

Docket 07-035-08
Review of Dr. Richard Drake Complaint
against Rocky Mountain Power
Final Report



September 4, 2007

WCI *Williams Consulting, Inc.*

September 4, 2007

Mr. Abdinasir Abdulle
Technical Consultant
Utah Division of Public Utilities
160 East 300 South
Salt Lake City, UT 84114-6571

Re: Docket 07-035-08

Dear Abdinasir,

I am pleased to enclose our final report on the above-referenced Docket covering our review and analysis efforts in support of the DPU in regard to the complaint filed by Dr. Richard Drake against Rocky Mountain Power.

It was a distinct pleasure working with you and the division staff on this assignment.

I would also like to mention that Rocky Mountain Power was most cooperative in answering our data requests and making arrangements for interviews and site visits.

If you should have any questions on this report, please do not hesitate to call.

Sincerely,



Michael F. Rafferty
Vice President

1.	Introduction	3
2.	Pole 343911 fire	3
2.1.	Floating Insulators.....	3
2.2.	RMP did not satisfy conditions in Docket No. 04-035-01	4
2.3.	Photograph reportedly shows shifted insulator	6
3.	Requests leveling of fines.....	7
3.1.	NESC Compliance	7
3.2.	Requests PSC to levy fines and penalties	7
4.	Response to PacifiCorp document dated March 28, 2007.....	8
4.1.	Insulators on crossarm caused pole fires.....	8
4.2.	Number of cross arm fires is increasing.....	8
4.3.	Lack of inspection and maintenance	10
4.4.	Violation of NESC 3” clearance	11
4.5.	Floater require immediate attention.....	12
4.6.	Utah system in worse condition than Oregon	12
4.7.	Requests PSC to levy fines	12
4.8.	Evidence destroyed	13
4.9.	Cut ground wires	13
4.10.	Some poles have exceeded 40 year life.....	13
4.11.	Management and line workers	14
4.12.	Maintenance spending.....	14
4.13.	Reliability.....	15
4.14.	Employees/Customers.....	16
4.15.	Utah vs. Oregon Maintenance Budget	16
4.16.	Missing ground	16
5.	Evergreen Park	17
5.1.	Pole 343911 failed pins.....	17
5.2.	Lack of maintenance	18
5.3.	Short circuit fault levels	18
5.4.	Floating insulators.....	19
6.	Official Complaint dated February 12, 2007.....	20
6.1.	Millcreek outages.....	20
6.2.	Meeting in 2005	20
6.3.	NESC compliance	21
6.4.	Penalties	21
7.	Addendum dated May 25, 2007	22
7.1.	Accident cause	22
7.2.	Collateral damage	22
7.3.	Mill Creek Problems “representative”	22
7.4.	East Millcreek circuit #13	23
7.5.	SAIFI comparison (49 th of 50).....	23
7.6.	Utah vs. Ore. Maintenance Budget	24
7.7.	Maintenance vs. restoration spending.....	24
7.8.	Journeyman interviews	25
7.9.	Implement WCI recommendations	25
8.	Response to RMP 6/8/07 documents.....	27
8.1.	Condition Codes.....	27
8.2.	Tie wire failures	28
8.3.	Journeymen linemen interviews.....	29
8.4.	Two troublemen trucks need to be available.....	29
8.5.	East Millcreek inspections	30

8.6.	Complete all repairs by 12/31/07	31
8.7.	Fines	31
8.8.	Mandate RMP report directly to Mid-American.....	31
8.9.	Revenue allocation	32
8.10.	Implement WCI recommendations	33
9.	Docket No. 07-035-08 Stipulation	33
9.1.	Repair “A” and “B” conditions (paragraph 13)	33
9.2.	Formal review of facility condition categories (paragraph 14).....	34
9.3.	Proper channels for condition reporting (paragraph 16)	34
10.	Conclusions and Recommendations.....	34
10.1.	Conclusions.....	34
10.2.	Recommendations.....	35

1. Introduction

During the early part of 2007, one of Rocky Mountain Power's (RMP) customers (Complainant) filed a series of complaints with the State of Utah, Division of Public Utilities (DPU) and the Public Service Commission that enumerate a number of concerns relative to that customer and a group of petitioners that he states to represent.

The Division of Utilities requested that Williams Consulting, Inc. (WCI) assist in reviewing these complaints and RMP's responses and undertake additional analysis and review of the issues.

This report is organized in Sections 2 through 9 to present and summarize the allegations/issues presented by the Complainant, RMP's responses and WCI's analysis.

Our recommendations are included in Section 10.

2. Pole 343911 fire

The complainant alleges lack of maintenance and adherence to agreed settlement conditions relative to East Millcreek #12, and requests to re-open Docket No. 04-035-01 (DR 04)

2.1. Floating Insulators

The Complainant claims inspection showed two floating insulators and that a resulting fire weakened the cross arm and pole.

2.1.1 RMP Response

In DPU Data Request 2.3, RMP claims that no 'failed' insulator pins were found, however, the insulators were squatted to different degrees. On April 12, 2007, an RMP engineer visited the structure and determined that the pole was not an imminent hazard since the crossarm that was burned was a double crossarm build. If the burned crossarm failed, the other would support the conductors. RMP provided a photo in the data request that shows the double crossarm construction.

On April 16, 2007, an RMP lineman visited the structure as part of a Reliability Work Plan and identified the crossarm as a "B" condition and issued a request that the crossarm be replaced.

On the evening of April 16, 2007, Mr. David Ward (who is acting as the Complainant's technical consultant and is his brother-in-law) contacted the PacifiCorp call center to report that a pole at the same address as pole 343911 was on fire. When the crew arrived they did not find a fire, but since they were prepared to make necessary repairs based on a pole fire report, they replaced the crossarm and associated hardware.

2.1.2 WCI Analysis

We agree with RMP that in the case of double crossarm construction, even if one crossarm was severely damaged, whether by fire or other cause, the remaining crossarm should adequately support the conductors.

A pole can lose a significant depth of outer wood to burning or other damage without losing the strength required to support itself and attached equipment. Based on the photos that we were shown, the pole suffered a minimal amount of burning and only the crossarm needed to be replaced.

2.2. RMP did not satisfy conditions in Docket No. 04-035-01

The complainant claims that RMP failed to meet settlement conditions in the noted docket.

2.2.1 RMP Response

In its filed "Response to Letters of Richard E. Drake", dated June 4, 2007, RMP summarizes the relevant agreements in that Stipulation. Further in DPU Data Request 1.19, RMP provided the following specific answer to the Kempner Rd. complaint:

07-035-08 04-035-01/Rocky Mountain Power
 June 12, 2007
 DPU 1st Set Data Request 1.19

DPU Data Request 1.19

(Ref ID: New 5) Kempner Avenue Complaint

Please provide follow-up on resolution of this complaint, including all actions taken.

Response to DPU Data Request 1.19

Rocky Mountain Power (formerly Utah Power) was contacted by Gordon Knight on behalf of concerned residents of Kempner Road, Brookburn Road, Millcreek Canyon Road, Craig Drive, Flynn Circle and Drage Circle in January 2004. After multiple meetings and correspondence between the Company and concerned residents the following actions were taken:

1. A detailed inspection of the East Millcreek #12 distribution feeder was completed in early June 2004. Conditions identified during this detailed inspection were prioritized for correction.
2. The Company identified approximately 50 locations where tree pruning could be beneficial. The majority of tree pruning was completed by July 2004. At the request of a landowner the remaining tree pruning was completed in October 2004.
3. A complete over-current protection study of the distribution feeder was completed and implemented. A combination of installing electronic sectionalizers and additional fuses on pre-determined tap lines was completed as of June 7, 2004.
4. Corrective maintenance was completed on over 150 facility points that included replacing, repairing, or correcting poles, cross-arms, pins, and insulators. All corrective work was completed by December 4, 2004.
5. At the request of David Ward, technical advisor to Gordon Knight, a steel stub on a pole located at 2991 Kempner Road was modified.
6. Technical advisor David Ward was concerned that sagging overhead wires had lost critical strength. Samples of these conductors were sent to an independent lab and analyzed. Sample 1, 2 and 3 elongation results ranged from 2% to 4%, well within the manufacturer specifications.

2.2.2 WCI Analysis

Based on the summary items stated in its filed “Response to Letters of Richard E. Drake”, dated June 4, 2007, we have provided the following table that lists the relevant agreement elements and what has been done or is in progress by RMP:

Paragraph	Agreement	Status
37	...the parties agree that for the future it will be desirable for Utah Power to spend incrementally more on its system and maintenance...	From 2003 to 2006 the Company has increased its maintenance spending by 13%.

