R. Jeff Richards (A7294) Rocky Mountain Power 201 South Main Street, Suite 2300 Salt Lake City, Utah 84111 (801) 220-4734 (801) 220-3299 (fax) jeff.richards@pacificorp.com

Attorney for Rocky Mountain Power

# **BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

In the Matter of Richard E. Drake	:
Complainant,	: Docket No. 07-035-08
vs. ROCKY MOUNTAIN POWER, a division of PACIFICORP,	: : ROCKY MOUNTAIN POWER'S : MOTION : TO DISMISS AND ANSWER
Respondent.	: : :

Pursuant to Utah Code Ann. § 63-46b-6, and Utah Admin. Code sections R746-

100-3.H and R746-100-3.I, Rocky Mountain Power, a division of PacifiCorp, ("Rocky

Mountain Power" or "Company") hereby responds to the Complaint of Richard E. Drake

("Complainant"), as follows:

# I. STATEMENT OF RELIEF REQUESTED

For the reasons stated below, Rocky Mountain Power respectfully requests that the Commission find that Rocky Mountain Power has not violated any provision of law, the National Electric Safety Code ("NESC"), Commission order or rule, or Company tariff, and that Complainant be denied his requested relief. Rocky Mountain Power also moves that the Complaint be dismissed in its entirety, with prejudice.

#### II. BACKGROUND

Richard E. Drake filed a formal action with the Public Service Commission of Utah on February 12, 2007, advancing two primary allegations: 1) Rocky Mountain Power is operating and maintaining its distribution system in violation of NESC, Section 35; and 2) Rocky Mountain Power has unnecessarily exposed the residents of the Lambourne Avenue area to power outages and safety hazards. Rocky Mountain Power denies those allegations as more fully explained below.

A number of Rocky Mountain Power customers experienced intermittent power outages in the Lambourne Avenue area of Salt Lake City during a period from February 9 through February 12, 2007. These outages were caused by events that are referred to by the electric industry as "pole fires." Pole fires are caused by a number of factors that include lightning, brush fires, vandalism, and, as was the case during this event, hardware contamination. Pole fires caused by hardware contamination occur where air particulates, such as salt, airborne pollution, or dust build up on insulating equipment during a dry weather pattern followed by a weather event of light misting rain. The light misting rain combines with contaminants on the insulating hardware and creates bonds between the contaminants. Contaminated water droplets then begin to form and establish paths from the energized overhead conductor to the cross arm. This provides an electrical path for electrical tracking to occur. (Exhibits A through D illustrate the effects of contamination and the cause of pole fires). When tracking occurs from the energized conductor to the surface of the cross arm, a small arc is generated between the wood and the through bolt that is used to attach the cross arm to the pole.

A unique weather condition must be present for widespread contamination-related pole fires to occur. In the Salt Lake Valley during January 2007, the weather was unusually cold and dry, combined with record-breaking inversions, causing fine particle air pollution that caused abnormally high concentrations of contaminants to build up on insulators as well as other pole hardware. From February 9 through February 12, 2007, the Salt Lake Valley experienced a pattern of light misting rain. This weather event combined with the hardware contamination is uniquely conducive to pole fires. During this period of time, Rocky Mountain Power experienced a number of pole fire outage events caused by the contamination of misting rain and contamination on its equipment, including but not limited to outages in the Lambourne Avenue area.

Pole fires (inclusive of all causes, i.e., lightning, brush fires, vandalism, and hardware contamination) account for less than two percent of the total number of outages Rocky Mountain Power experiences with its distribution system. Company outage records for calendar years 2004, 2005, and 2006 indicate pole fires account for 1.3 to 2.0 percent of all outage incidents in the state of Utah.

3

# III. REASONS FOR GRANTING ROCKY MOUNTAIN POWER'S REQUESTED RELIEF

# 1. The Drake Complaint Fails to Establish any National Electric Safety Code Violation by Rocky Mountain Power and Should, Therefore, be Dismissed.

Drake's complaint fails to show that Rocky Mountain Power violated the NESC. Specifically, Drake erroneously alleges that Rocky Mountain Power violated Section 35 of the NESC which "outlines minimum safe strength and clearance requirements for pole insulators." Instead, however, Section 35 of the NESC provides standards for safety rules for underground lines, specifically direct-buried cable. Section 35 of the NESC is entirely irrelevant to the February outages or any of the allegations Drake asserts in his complaint.

Overhead clearance requirements for insulators and the conditions complained of by Drake's complaint are governed by NESC Section 23, Table 235-6. These provisions set forth the "clearance in any direction from line conductors, span, or guy wires attached to the same support." Rocky Mountain Power's poles, hardware, and other equipment comply with Section 23 and the type of NESC clearance standards referred to in the Drake complaint.

Section 23, Table 235-6 provides that where operating voltage is 7.2 kV phase to neutral and where the circuit is effectively grounded and the neutral conductor meets the standards of Rule 230E1, which is the case here, a minimum of three inches of clearance must be maintained between the cross arm of the pole and the mid-point of the

conductor<sup>1</sup>. The insulators on Rocky Mountain Power's poles in the Lambourne Avenue area are installed with a 5 and 9/16 inch clearance between the surface of the cross arm and the conductor, thus exceeding the NESC required clearance standard by 2 and 9/16 inches.

