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

) COMCAST CABLE COMMUNICATIONS, ) INC., )	
) Claimant, )	Docket No. 03-035-28
v. )	
)	PREPARED DIRECT TESTIMONY
PACIFICORP, dba UTAH POWER, )	OF JAMES COPPEDGE
)	FOR PACIFICORP
Respondent. )	
)	<b>July 2, 2004</b>

### 1 Q. Please state your name and business address.

A. My name is James E. Coppedge Jr. My business address is 650 NE Holladay,
Suite 700, Portland, Oregon 97232.

#### 4 Q. By whom are you employed and what is your position?

5 A. I am employed by PacifiCorp as the Manager of Field Inventory and 6 Inspections. I am primarily responsible for overseeing all inventory/audit inspections 7 and results, overseeing supervision of pre- and post-inspections for all applications, and 8 National Electrical Safety Code compliance. I have been employed by PacifiCorp for 9 the past two years. I have approximately 25 years of experience in the 10 telecommunications and cable industry in the construction of communications 11 networks and facilities, and as a project manager.

## 12 Q. Attached to your written testimony are Exhibits PC 2.1 through 2.5. Were these 13 prepared by you or under your direction?

14 A. Yes.

1	Q.	What are your qualifications to testify in this proceeding?
2	A.	I have listed my qualifications in Exhibit PC 2.1.
3	Q.	What areas will your testimony address?
4	A.	My testimony will address the processes, data collection, management, and
5		charges associated with the 2002/2003 Audit of PacifiCorp's joint use utility poles.
6		AUDIT PROCEDURES
7	Q.	What was the purpose of the 2002/2003 Audit?
8	A.	The purpose of the 2002/2003 Audit was to identify the ownership, types, and
9		location of all third-party attachments to PacifiCorp's poles, as well as to determine
10		whether such attachments are in compliance with the requirements of PacifiCorp's
11		Distribution Construction Standards, the National Electrical Safety Code or General
12		Order 95, whichever is applicable, in addition to state or federal standards that may
13		exceed the preceding. PacifiCorp was also identifying its own attachments to third-
14		party poles during the 2002/2003 Audit (as distinct from an audit to determine
15		PacifiCorp's compliance with the National Electrical Safety Code). The cost of the
16		portion of the 2002/2003 Audit directed at identifying PacifiCorp's attachments to
17		foreign-owned poles was not passed on to third-party attachers.
18	Q.	What were the geographical areas covered by the 2002/2003 Audit?
19	A.	The geographic areas to be covered by the 2002/2003 Audit included all of
20		PacifiCorp's service area within the states of Utah, Washington, Oregon, California,
21		Idaho, and Wyoming.

1	Q.	Who conducted the 2002/2003 Audit?
2	A.	PacifiCorp hired Osmose Holdings, Inc. ("Osmose") as the contractor to
3		perform the 2002/2003 Audit.
4	Q.	What are Osmose's qualifications?
5	A.	Osmose is an industry-recognized company that has conducted joint use audits
6		for a number of major utilities. PacifiCorp awarded the contract to perform the audit to
7		Osmose based upon Osmose's excellent experience and low cost.
8	Q.	How did PacifiCorp select Osmose as the contractor to perform the 2002/2003
9		Audit?
10	A.	In July of 2002, PacifiCorp distributed a request for proposals ("RFP") to what
11		it felt were qualified contractors to perform an inventory audit of PacifiCorp facilities
12		throughout PacifiCorp's service territory. Ex. PC 2.2.
13		PacifiCorp asked North Star, Osmose, Custom Lighting Services, Utility Asset
14		Management, Potelco, Transmap, and Joint Use Solutions to participate in the RFP
15		process. Out of the seven contractors that were asked to participate in the RFP process,
16		two contactors, Osmose and Custom Lighting Services, were selected to make a formal
17		presentation related to their ability to perform the work and to express any concerns
18		that might jeopardize their ability to complete the work on schedule.
19		Contractors submitted bids on July 15, 2002. On November 1, 2002,
20		PacifiCorp awarded the contract to perform the 2002/2003 Audit to Osmose based
21		upon the value and experience it offered at low cost.