Paragraph	Agreement	Status
38	The parties agree that Utah Power has appropriately implemented the recommendations in the Reports and Response as resolved by the Company, the Division and WCI...	WCI is engaged to review the progress RMP has and is making on implementing the recommendations emanating from the Storm Report. This review will be part of our Storm Report Follow-Up Study report
39.a	From an after January 1, 2007, Utah Power agrees that it will be current on its three-year vegetation management cycle...	As of June 12, 2007, for the period FY2006 through Q2, the Company has reached 97.2% of its target of a 3 year trim cycle. It has achieved 100% in Cedar City, Jordan Valley, Metro, Layton, Ogden and Tremonton (99.99%).
39.b	From and after July 1, 2007, Utah Power agrees that it will repair or correct all priority "A" conditions identified on its Utah distribution system that it is responsible to repair or correct within 120 days on average of the date the condition was identified.	Rocky Mountain Power began repairing and correcting all priority "A" conditions beginning August 1, 2006, nearly one year in advance of the distribution system maintenance commitments. As of June, 2007, RMP averages under 30 days to repair or correct priority "A" conditions.
40	The parties agree that Utah Power's compliance with paragraph 39 should be monitored by the Service Quality Task Force.	The Company has participated in the Service Quality Task Force and has submitted reports.

2.3. Photograph reportedly shows shifted insulator

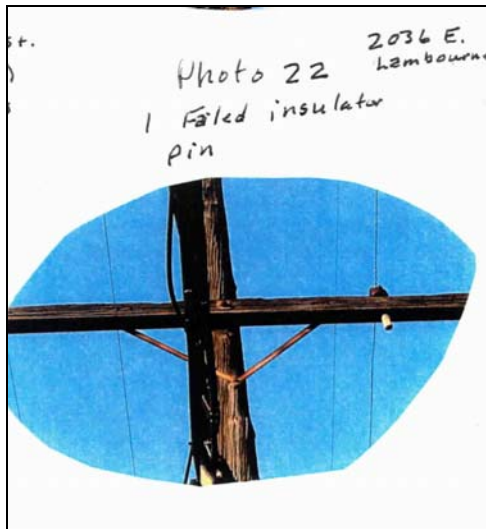
Photograph reportedly shows insulator in lower cross arm shifted (Letter dated April 13, 2007 to the Commission).

2.3.1 RMP Response

RMP did not respond to this item directly, but did respond in general to the issues of floating and squatting insulators and how these are classified and prioritized for repair.

2.3.2 WCI Analysis

If photograph 22 provided by Dr. Drake (DR 0..3 – Lambourne Photographs), which claims "1 failed insulator pin," is the photograph described in the letter, the insulator is indeed a squatter, but the angle of the pin and the insulator clearly shows that the pin/insulator interface is intact. The entire pin is tilted likely due to elongation and wear in the drilled hole in the crossarm. This does not indicate a "floater" since the insulator is still held securely. A copy of the subject photo follows:



3. Requests leveling of fines

(DR 12), dated February 12, 2007.

3.1. NESC Compliance

Complainant claims Utah Power should be required to come into compliance with NESC

3.1.1 RMP Response

In its motion to dismiss and answer filed March 20, 2007, RMP asserts that "...complaint fails to show that Rocky Mountain Power violated the NESC".

3.1.2 WCI Analysis

RMP's documents illustrate NESC compliance, especially with regard to pin type insulator clearances. NESC requires a crossarm to conductor clearance of 3" (please refer to material provided by RMP). For PPC or Lapp type insulators, the clearance is 3 7/8". For brown glass insulators (with wood pins) the clearance is 3 9/16". NESC requirements are measured from the surface of the crossarm to the nearest point of the conductor.

3.2. Requests PSC to levy fines and penalties

Complainant request PSC and other "watchdog" agencies to levy fines on Utah Power (RMP) for placing Millcreek residents at risk due to failed insulator pins.

3.2.1 RMP Response

Please see 3.1.1 above.

3.2.2 WCI Analysis

While the subject of fines is a Commission matter and is outside WCI's scope, we would like to comment that RMP provided lists of conditions found during its

inspections of East Millcreek feeders #12 and #13. On feeder #12, there were 2 instances of “burned off pin” or “wood pin broken,” which were classified as “A” conditions and repaired the same day as the inspection (8/6/04). On feeder #13, there were no safety conditions found and no failed pins found (please refer to Section 7.4 below). Therefore, we do not find evidence to support the request for fines to be levied.

4. Response to PacifiCorp document dated March 28, 2007

(DR 15) dated March 28, 2007.

4.1. Insulators on crossarm caused pole fires

Complainant claims that insulators resting on crossarm caused pole fires due to leakage.

4.1.1 RMP Response

RMP's Motion to Dismiss (DR8) states that pole fire outages are not isolated to squatting insulators. RMP said in that document “The cause of the outages were not isolated to squatting insulators and occurred on other types of equipment as well, including non-squatting insulators, cutouts, dead-ends, new insulators, and other types of insulating hardware”. RMP further stated that, during the period (February 2007) of the pole fire outages, record-breaking pollution during a dry weather period, followed by a weather pattern of fine misting rain.

4.1.2 WCI Analysis

WCI agrees that not all pole fires are caused by squatting insulators; other causes include lightning, vandalism, otherwise failed insulators, etc. Further, RMP indicated during our interviews that other equipment, as noted above, were identified as possible causes on some of the pole fires, and this included even new insulators. WCI believes that it is not reasonable to attribute all pole fires to squatting insulators.

4.2. Number of cross arm fires is increasing

Complainant claims inspecting records will show the number of cross arm fires is increasing.

4.2.1 RMP Response

RMP claims pole fires account for 1%-2% of outage causes.

4.2.2 WCI Analysis

RMP's data indicates that pole fire outages as a percent of total outages averages about 1.5%. RMP classifies pole fire outages as Equipment Failures, with a sub class of pole fire as the direct cause. Outage statistics reported by other utilities do not disaggregate causes below the general category of Equipment Failures, so it is not possible to perform a direct comparison.

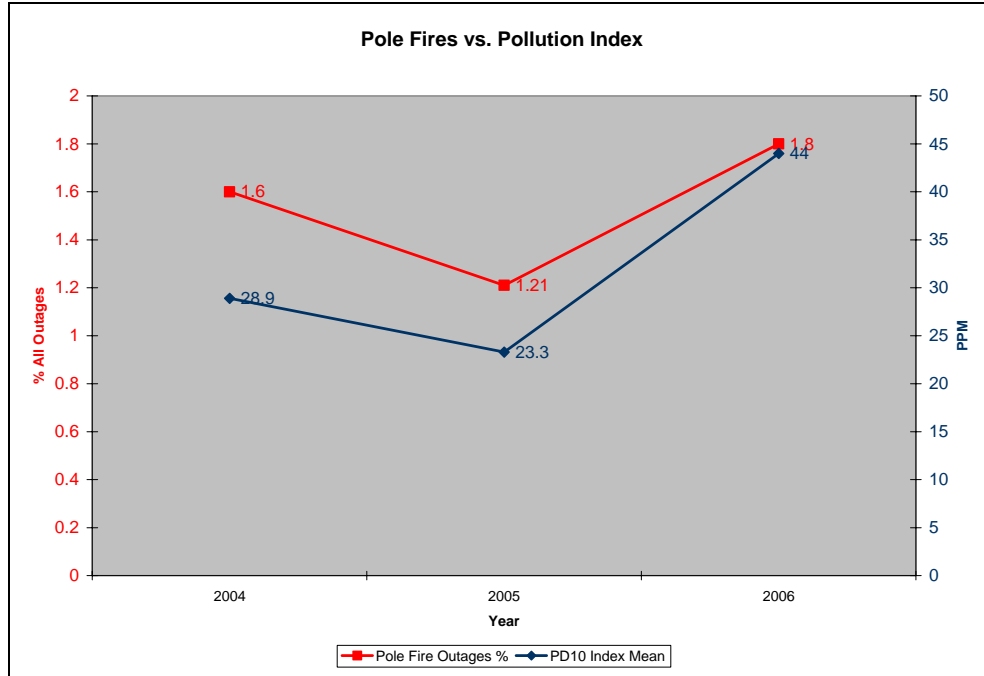
It should be noted that RMP's pole fire outages have slightly increased as a percent of all outages, rising to 1.8% in 2006. Percentages can sometimes be misleading. The following table illustrates the number of pole fires by year for both SLC metro and all of Utah:

Area	2004	2005	2006
SLC Metro	108	58	115
Utah	379	257	422

While the number of pole fires has indeed increased from 2004 to 2006, it should be noted that pole fires decreased significantly in 2005. This is consistent with RMP's statement that many of the recent pole fires are the result of high pollution levels coupled with light misting rain, which can produce a condition on the insulators that promotes tracking¹. It is interesting also to note that the percentage of pole fire outages in SLC metro (at about 27%) is consistent with its share of customers (at also about 27%).