Drake further alleges that Rocky Mountain Power fails to meet the appropriate NESC clearances for those insulators where the wood pin that supports it has dropped into the cross arm. When the poles in the Lambourne Avenue area were originally installed, the standard was to use insulators that were fastened to the top of wooden pins. These wooden pins were dropped into a hole that was drilled vertically through the cross arm. These wooden pins hold the insulator two inches above the cross arm. Over time however, the wooden pins wear, causing the pin and the insulator to sink down into the cross arm. In some cases, this results in the bottom of the insulator resting closer to and in some cases directly on the cross arm. This condition is referred to as a "squatting insulator."

Squatting insulators do not violate the required NESC clearance standards and were not the cause of the pole fires that occurred during February. Section 23, Table 235-6 requires a three inch distance from the center of the conductor to the surface of the

<sup>&</sup>lt;sup>1</sup> Drake erroneously asserts that table 235-6 of the NESC requires a minimum safe clearance of 3 and 5/8 inches for a line energized at 12,500 volts. Note 10 for Table 235-6 states: "[w]here the circuit is effectively grounded and the neutral conductor meets 230E1, phase-to-neutral voltage <u>shall be used</u> to determine clearance from the surface support arms and supports." (Emphasis added). This results in a minimum safe clearance distance of 3 inches.

cross arm. Even where an insulator pin has sunken and the insulator rests directly on the cross arm, the distance between the surface of the cross arm and the conductor is 3 and 9/16 inches, exceeding the three inch NESC standard. The pole fires that occurred during the February outages were the direct cause of a period of record breaking pollution during a dry weather patter that resulted in fine-particulate matter contaminating insulating equipment followed by a weather pattern of misting rain. 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.

Squatting insulators are replaced in priority. The Company categorizes its work into three priorities, A, B, and C conditions which reflects the significance of the condition. An "A" condition is a condition found that poses an imminent hazard to the public or employees, or risk of loss of supply or damage to the electrical system and is corrected as soon as possible. In the state of Utah, the average age of "A" conditions is not to exceed 120 days. A "B" condition is a condition found that while there is a sign of defect or damage, in the opinion of the inspector does not pose an imminent hazard and is prioritized to be corrected as part of scheduled maintenance in targeted areas. Squatting insulators, because the condition does not meet the A condition standard is considered a B condition and are replaced accordingly.

6

2. The Lambourne Avenue Area Has Experienced Relatively Few Outages.

The Lambourne Avenue area has experienced relatively few outages. Exhibit E shows the number of outages experienced on the South East 16 and Millcreek 13 circuits that serve this area over the course of the last year. According to company outage records specific to Richard E. Drake, Mr. Drake experienced four outages in 2006; three of which were caused by weather. Because the Drake complaint does not specifically allege the basis for his assertions that Rocky Mountain Power is endangering residents in the Lambourne area, including school children and senior citizens, it is difficult to understand with any degree of clarity the basis for his claims. In short, Rocky Mountain Power's system, and in particular the South East 16 and Millcreek 13 circuits have been maintained in a proper and safe condition at all times and in compliance with NESC standards.

## IV. ANSWER

The Complaint does not contain statements of fact conducive to paragraph-byparagraph response. Therefore, in addition to rebutting Complainant's factual allegations by setting forth its own factual assertions above, Rocky Mountain Power responds to the specific allegations of the Complaint by general denial of any allegation that would support a finding that Rocky Mountain Power has in any way violated a provision of law, Commission rule or order, or Company tariff, such that Complainants could be entitled to their requested relief.

# V. DEFENSES

# **First Defense**

Complainant has failed to state a claim upon which relief can be granted.

#### Second Defense

Rocky Mountain Power has acted consistent with statute, the National Electric

Safety Code, Commission rule and order and Company tariffs.

#### **Third Defense**

Complainant's claims are barred by the filed tariff doctrine.

#### **Fourth Defense**

The Complaint is barred by the prohibition of retroactive ratemaking.

### **Fifth Defense**

The Complaint is barred by Utah Coe Ann. § 54-7-14.

### Sixth Defense

The Company reserves the right to assert any additional affirmative or special defense that may become known through discovery or further proceedings in this matter or as may be otherwise appropriate.

WHEREFORE, for the reasons stated above Rocky Mountain Power respectfully requests that the Complaint be dismissed in its entirety, with prejudice.

RESPECTFULLY SUBMITTED: March 20, 2007.

R. Jeff Richards Attorney for Rocky Mountain Power

# **CERTIFICATE OF SERVICE**

This is to certify that a true and correct copy of the foregoing **ROCKY MOUNTAIN POWER 'S MOTION TO DISMISS AND ANSWER** was sent by U.S. Mail, postage prepaid, to the following on March 20, 2007:

Richard E. Drake 2134 East Lambourne Avenue Salt Lake City, Utah 84109