#### 1 Q. What criteria were utilized in analyzing the bids that were submitted?

A. The bids were analyzed by PacifiCorp based on cost, technology and previous
experience.

## 4 Q. Were Osmose employees trained prior to the commencement of the 2002/2003 5 Audit?

- A. Yes. Osmose employees were required to attend a three-week training process,
  which encompassed classroom and field instruction. The training included the use of
  IPAQ handheld devices, understanding of the National Electrical Safety Code rules,
  and PacifiCorp's distribution construction standards. The training class was pass or
  fail; only the candidates that passed were hired to perform the audit. This training was
  conducted by Osmose, and I reviewed all relevant training materials.
- 12 Customer Acceptance Quality Control ("CAQC") inspectors, people hired by 13 PacifiCorp to ensure a minimum 97% accuracy rate for the audit, went through a one-14 week training process, as well as time in the field with current inspectors. Osmose 15 training manuals are attached to my testimony as Exhibit PC 2.3.
- 16 Q. What types of data was Osmose required to collect?

A. Osmose was tasked with collecting data associated with the following: the
specific licensee attachment, types of equipment, the height of the attachment, any
violations associated with the licensee, pole tag information that identifies the pole,
GPS (global positioning system) coordinates and a photograph of the pole in its current
condition. Osmose also collected a few data points solely for PacifiCorp's own use.

Again, the cost of the Audit incurred for PacifiCorp's sole benefit was paid for solely
 by PacifiCorp.

#### 3 Q. How did the Osmose crews collect the data for the 2002/2003 Audit?

4 In the 2002/2003 Audit, "fielders" were required to physically visit every A. 5 distribution pole. (A fielder is the individual, typically an Osmose employee, who 6 enters the field with an IPAQ device to collect and record the data for the audit.) The 7 crews used a measuring stick to collect heights, and a PDA computer with a digital 8 camera and a Trimbal GPS locator to collect data elements. In conducting the Audit, 9 PacifiCorp took an extract of an area from FastGate and sent it to Osmose. FastGate, 10 an Osmose proprietary system, is another software system used by PacifiCorp to 11 manage joint use activities. PacifiCorp uses FastGate primarily as a digital 12 connectivity tool.

Osmose would then take the FastGate extract and break it down into work packets to be distributed to fielders. The software used to compile this data on the hand held device is called FastGate Mobile. The field data associated with each pole was entered into an IPAQ PDA handheld device, and the completed data was electronically sent to PacifiCorp.

Prior to the data being sent to PacifiCorp, Osmose performed a quality control ("QC") inspection of a sample set of the data to ensure fielded accuracy. If the sample set did not pass the Osmose QC, it was "refielded," or redone. Once the sample sets had passed the Osmose QC, the larger work packets were then sent to PacifiCorp for

1		additional QC. During the 2002/2003 Audit, PacifiCorp retained four CAQC
2		inspectors. These inspectors were contract workers provided by Volt. The CAQC
3		inspectors would take a percentage of previously QC'ed data and a percentage of non-
4		QC'ed data and perform an additional QC of this material. The accuracy threshold for
5		this QC was 97%. If the threshold was not met, the data was returned to Osmose to be
6		refielded. After the stages of QC were completed, the fielded data was uploaded into
7		FastGate production version. Once the data had been applied in FastGate, reports for
8		comparison against JTU were then run.
9	Q.	How did Osmose submit the data it collected to PacifiCorp?
10	A.	Osmose electronically submitted the data it collected to PacifiCorp to review
11		and approve or return to the field for corrections.
12	Q.	What did PacifiCorp do with the data it received from Osmose?
13	A.	In short, once the data was reviewed, it was applied to PacifiCorp's FastGate
13 14	A.	In short, once the data was reviewed, it was applied to PacifiCorp's FastGate mapping database to update the location of the facilities identified by the Audit with
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14	A.	mapping database to update the location of the facilities identified by the Audit with
14 15	A.	mapping database to update the location of the facilities identified by the Audit with respect to the facilities and attachments already existing in PacifiCorp's database.
14 15 16	A.	mapping database to update the location of the facilities identified by the Audit with respect to the facilities and attachments already existing in PacifiCorp's database. In greater detail, Osmose first collected the data in the field using FastGate
14 15 16 17	A.	mapping database to update the location of the facilities identified by the Audit with respect to the facilities and attachments already existing in PacifiCorp's database. In greater detail, Osmose first collected the data in the field using FastGate Mobile software. The completed data was then sent electronically to PacifiCorp. The
14 15 16 17 18	A.	mapping database to update the location of the facilities identified by the Audit with respect to the facilities and attachments already existing in PacifiCorp's database. In greater detail, Osmose first collected the data in the field using FastGate Mobile software. The completed data was then sent electronically to PacifiCorp. The information extracted from FastGate was then compared with existing data maintained