Utah EPA statistics clearly show a similar trend in particulates below 10 micrometers (PD10) in size (combustion - motor vehicles, power plants, wood burning, etc., some industrial processes, crushing or grinding operations, and dust from paved or unpaved roads). As shown in the chart below, there appears to be a strong correlation between the pollution index and pole fire incidence. However, without a specific analysis that tracks each pole fire incident with atmospheric pollution and precipitation surrounding the date and time of the outage, it is not possible to draw conclusive findings. Nonetheless, the pattern of pollution and pole fires is consistent and supports RMP's conclusion as to the cause of some pole fires.

¹ "Tracking" refers to a conductive path created across insulating devices, for example pin and post type insulators, lightning arrester insulators, cut-outs transformer bushings, etc., by contamination such that current can flow across the insulating device to ground or to other devices.



Source: Outage data: RMP, Pollution data: Utah EPA

4.3. Lack of inspection and maintenance

Complainant claims that there is a lack of routine and responsible inspection along with preventative maintenance.

4.3.1 RMP Response

RMP outlined its current inspection program during the initial Technical Conference held on May 1, 2007. It indicated that it inspects 50% of the system visually each year and conducts detailed tests and treats inspections on a longer cycle. It also has employed a grid approach to identify underperforming sections of the system and they now use a systematic approach to identify pockets of poor reliability and conduct detailed inspections in those areas.

4.3.2 WCI Analysis

In our Storm Report², we found that RMP's preventative maintenance plan conformed to industry practices. At that time RMP's pole inspection program consisted of a 2 year safety inspection, an 8 year detailed inspection and a 16 year test and treat program. At the time of our report, RMP was at or above targets.

RMP has implemented a slightly different inspection program with some enhancements as described below:

1. A 2-year cycle visual inspection of all distribution facilities
2. A 10-year test/treat program that includes both pole strength and below ground condition as well as a complete visual inspection of the pole from

² Williams Consulting, Inc.'s report entitled: "Review of PacifiCorp's Storm Response Report, Utah Holiday Storm - December 2003", dated May 13, 2004, page 40.

the ground up to and including pole top equipment such as cross arms, insulators, conductor and other attachments.

3. A "Reliability Work Plan" (RWP) program (initiated in October 2006) in which RMP identifies pockets of poor performance by mapping outages at the feeder and sub-feeder level, using a computer mapping tool known as the Geographic Reliability and Analysis Tool (GREAT). The resulting poor-performing pockets are subjected to a detailed inspection by RMP line inspectors and remediation programs are planned for the area(s). This program was initiated in late 2006. RMP currently has 272 RWP2 in its 3-state area, of which 175 are in Utah. Of these, 125 are in central Utah and 9% are in the East Millcreek area.
4. A worst performing feeder program that identifies the 5 worst performing distribution feeders annually, based on the feeder's contribution to system reliability. Remediation plans are developed based on inspections and historical performance records.

RMP utilizes outsourced inspection teams for the 2-year and 10-year inspection cycles. RMP conducts quality audits (known as "Field Inspection Support") of 5% of the contractors work and monitors their work carefully. If the audit results are unsatisfactory, RMP requires a re-inspection at the contractor's expense. A sample of the audit results for nine areas of RMP's service territory over calendar year 2006 shows a 93.5% compliance rate, which we view as satisfactory.

4.4. Violation of NESC 3" clearance

4.4.1 RMP Response

RMP, in its March 20, response, presented its interpretation of the clearance tables in the NESC to demonstrate that it is not in violation of NESC clearances with respect to insulators

4.4.2 WCI Analysis

RMP's response indicates that it is within NESC compliance, especially with regard to pin type insulator clearances. NESC requires a crossarm to conductor clearance of 3" (please refer to material provided by RMP). For PPC or Lapp type insulators, used by RMP, the actual clearance is 3 7/8". For brown glass insulators (with wood pins) used by RMP, the actual clearance is 3 9/16". In both these examples, the measurement was made between the crossarm and the bottom of the conductor channel in the insulator. NESC requirements are measured from the surface of the crossarm to the nearest point of the conductor.

4.5. Floaters require immediate attention

4.5.1 RMP Response

RMP provided “Appendix A – Three-Tier Prioritization Model”, and further defined³ that “floaters” are defined as an insulator or conductor that is either off the cross arm or has visibly shifted from the insulator pin centerline.

4.5.2 WCI Analysis

RMP's “Appendix A – Three-Tier Prioritization Model”, shows “floaters” (condition code BOCOND) classed as a “B” priority, unless the conductor is lying on the crossarm in which case it is classified as an “A” priority. It must be recognized that in the judgment of the inspector, if the situation represents an imminent hazard to safety or to continued operation, the inspector may have dispatch issue an immediate work order for repairs. The inspector or troubleshooter will remain at the site, if possible, until crews arrive. If this is not possible, perhaps due to other outage requirements, the troubleshooter will assure that the feeder is safely secured before leaving the location.

4.6. Utah system in worse condition than Oregon

Complainant quoted WCI report that “Utah system in worse condition than Oregon.”

4.6.1 RMP Response

None required.

4.6.2 WCI Analysis

The Complaint's comment was based upon a quotation from PacifiCorp's own report. The report was entitled “Resource Review: Distribution Business” and was dated November, 2002. The actual text from WCI's report⁴ is reproduced below:

According to the company's “Resource Review: Distribution Business” dated November 2002, prior to the recent formation of an asset management department there was no defined maintenance plan or maintenance budget. It is further noted that the condition of the network in Utah is generally in worse condition than Oregon due to a historical lack of maintenance in Utah compared to a State mandated maintenance program in Oregon.

4.7. Requests PSC to levy fines

This request is based on conductor clearances above the crossarm.

³ Meeting at RMP 6/13/07 with Doug Bennion, Josh Jones, Heidi Caswell and Rick Vale (via telephone), Jeff Richards and Dave Elmont.

⁴ From Williams Consulting, Inc.'s report entitled: “Review of PacifiCorp's Storm Response Report, Utah Holiday Storm - December 2003”, dated May 13, 2004, page 30.

4.7.1 RMP Response

In its motion to dismiss and answer filed March 20, 2007, RMP asserts that "...complaint fails to show that Rocky Mountain Power violated the NESC".

4.7.2 WCI Analysis

While the subject of fines is a Commission matter and is outside WCI's scope, we would like to comment that RMP has, in Section 4.4 above, satisfactorily demonstrated that no NESC violations exist with regard to these clearances. Therefore it is our opinion that no basis for fines exists.

4.8. Evidence destroyed

Complainant claims that the crossarm from 3003 E Craig Dr. was destroyed. Complainant further wishes the other crossarm to be removed and kept by PSC as evidence.

4.8.1 RMP Response

In DPU Data Request 2.2, RMP indicates that this crossarm was provided to Connie White, Director of the Utah Division of Public Utilities, on March 28, 2007.

4.8.2 WCI Analysis

No further response required.

4.9. Cut ground wires

Complainant claims "misguided" power company staff have cut ground wires.

4.9.1 RMP Response

None required.

4.9.2 WCI Analysis

Complainant's statement is unsubstantiated.

4.10. Some poles have exceeded 40 year life

4.10.1 RMP Response

RMP provided details of the 152 conditions found on East Millcreek #12.

4.10.2 WCI Analysis

As part of its inspection of East Millcreek #12, RMP provided details of the 152 conditions found and its resolution as discussed later in this report. Of interest is that average age of the poles (where data was provided) of the "A" conditions was 28 years and of the "B" conditions was 40 years.

Age alone is not a determinant of impending failure, and can be addressed through enhanced inspections, if needed. RMP's 2-year visual inspection program, a 10-year test/treat program, feedback from vegetation management crews and focused reliability improvement program (Reliability Work Plans) should identify older poles that have condition and strength issues.