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generated by JTU through an information-technology process wherein the JTU mainframe conducted the comparison. The Mismatch Report reflected poles identified in the 2002/2003 Audit that had a particular company's attachments, despite the fact that JTU had no current record of the existence of that company on those particular poles.

6 Nothing was updated in JTU at that point. Instead, a member of my staff, Sara 7 Johnson, analyzed the Mismatch Report to ensure that it accurately identified 8 unauthorized attachments. Once she did so, as explained in her testimony, she 9 uploaded the data into JTU, checked to see whether permits were pending for a 10 particular company, and generated a billing statement and a Billing Summary Report. 11 The Billing Summary Report was then checked to ensure that it accurately reflected the 12 information entered into JTU. Safety violations detected during the 2002/2003 Audit 13 were also entered into JTU once an inventory for a particular district was completed.

14

#### Q. How did PacifiCorp ensure the accuracy of the 2002/2003 Audit?

A. Prior to the data being submitted to PacifiCorp, Osmose was required to do a random quality-control sample of 10% of the poles that it inspected to ensure accuracy. In addition, PacifiCorp conducted a random sample of 5% of the poles to validate the integrity of the data. Work that failed the QC was reworked by Osmose and resubmitted to PacifiCorp with corrections. In addition, PacifiCorp's contract with Osmose obligated Osmose to maintain an accuracy rate of at least 97% in the Audit. 1 To ensure the necessary high level of quality control for the Audit, PacifiCorp 2 contracted with Volt for temporary contract employees to provide quality control.

3

4

## Q. Did PacifiCorp ever notify AT&T or Comcast of its intention to conduct the 2002/2003 Audit in Utah?

5 A. Yes. PacifiCorp notified Comcast of its intent to conduct the audit 30 days 6 before it commenced the audit in specific areas throughout Utah, except for the Layton 7 District. I sent letters to Comcast to this effect for the following areas: Ogden (letter 8 sent Feb. 3, 2003), American Fork and Layton (letter sent Dec. 30, 2002), Jordan 9 Valley (letter sent Feb. 24, 2003), Salt Lake City metro area (letter sent Mar. 31, 2003), 10 and Tooele and Park City (letter sent Oct. 8, 2003). Each letter advised Comcast that 11 upon completion of the audit, PacifiCorp would notify Comcast of any unauthorized 12 attachments. I further advised Comcast that it would be invoiced according to the 13 terms of the Agreement.

# 14 Q. Has Comcast ever provided any data to PacifiCorp to refute the results of 15 PacifiCorp's 2002/2003 Audit?

A. To the best of my knowledge, prior to bringing the present action, Comcast
never provided PacifiCorp any documents purporting to refute the results of the
2002/2003 Audit, even though Comcast did hire a company called MasTec Services of
Canada ("MasTec") to independently verify the results of PacifiCorp's 2002/203
Audit.

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1 During the discovery phase of this proceeding, it is my understanding that 2 Comcast provided to PacifiCorp documents pertaining to its pole attachment activity 3 on PacifiCorp's poles in Utah. I personally reviewed 1,809 documents produced by 4 Comcast consisting of applications for attachments, overlash notices, inspection 5 reports, power supply applications, and removal notices relating to activity taking place 6 in American Fork, Ogden, and Layton districts during the relevant time period. Of the 7 1,809 documents submitted by Comcast relating to attachments to PacifiCorp's poles 8 in the American Fork, Ogden, and Layton districts, only 302 of the documents related 9 to poles invoiced by PacifiCorp to Comcast for unauthorized attachments.