4.11. Management and line workers

Complainant claims that PacifiCorp has inadequate management and insufficient line workers.

4.11.1 RMP Response

RMP provided as part of DPU Data Request 1.24, the levels of maintenance staffing for 2003 to 2006.

4.11.2 WCI Analysis

PacifiCorp has ensured that management positions that directly impact the level of operations, service reliability and customer interaction are properly represented in Utah. During our investigation of the Complainant's statements and issues, we interviewed the following management positions, all of which are located in Utah:

- ◆ President
- ◆ Vice President, Customer Services
- ◆ Managing Director, Network Reliability & Investment
- ◆ Vice President, Operations
- ◆ Directors, Distribution (UT South, Central and North)
- ◆ Managing Director, Distribution Support
- ◆ Manager, Vegetation Management

Based on our interviews, we believe that RMP's management team is dedicated and knowledgeable. These are seasoned utility professionals who maintain contact with peers at other utilities to share best practices.

From 2003 to 2006, RMP has added 58 journeyman line workers, or about 12%, and continues to aggressively add to this resource. Many of these are assigned to the Wasatch Resource Center, which responds to outages and performs maintenance in the central Utah area. Further, RMP is actively pursuing new apprentices through their "skilled groundsman" program that targets 2 year trade colleges and other trade schools. After intensive training, these recruits are ready to move directly into apprentice positions.

4.12. Maintenance spending

Complainant claims that Utah is dead last in maintenance spend per customer.

4.12.1 RMP Response

RMP provided as part of Data Request DPU 1.25 data that lists maintenance spending for Utah and Oregon.

4.12.2 WCI Analysis

In WCI's May 13, 2004 report on PacifiCorp's storm response report, we made a comparison of Utah distribution maintenance spending per customer of \$27.78. These figures placed Utah in the lowest quartile of spending, compared to a panel of 21 utilities. In the PA Consulting, Inc. 2004 Benchmark study, PacifiCorp placed in the highest quartile (of a panel of 24 utilities) of distribution maintenance spend per customer at \$55.43. (PA's survey does not disaggregate PacifiCorp's component entities). RMP and Pacific Power are nearly equal in spend levels per customer at about \$71.00 for 2006 data. Based on these facts, it is our opinion that RMP has improved its maintenance spending level per customer since the 2001 period.

4.13. Reliability

Complainant claims that Utah is dead last in reliability.

4.13.1 RMP Response

RMP provided its Service Quality Review for April-September 2005.

4.13.2 WCI Analysis

In its Storm Review Report, WCI reported that PacifiCorp (Utah only) ranked in the 4th quartile for both System Average Interruption Frequency Index (SAIFI) at 2.6 interruptions, and System Average Interruption Duration Index (SAIDI) at 260 minutes as compared to a national panel in the Edison Electric Institute (EEI) 2002 Reliability Survey. These results were near the high end of the 4th quartile (worst performers).

In the 2005 Institute of Electronic and Electrical Engineers (IEEE) Reliability Survey, PacifiCorp - Utah improved their performance to 2.021 interruptions for SAIFI (22% better) and 215.53 minutes for SAIDI (17% better). These results place Utah nearer the low end of the 4th quartile and indicate significant improvement.

Comparisons made against a national panel of utilities can be very misleading with respect to a utility's specific performance. There are many factors that affect quartile placement, including the level of urban service territory and underground network system, the level of forestation, the pollution levels, reporting criteria, etc. Therefore these statistics should only be used to indicate areas of further review and should not be used as absolute measures of a utility's customer-facing performance.

Further, RMP has committed to a 2% annual improvement in these indices and so far has met that target.

4.14. Employees/Customers

Complainant draws comparison to decline in employees (40-50%) while customers increased 31%.

4.14.1 RMP Response

RMP provided data for 2003 to 2006 for employee counts and customer counts.

4.14.2 WCI Analysis

In its Storm Review report, WCI makes note that there was a decline in customer-facing employees of 51% between 1990 and 2002, but recognized that the Company had employed additional contracted services. These contracted services were utilized primarily for new customer connections, which amounted to nearly a 31% growth. Therefore the shortfall in customer-facing employees would have been less than 51% and likely more than 20%. From 2003 to 2006, RMP has added 58 journeyman line workers, or about 12%, and continues to aggressively add to this resource. In addition, RMP has outsourced the bulk of its distribution line inspection program, freeing up journeyman line workers to focus on corrective maintenance. RMP estimates that this outsourcing has freed up approximately 12 journeyman lineman FTEs, which are able to be used on corrective maintenance tasks.

4.15. Utah vs. Oregon Maintenance Budget

Complainant claims Utah is only getting \$2.1 Million while Oregon gets \$6 Million in maintenance budget in year 2007.

4.15.1 RMP Response

RMP provided in DPU Data Request 1.25, the 2004 to 2006 distribution maintenance expenditures for Utah and Oregon.

4.15.2 WCI Analysis

We believe that the Complainant misread our chart (4.6-6) on page 35 of our Storm Review Report. The graph shows 2007 figures of \$21-\$22 million for Utah and \$60 million for PacifiCorp (as a whole, not just Oregon). RMP's actual maintenance expenditures in 2006 amounted to \$ 58,758,210, compared to Pacific Power's maintenance expenditures of \$ 41,735,098 for the same period, and are significantly above the spending levels envisioned in PacifiCorp's Storm Report.

4.16. Missing ground

Complainant claims that pole 274710 has one foot of ground missing, and further claims this poses a hazard. Also claims that this is representative of many poles.

4.16.1 RMP Response

During the 1st Technical Conference on May 1, 2007, PacifiCorp clearly outlined effective grounding throughout its system and that it is well over requirements, thus one (or more) missing or cut ground wires does not pose an electrical hazard.

4.16.2 WCI Analysis

Based on the information provided by RMP during the 1st Technical Conference, WCI believes that RMP's system is adequately grounded. During our 6/13/2007 interview, RMP illustrated its grounding philosophy and grounding appears to be well in excess of requirements. RMP could lose a significant number of grounds (through, for example, cut or missing grounds) and still be well within system design requirements.

RMP classifies cut, missing or damaged ground wires according to its condition prioritization system described earlier. A cut or broken ground wire is classified as either an "A" or "B" condition, depending on the hazard it presents and/or its location and potential access by the public. A ground wire that is loose, broken or burned at the crossarm level or above is classified as a "B" condition, since no touch shock hazard exists below that point on the ground wire. This is consistent with general utility practice.

A cut or broken ground wire below the crossarm could in some cases present a shock hazard if several conditions are ALL met: The cut or broken end is touch accessible by the public, and ground wires at adjacent poles are weak or damaged, and there is some level of contact or leakage to the ground wire from the primary system. These would typically be classified as an "A" condition or repaired on the spot.

RMP's inspection process (supplemented by other reporting calls) finds 500 to 1,000 ground wire conditions annually (out of several hundred thousand grounded poles). Of these, approximately 6% are classified as an "A" condition. As of June, 2007, RMP had cleared all of the "A" priority ground wire conditions. Therefore, a single instance of a cut ground wire should not be used to infer the condition of the system.

5. Evergreen Park

Complainant cites Evergreen Park safety hazard (DR 16) letter dated April 9, 2007 and Official Complaint dated February 12, 2007.

5.1. Pole 343911 failed pins

Complainant claims that all insulators on pole 343911 have failed wood pins, and that 4 are floaters.

5.1.1 RMP Response

In DPU Data Request 2.3, RMP claims that no “failed” insulator pins were found, however, the insulators were squatted to different degrees. On April 16, 2007, an RMP lineman visited the structure as part of a Reliability Work Plan and identified the crossarm as a “B” condition and issued a request that the crossarm be replaced. RMP further stated that at no time did Facility Point 343911 have 4 floaters.

5.1.2 WCI Analysis

We agree with RMP’s analysis. Further, WCI reviewed RMP’s policies and condition prioritization process specifically in regard to squatting insulators and the definition of floaters. In Appendix A – Three Tier Prioritization Model (DPU 1st Set Data Request 1.7), both squatting pins and floating conductors (which would include floating insulators) are classified as condition “B.” It is noted, however, that any condition can be escalated to priority “A” or imminent danger by the inspector or troubleshooter, based on their experience and the actual conditions at the facility point.

We would like to point out that there are several inconsistencies in the listings in the Appendix A. For example, item 65, BOXARM – “Arm is split/cracked/rotten” is classed as “Imminent Danger” (“A”), while items 72 and 73, BOXARM – “SPLIT/CRACKED, CAN BAND” and “SPLIT/CRACKED, REPLACE” are both classed “Before Next Detail Inspect” (“B”). We do not believe that this would cause a line inspector or troubleshooter to misclassify a condition, but point out that RMP should carefully review the list of conditions to improve consistency.

5.2. Lack of maintenance

Complainant claims that this pole (343911) is representative of overall Utah distribution system condition and lack of maintenance.

5.2.1 RMP Response

None required.

5.2.2 WCI Analysis

It is not supportable to make a system-wide assertion based on one pole. In order to use inspection results to reflect the overall system condition, it is necessary to undertake a statistically valid sample. Without performing a sample design, we assert that a valid sample, with meaningful stratification, would involve inspections of several thousand poles, at the minimum.

5.3. Short circuit fault levels

Complainant raises subject of short circuit fault current levels vs. condition and rating of equipment at the East Millcreek substation.

5.3.1 RMP Response

RMP did not respond directly to this issue, but did provide information during our interviews related to substation planning, design and maintenance.

5.3.2 WCI Analysis

This is a generalized statement that bears no connection to squatting/floating insulators. The comment points out that fault levels are generally high at substations, which we agree with, and therefore a higher level of maintenance should be exercised on the substation outlet circuits. Short circuit levels and substation equipment ratings are studied by RMP's Distribution Planning engineers as part of their overall responsibilities. As part of this analysis, protection device and fusing coordination studies are conducted to assure that protective devices will operate under fault conditions and will successfully interrupt faults that may occur without damage to the facilities. Further, RMP has inspected three of the four East Millcreek substation exits⁵ over the past several years and has not found any conditions that indicate that the substation exits are compromised in any way that puts the system at risk.

5.4. Floating insulators

Complainant claims there were 12 squatting insulators and four failed insulator pins resulting in floaters on pole 343911.

5.4.1 RMP Response

In DPU Data Request 2.3, RMP stated that at no time did Facility Point 343911 have 4 floaters. In fact, RMP stated that they did not discover any floaters on this pole.

5.4.2 WCI Analysis

During a brief visual spot inspection of several facilities in the Millcreek area, we encountered several pin type insulators that were clearly canted to one side, but still aligned on the insulator centerline on the crossarm. On several of these, the insulator pin, while a squatter, showed the same angle of lean as the insulator, which indicates wear on the hole through the crossarm and does not indicate a loose or floating insulator. Even if the wooden pin is damaged, such that it "leans", there could be sufficient remaining wood fiber strength to retain the insulator at its proper location. However, this condition could be considered as incipient to a loss of conductor anchor situation and could be classified as a priority "A" condition. Again, the priority classification of such insulators is based on the experience of the line inspector and the physical condition of the insulator and pin.

⁵ An "exit" from a substation refers to the feeders or circuits that emanate to carry power away from the substation to the customers.

6. Official Complaint dated February 12, 2007

(Refers to WCI numbered Data Request 0.17)

6.1. *Millcreek outages*

Complainant asserts that Millcreek has experienced numerous outages, downed wires, flash over problems and pole fires.

6.1.1 RMP Response

RMP provided in DPU Data Request 2.5, a listing of outages that occurred on Millcreek feeders over the past year.

6.1.2 WCI Analysis

Based on a detailed analysis of outage records on the East Millcreek outlets (#11, #12, #13, and #14) covering a one year period (7/11/2006 through 7/4/2007), we conclude that the number and type of outages experienced on the East Millcreek outlets are consistent with overall system outages. Aside from the 46kV dropping on the 12 kV on 2/11/2007, caused by a vehicular accident, there were no flashovers, 1 downed wire and 3 pole fires, all of which are within overall system averages.

6.2. *Meeting in 2005*

Complainant claims that during a meeting in 2005 with Doug Bennion and Rhea Peterson, promises were made to correct deficiencies.

6.2.1 RMP Response

RMP indicates that there was no meeting in 2005 and offered the following response:

07-035-08 & 04-035-01/Rocky Mountain Power
July 11, 2007
DPU 2nd Set Data Request 2.6

DPU Data Request 2.6

What was outcome of meeting held in 2005 with Doug Bennion and Rea Peterson (I assume with Drake and/or Ward)?

Response to DPU Data Request 2.6

Doug Bennion of Rocky Mountain Power is not aware of any meeting held in 2005 with either Mr. Richard Drake or Mr. David Ward as noted in the question. Rocky Mountain Power is informed that Rea Peterson of Utah DPU is likewise not aware of a meeting in 2005.

On April 28, 2004 Rocky Mountain Power (then Utah Power) met with Gordon Knight, Chairman and Representative for concerned residents of Kempner Road, Brookburn Road, Millcreek Canyon Road, Craig Drive, Flynn Circle and Drage Circle at the Millcreek Library to discuss supply of service to this area. Mr. Knight was joined by his technical advisor, Mr. David Ward and three Co-Chairman Signatories to the same petition. Also in attendance were local news networks serving the Greater Salt Lake City area. Rea Peterson of Utah DPU has informed Rocky Mountain Power that Mr. Richard Drake was in attendance as well. At this time the Company committed to do detailed line inspections, corrective maintenance, vegetation management (tree pruning), a fuse-coordination, and lab testing of an overhead conductor suspected of being annealed. All work was targeted on the East Millcreek #12 distribution feeder serving these customers. All work was completed by December 4, 2004.

6.2.2 WCI Analysis

Not required.

6.3. NESC compliance

6.3.1 RMP Response

RMP claims that it is in compliance with NESC.

6.3.2 WCI Analysis

See earlier discussion on NESC compliance relative to insulator clearances.

6.4. Penalties

6.4.1 RMP Response

In its motion to dismiss and answer, filed March 20, 2007, RMP asserts that "...complaint fails to show that Rocky Mountain Power violated the NESC".

6.4.2 WCI Analysis

While the subject of fines is a Commission matter and is outside WCI's scope, we would like to comment that this complainant request is based on claimed non-compliance with NESC Safety Codes. As RMP demonstrated earlier in Section 3.1, it is in compliance relative to insulator clearances.

7. Addendum dated May 25, 2007

This is in regard to Millcreek Canyon Rd. (DR21).

7.1. Accident cause

Complainant claims that a 7.2kV conductor fell off and contacted a service cable, blinding a driver who ran into a pole on the other side of the street.

7.1.1 RMP Response

RMP provided a synopsis of the police report that was filed:

According to the police report, the driver was traveling eastbound on Millcreek Canyon road. She had an unsecured puppy in her lap which became excited. The puppy reportedly bit the driver on the face. The driver lost control of the vehicle, drove across traffic onto the left shoulder and collided with a utility pole. The pole tore utility wires from the house at 3063 E. Millcreek Canyon Rd.

7.1.2 WCI Analysis

No further comment required.

7.2. Collateral damage

Complainant claimed the falling conductor energized service drops at 7.2kV causing damage (claims likely damage).

7.2.1 RMP Response

RMP stated in DPU 2nd Set Data Request 2.7 that "As of the week of July 2, 2007, no claims against the Company have been filed, related to the damage."

7.2.2 WCI Analysis

No further comment required.

7.3. Mill Creek Problems "representative"

Complainant claims that issues found on East Millcreek circuit #12 in 2004 (150) were "representative" of the system.

7.3.1 RMP Response

RMP provided in DPU 2nd Set Data Responses 2.8 a complete listing of the 152 conditions found on Millcreek #12 and their repair status. Of these, 40 were

priority “A” conditions, 87 were priority “B” conditions and 25 were vegetation management related. All were mitigated by 12/31/2004.

7.3.2 WCI Analysis

It is not valid to extend the results of a single pole to reflect the entire system. As a matter of interest the average age of the poles (where data was provided) of the “A” conditions was 28 years and the “B” conditions was 40 years. Out of the 150 conditions that were found, only 25 were squatter pins and these were classified as “B” conditions and did not present an immediate danger.

7.4. East Millcreek circuit #13

Complainant claims that East Millcreek circuit #13 has over 50 safety issues (reported earlier).

7.4.1 RMP Response

RMP provided a listing of the conditions found on East Millcreek #13 during its inspection on 4/19/2007.

7.4.2 WCI Analysis

Of the 52 conditions found, none were “safety” issues, all were prioritized “B” and comprised the following:

Code	Description	Count
DTLTRT	18" CLEARANCE VIOLATION	4
BOXARM	ARM IS SPLIT/CRACKED/ROTTEN	21
CLEAR	LOW SVC OVER ROOF	1
COOTHER	POLE TOP FEATHERED NEEDS EVAL	1
BOGUYANC	SLACK/BROKEN GUY	1
BOXARM	SQUATTER PIN	24
Total		52

It should be noted that while “ARM IS SPLIT/CRACKED/ROTTEN” is classified as an “A” condition in the “Appendix A – Three-Tier Prioritization Model”, the final priority code assigned is up to the experience and judgment of the inspector. We do not believe that this would cause a line inspector or troubleshooter to misclassify a condition, but again point out that RMP should carefully review the list of conditions to improve consistency.

7.5. SAIFI comparison (49th of 50)

7.5.1 RMP Response

RMP provided its Service Quality Review for April-September 2005.

7.5.2 WCI Analysis

Please refer to SAIFI information in Section 4.13.2.

7.6. Utah vs. Ore. Maintenance Budget

Complainant raised issue regarding maintenance budget in Utah at 50% of the budget in Oregon.

7.6.1 RMP Response

RMP provided in DPU Data Request 1.25, the 2004 to 2006 distribution maintenance expenditures for Utah and Oregon.

7.6.2 WCI Analysis

RMP's distribution maintenance expenditures for Utah have increased from 2004 as shown in the following table. Utah's share averages 59% of the combined Utah and Oregon budget.

Total Distribution Maintenance			
State	CY 2004	CY 2005	CY 2006
Utah	\$ 51,831,025	\$ 57,327,640	\$ 58,758,210
Oregon	\$ 42,470,053	\$ 34,557,224	\$ 41,735,098
Total	\$ 94,301,078	\$ 91,884,863	\$ 100,493,308

Percent of Total			
State	CY 2004	CY 2005	CY 2006
Utah	55%	62%	58%
Oregon	45%	38%	42%

7.7. Maintenance vs. restoration spending.

Complainant questioned combined figures for maintenance vs. outage restoration spending.

7.7.1 RMP Response

RMP provided in DPU Data Request 2.10, a breakdown on distribution maintenance expenditures for 2003 to 2006.

7.7.2 WCI Analysis

RMP provided the following breakdown of distribution maintenance and outage restoration spending for the 2003-2006 period.

RMP Distribution Maintenance Expenditures				
Category	2003	2004	2005	2006
Maintenance	\$ 16,852,545	\$ 39,562,361	\$ 46,891,416	\$ 46,788,615
Outage Restoration	\$ 11,169,506	\$ 12,268,664	\$ 10,436,224	\$ 11,969,596
Total	\$ 28,022,051	\$ 51,831,025	\$ 57,327,640	\$ 58,758,211

Notes:

1. Does not include capital expenditures
2. Includes vegetation management and other distribution maintenance activities

In the complaint, it was stated that there was a contradiction in the value of maintenance spend quoted in the press of about \$60 million to be spent this year (2007) against RMP testimony that indicated a spend level of about \$40 some

million for the same period. The figures in the preceding table show that there must have been a misunderstanding of the figures. Overall maintenance and outage restoration spending is at \$58.8 million, while maintenance alone is at \$46.8 million, which is consistent with what was reported in the press and through testimony.

Further, the complaint referenced the WCI Storm Report as saying the company had earmarked \$20.1 million for maintenance spending in 2007. The \$20.1 million referred to in the WCI report was a restatement of PacifiCorp's planned (at that time) expenditures going forward. Our comment was that the spending level was planned to be increased over the historical level. In our recommendations in our Storm Report⁶, we further stressed that PacifiCorp would need for "aggressive catch-up spending" on maintenance activities. PacifiCorp has indeed substantially increased its maintenance spend as shown in the table above.

7.8. Journeyman interviews

Complainant requests that all journeymen line workers in the state be interviewed.

7.8.1 RMP Response

RMP stated in its filed "Response to May Letter of Richard E. Drake" dated June 19, 2007 on page 6 that "the request that the Commission interview all journeymen linemen in the state is plainly excessive and would amount to a fishing expedition"

7.8.2 WCI Analysis

WCI believes this to be excessive and would not produce meaningful results. WCI has interviewed three Journeymen Line workers in the SLC Metro area during June, 2007. These line workers are assigned in the area that covers Millcreek. WCI further interviewed six Troubleshooters and Journeyman Linemen, two each in each of three major service areas for RMP: Metro, Ogden and Jordan Valley. We questioned each separately and summarize below the responses. Our line of questioning was devised to solicit independent responses with regard to the following topics:

Typical Questions	Response Summary
What is the crew size for troubleshooters (TS) and line crews?	Troubleshooters: 1 person Line crews: 3-4 persons
What % of trouble issues are you able to resolve yourself without additional crews?	90% to 95%
Do you think there should be 2 troubleshooters assigned to outages?	No
What is the process to situations that requires a crew?	If the situation is a public or utility safety issue, the TS will secure the feeder and if possible remain on

⁶ Williams Consulting, Inc.'s report entitled: "Review of PacifiCorp's Storm Response Report, Utah Holiday Storm - December 2003", dated May 13, 2004, page 29.

Typical Questions	Response Summary
	site until crew(s) arrive. If this is not possible, the TS assures the feeder is de-energized and made safe before leaving the location.
If you find a damaged or downed conductor, do you look at other poles?	Typically will inspect at least 2 poles either side for collateral damage. This is a climbing inspection.
How do you classify conditions?	If a condition is a safety or power supply issue, we call it into the dispatch center for immediate crew scheduling. If the condition is not a safety issue we code it according to the Facility Inspection Point priority schedule, either as an "A", "B" or "C" condition.
How do you determine ABC?	We have training that we must attend, and we use our experience.
Do you think the current inspection program (2 year safety and 10 year test/treat) is sufficient?	Generally yes. We audit the contractor's work and have found it to be OK.
What else are you involved in regarding inspections?	We send a journeyman line worker to check on all "A" conditions reported by the contractor and we do the inspections on outage calls and the reliability work plan (RWP) program.
Do you think priority "A" conditions are being handled in a reasonable time?	Yes, we have put a lot of effort into correcting "A" conditions this past year.
Do you think priority "B" and "C" conditions are being handled in a reasonable time?	We get a list of all "B" and "C" conditions when we are doing maintenance on a feeder or if it a part of an RWP.
What is your impression on the overall condition of the system?	The system is in much better condition that it was 4 (or more) years ago.
Do you feel that all areas of the system are getting the right amount of attention?	Yes, the RWP program identifies areas that have problems across the system. We go after the worst first.
Are there enough troubleshooters both during the weekdays and after hours?	Yes, we have several shifts operating at the Wasatch Center and we have 1 hour call outs.
Do you have sufficient journeyman line workers?	We just added some, but can always use more.

7.9. Implement WCI recommendations

Complainant calls for RMP to implement all WCI recommendations from Storm Report.

7.9.1 RMP Response

In its Response to Letters of Richard E. Drake, dated June 4, 2007, RMP provided the following quotation, referring to the agreed Stipulation

“38. The parties agree that Utah Power has appropriately implemented the recommendations in the [Company] Report and [Division Report] as resolved by the Company, the Division and WCI . . . and that such implementation should mitigate the impact of a storm similar to the Storm in the future. The parties agree that the costs incurred in implementing the recommendations and Utah

Power's commitments in paragraph 39 are the type of costs that should be recovered in rates."

7.9.2 WCI Analysis

WCI is engaged to review the progress RMP has and is making on implementing the recommendations emanating from the Storm Report. This review will be part of our Storm Report Follow-Up Study report.

8. Response to RMP 6/8/07 documents

Complainant's response to RMP June 8th docs, (RMP DR 22) (Drake DR 27) dated June 14, 2007.

8.1. Condition Codes

Complainant takes issue with condition code contents, time lines and application.

8.1.1 RMP Response

RMP provided "Appendix A – Three-Tier Prioritization Model," which is a part of the training that line inspectors and journeyman line workers receive.

8.1.2 WCI Analysis

Condition Codes:

The Three-Tier Prioritization Model, which contains 128 specific condition categories and their priority, provides a set of rules for classifying facility point conditions. Of these, 32 are classed as "Imminent Danger" (equivalent to an "A" condition), 73 are classed as "Before Next Detailed Inspection" (equivalent to a "B" condition), and 26 are classed as "Candidate for Deferral" (equivalent to a "C" condition). A total of six of the conditions are classed as either as "A" or "B," and are automatically classed as "A" unless the line worker believes they do not represent an imminent danger and then they are classed as a "B" condition. Similarly, there are four conditions that are classed either "B" or "C." The line workers have the ability to escalate any condition to a higher priority, based on their experience and knowledge of the system.

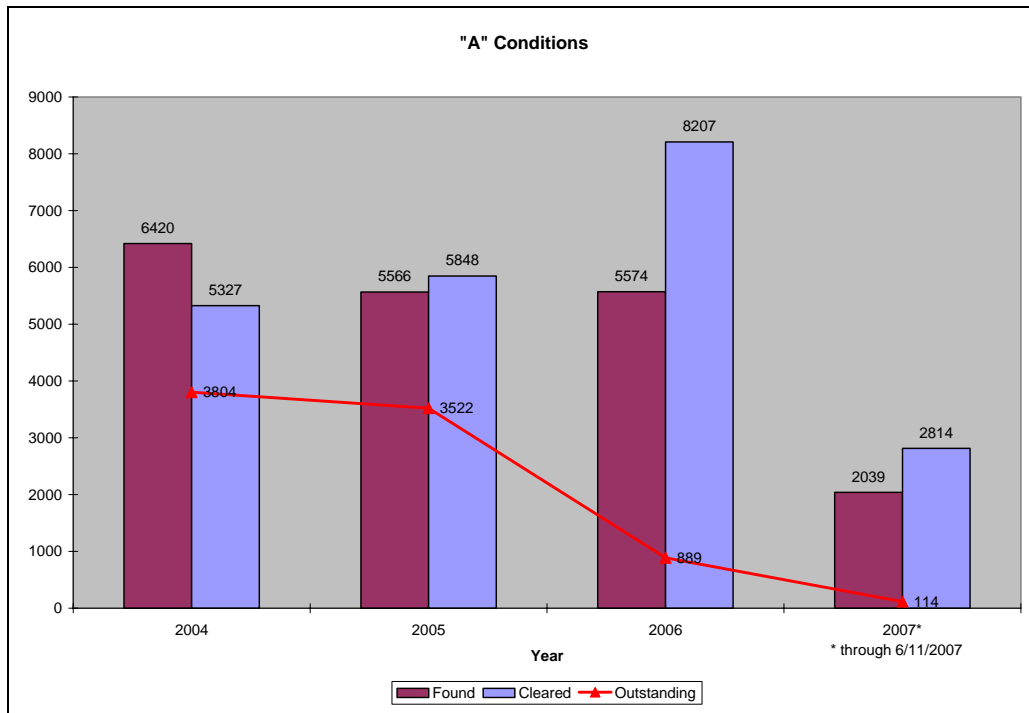
Repair Status:

The following table summarizes RMP's progress in correcting issues on the system.

Year	A Conditions		
	Found	Cleared	Outstanding
2004	6420	5327	3804
2005	5566	5848	3522
2006	5574	8207	889
2007*	2039	2814	114

* 2007 is through 6/11/2007

RMP has put substantial effort into correcting "A" conditions found as a result of its inspections, outage responses and other reporting means. "A" conditions have been reduced from 3,804 in 2004 to less than 114 through 6/11/2007 in 2007, as depicted on the following chart.



Repair Time:

RMP has agreed to complete corrective maintenance on "A" items within an average of 120 days from the time the condition was reported. RMP's average repair time is under currently under 30 days.

8.2. Tie wire failures

Complainant claims that RMP did not inspect adjacent pole tie wires.

8.2.1 RMP Response

RMP's journeymen linemen provided anecdotal information during our interviews with them.

8.2.2 WCI Analysis

RMP's journeyman line workers inspect at least the two adjacent poles for tie wire and other conditions when a conductor down or conductor damage is discovered either through an outage or during inspections (please refer to section 7.8.2).

8.3. *Journeyman linemen interviews*

Complainant suggests PSC undertake interviews with all current and prior Utah journeymen linemen.

8.3.1 RMP Response

RMP stated in its filed "Response to May Letter of Richard E. Drake" dated June 19, 2007 on page 6 that "the request that the Commission interview all journeymen linemen in the state is plainly excessive and would amount to a fishing expedition"

8.3.2 WCI Analysis

WCI also believes this to be excessive and would not produce meaningful results. However, WCI agrees that a representative sample of journeymen linemen should be interviewed to gain their perspective on the condition of the system and to obtain their observations on procedures. Please refer to section 7.8.2 for a summary of the interviews that WCI conducted.

8.4. *Two troublemen trucks need to be available*

8.4.1 RMP Response

RMP's journeyman line workers (during our interviews), stated that a single RMP troubleshooter can correct 90% to 95% of outage restorations.

8.4.2 WCI Analysis

As stated by RMP, their troubleshooters are able to correct 90% to 95% of outage restorations with a single troubleshooter. It does not make economic sense to double up the troubleshooters. If a troubleshooter requires assistance, he/she can call dispatch for assistance. If the outage is after hours, there could be a slight delay in mobilizing either crews or additional troubleshooters, but RMP does utilize staggered shifts and one hour call-outs to assure that adequate crews are available for response.

Remedies Contained in this Complaint follow (with continued numbering)

8.5. East Millcreek inspections

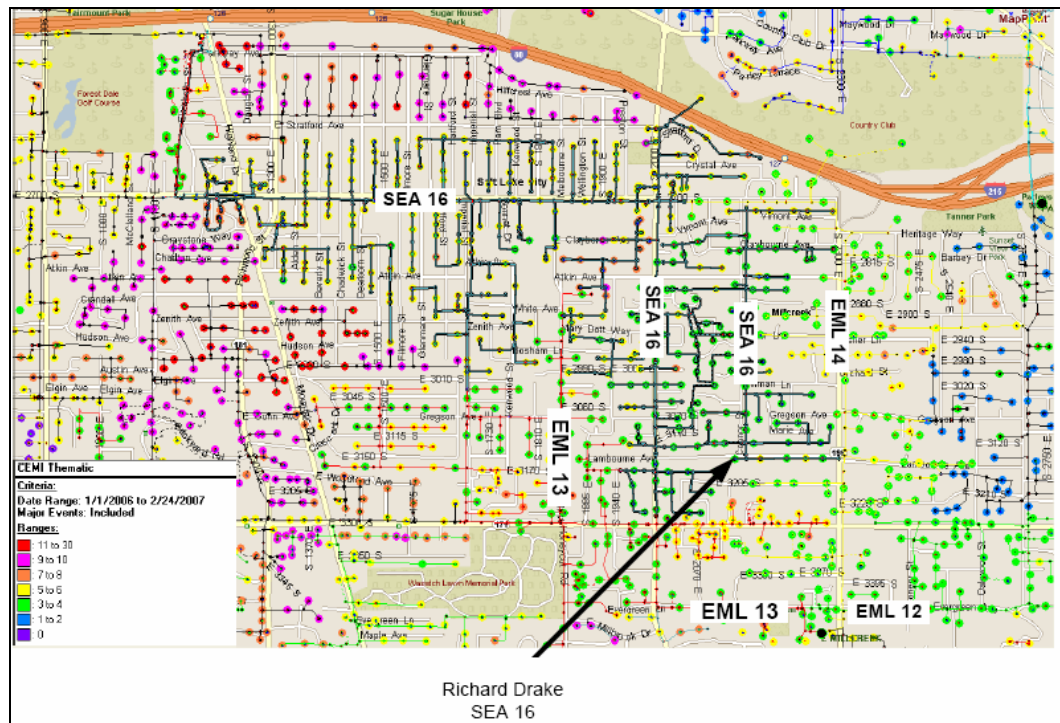
Complainant requests an immediate inspection of all circuits in the Millcreek area, listing all required maintenance and repairs.

8.5.1 RMP Response

Three of the four circuits noted have been inspected and repairs either have been completed or are in progress or scheduled. The fourth circuit (East Millcreek #13) does not serve Dr. Drake's street.

8.5.2 WCI Analysis

We analyzed the CEMI Thematic shown in the following graphic:



From this it is clear that East Millcreek #13 is not currently part of on-going Reliability Work Plans, nor is it scheduled for cycled inspections. East Millcreek #13 generally experienced 3-4 outages during the 1/1/2006 through 2/24/2007 period, compared to other feeders that had a substantially higher number of outages (in the range of 7 to 10 outages) during the same period. These feeders are currently under RWPs. If RMP were to divert resources to conduct a detailed inspection of this feeder (East Millcreek #13), it would require deferring on-going work in areas defined under RWPs, which by definition are areas of poorer performance than the area served by East Millcreek #13.

8.6. Complete all repairs by 12/31/07

8.6.1 RMP Response

At the June 14, 2007 Technical Conference, RMP indicated that it should not be a problem to affect all necessary repairs by 12/31/07.

8.6.2 WCI Analysis

RMP to proceed to inspect and repair as needed by 12/31/07, or by a date negotiated as reasonable as mentioned at the June 14, 2007 Technical conference by Mr. Drake (page 87).

8.7. Fines

Complainant requests PSC to levy fines for each safety violation until corrected.

8.7.1 RMP Response

RMP stated in its filed "Response to May Letter of Richard E. Drake" dated June 19, 2007 on page 8". A violation occurs only if the condition is not repaired within a reasonable time as determined by the utility after discovery of the condition.

8.7.2 WCI Analysis

While the subject of fines is a Commission matter and is outside WCI's scope, we would like to comment that RMP has demonstrated that conditions which were claimed as "safety" conditions, were in fact not safety related but instead conditions that were classified as "A" or "B" conditions in accordance with its prioritization system. RMP stated several times during the Technical Conferences and during our interviews with them, that safety related conditions are immediately dispatched.

8.8. Mandate RMP report directly to Mid-American

8.8.1 RMP Response

In its filed "Response to Letters of Richard E. Drake", dated June 4, 2007, RMP states "Given that the Commission has in the course of three separate proceedings, found, after exhaustive analysis, that mergers and acquisitions of the former Utah Power system were in the public interest.."

8.8.2 WCI Analysis

This issue is outside of WCI's scope and outside the purview of the Utah PSC. However, it should be noted that in WCI's Storm Report, we recommended that PacifiCorp provide local authority and leadership in Utah relative to Utah issues. This was accomplished as part of the Mid-American merger agreement. Where RMP's management reports (PacifiCorp or Mid-American) is not relevant and in fact such a mandate could be counter-productive to efficient utility operations, including mutual aid during emergencies. Further, during our interview with Mr.

Rich Walje, RMP's President, he indicated that he is required to participate in a weekly conference call to his superiors at MEHC. These calls focus on performance including safety, environmental issues, call center performance, achievement of customer guarantees, reliability performance and attainment of corporate goals. This, in our view should satisfy the Complainant's concern that RMP's performance is filtered by PacifiCorp.

8.9. Revenue allocation

Complainant requests that the PSC mandate a reasonable percentage of revenue be directly applied to maintenance and repair of the system.

8.9.1 RMP Response

In its filed "Response to Letters of Richard E. Drake", dated June 4, 2007, RMP states "The Commission regulates the Company's rates and provision of service as a surrogate for competition in the market." RMP further states that this does not allow for the Commission to micro-manage the utility and that limitation should also apply to customers of the utility.

8.9.2 WCI Analysis

In typical utility ratemaking, revenues provided under the tariff are defined in filed rate cases. These revenues are usually based on a cost of service analysis taking into account all the utility's costs (that are recoverable within rates), which include distribution maintenance and repair. What is ultimately allowed in rates may differ from what is filed due to unknowns, such as stipulations, unspecified disallowances, etc. However, the filed distribution maintenance costs for Utah are shown in the table below:

Docket	Effective Date	Filed Distribution Maintenance Costs – Utah Allocated
99-035-10	May 2000	\$18.1 million
01-035-01	Nov 2001	\$21.9 million
03-2035-02	Apr 2004	\$27.4 million
04-035-42	Mar 2005	\$64.0 million
06-035-21	Dec 2006	\$67.5 million

These costs include maintenance supervision and engineering and maintenance of: structures, station equipment, overhead lines, underground lines, line transformers, street lights, meters and miscellaneous distribution plant. The figures also include vegetation management and outage restoration, but exclude capital expenditures.

8.10. Implement WCI recommendations

8.10.1 RMP Response

RMP has actively been addressing the agreed recommendations contained in the subject WCI report.

8.10.2 WCI Analysis

WCI is engaged to review the progress RMP has and is making on implementing the recommendations emanating from the Storm Report. This is not relevant to this evaluation and will be addressed in the Storm Report Follow-Up Study.

9. Docket No. 07-035-08 Stipulation

On August 10, 2007 Complainant Richard Drake and Respondent Rocky Mountain Power filed a Stipulation purporting to settle all outstanding issues relating to Dr. Drake's complaint(s) and requesting dismissal of the complaint. Further in a letter dated August 10, 2007 to the Utah PSC from Richard Drake, the complainant acknowledged the meeting held with RMP, affirmed the agreements reached, requested the Commission to drop the action initiated by his complaint and to cancel the Technical Conference scheduled for August 16, 2007.

The relevant terms and conditions of the abovementioned Stipulation are described in the following:

9.1. Repair "A" and "B" conditions (paragraph 13)

RMP agrees to repair all "A" and "B" conditions on the four distribution circuits serving the Lambourne Avenue, Kempner Road and adjacent neighborhoods, consisting of Millcreek Circuits 11, 12, 13, and 14.

9.1.1 WCI Analysis

In section 8.5, above, we noted that diverting resources to address concerns in the Millcreek area could affect the progress of RWPs in other areas that were not performing as well. However, we recognize that protracted involvement in settling Dr. Drake's complaint would involve costs to RMP, so there would be a savings of avoided costs should this Stipulation be approved. RMP has indicated that while correcting all "A" and "B" conditions on the Millcreek circuits will require financial and labor resources, they believe, and we agree, that several benefits will come out of this activity. These benefits include the ability to observe the incremental performance improvement of circuits that have been completely redone, as a benchmark from which to base future repair decisions. Further, RMP indicated that this Stipulation would have a de minimus impact of deferring a very small number of on-going planned reliability work plans for a short period of time.

Based on the foregoing, WCI agrees that the proposed work mitigating “A” and “B” conditions on the four Millcreek circuits, while representing added workload for RMP, will:

1. Avoid further costs associated with settling this complaint
2. Provide a benchmark for future maintenance decisions and comparison to reliability work plan results
3. Have a minimal impact on on-going reliability work plan efforts.

9.2. Formal review of facility condition categories (paragraph 14)

RMP agreed to conduct a formal review of its facilities condition categories (A and B conditions) to assure that they comply with accepted utility practices and will inform Mr. Ward of the outcome.

9.2.1 WCI Analysis

We are in agreement with this proposed action as it complies with our findings (Section 8.1) and recommendations (Section 10).

9.3. Proper channels for condition reporting (paragraph 16)

The parties agreed that the most effective and efficient manner to address potential conditions on the system is to establish direct communication between the reporting party and the Company, in lieu of pursuing other (formal) avenues for possible correction.

9.3.1 WCI Analysis

WCI agrees that this is an appropriate and cost effective mechanism to bring first light to potential system conditions that are of concern to customers. The State of Utah Statutes provide remedies should this path not be fruitful.

10. Conclusions and Recommendations

10.1. Conclusions

In the context of the complaints raised and based on the data requests that we requested, received and analyzed and the interviews held with RMP personnel, it appears that RMP:

1. Is not in violation of NESC code with regard to insulator clearances.
2. Handled condition codes for squatting insulators appropriately.
3. Has put systems in place to properly provide for customer contact.
4. Has put systems in place to manage its maintenance and outages.
5. Has adequately funded and conducted its distribution maintenance program as provided in rates.
6. Is taking the appropriate steps to increase its field workforce.
7. Has improved its system reliability through inspection and maintenance programs, vegetation management enhancements and its targeted reliability work plans.

8. Has committed to continued reliability improvements.
9. Has implemented or is in the process of implementing the recommendations contained in the WCI Storm Response Review Report.
10. Has complied with or is in the process of complying with the appropriate “Remedies” stated in Section 8 by the Complainant.
11. Has reached a settlement agreement with the Complainant.

10.2. Recommendations

1. In the context of the complaints lodged by Dr. Drake, we recommend that the PSC close this matter.
2. RMP should undertake a careful review of all the condition classes and description in the “Appendix A – Three Tier Prioritization Model” (DPU 1st Set Data Request 1.7) to assure consistency in criticality assignments. Please refer to section 5.1.2.

Both of these recommendations were addressed in the Stipulation described in Section 9 and we further recommend that the Stipulation and its contents be approved by the Commission.