10 Of those 302 documents, only seven applications were dated prior to the date of 11 the corresponding invoices for unauthorized attachments. In other words, 295 of 12 Comcast's applications were submitted subsequent to invoices being issued, were for 13 new attachments to the same poles where unauthorized attachments had been found, or 14 were for overlashes to existing attachments that were invoiced as unauthorized. 15 Ultimately, most of the applications produced by Comcast in discovery in this case 16 were for overlash attachments, with no application documentation for the underlying 17 attachment.

In addition, I found 971 poles with safety and construction violations associated with attachments identified in the Comcast documentation I reviewed. This equates to a violation rate of 53% related to the documents provided. Exhibit PC 2.4 is a spreadsheet setting forth my analysis of the Comcast documentation. Of the 302

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invoices related to poles with unauthorized attachments, 183 poles were identified as
having safety or construction violations committed by Comcast. In sum, based on my
examination of the documents provided by Comcast, it would appear that over half of
the poles invoiced for unauthorized attachments in American Fork, Layton, and Ogden
also had safety violations committed by Comcast.

6 Comcast has recently supplemented its original discovery response with 7 additional material. I have reviewed this newly provided material, and it appears that 8 the bulk of the additional material has either already been provided by Comcast or 9 relates to districts and time frames outside the scope this proceeding. I am continuing 10 to review this data to ensure that it does not provide new information that could be 11 used to refute the accuracy of the 2002/2003 Audit, as it pertains to American Fork, 12 Ogden or Layton.

13

#### AUDIT FEES

14 Q. How does Osmose charge PacifiCorp for the 2002/2003 Audit?

A. Osmose charges PacifiCorp \$12.27 per pole for joint use poles and \$3.25 per pole for distribution poles. A joint use pole is a PacifiCorp-owned pole that has one or multiple joint use attachments. A distribution pole is a PacifiCorp-owned pole where there are no other joint use attachments. The total amount invoiced by Osmose, to date, for the 2002/2003 Audit in Utah is approximately \$2,795,389. The total amount invoiced for the American Fork, Ogden, and Layton districts respectively are as follows: \$202,518, \$341,599, and \$139,136. These amounts only reflect Osmose

1		invoices, not costs associated with Volt contract employees or quality-control costs
2		incurred by PacifiCorp.
3	Q.	Does PacifiCorp intend to charge Comcast and other licensees for the cost of the
4		2002/2003 Audit?
5	A.	Yes, but on a pro rata basis. It is my understanding that PacifiCorp's contract
6		with Comcast provides for cost recovery stemming from such audits.
7	Q.	Has PacifiCorp paid for a portion of the 2002/2003 Audit?
8	A.	PacifiCorp has processed and paid all Osmose and Volt invoices received to
9		date related to the 2002/2003 Audit. There may be several invoices that have been
10		received recently that are still being processed for payment.
11	Q.	What formula did PacifiCorp utilize to determine the pro rata rate for the
12		2002/2003 Audit?
12 13	A.	<b>2002/2003 Audit?</b> PacifiCorp performed a cost analysis of the five districts where the 2002/2003
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13	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003
13 14	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and
13 14 15	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and PacifiCorp in conducting the 2002/2003 Audit and any quality-control testing. These
13 14 15 16	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and PacifiCorp in conducting the 2002/2003 Audit and any quality-control testing. These costs, minus any costs incurred for the sole benefit of PacifiCorp, were then totaled.
13 14 15 16 17	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and PacifiCorp in conducting the 2002/2003 Audit and any quality-control testing. These costs, minus any costs incurred for the sole benefit of PacifiCorp, were then totaled. (PacifiCorp incurred costs related to streetlight data, as well as poles identified as
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and PacifiCorp in conducting the 2002/2003 Audit and any quality-control testing. These costs, minus any costs incurred for the sole benefit of PacifiCorp, were then totaled. (PacifiCorp incurred costs related to streetlight data, as well as poles identified as leased poles where PacifiCorp was attached.) These costs incurred by PacifiCorp were
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	A.	PacifiCorp performed a cost analysis of the five districts where the 2002/2003 Audit had been completed and determined the costs incurred by Osmose and PacifiCorp in conducting the 2002/2003 Audit and any quality-control testing. These costs, minus any costs incurred for the sole benefit of PacifiCorp, were then totaled. (PacifiCorp incurred costs related to streetlight data, as well as poles identified as leased poles where PacifiCorp was attached.) These costs incurred by PacifiCorp were excluded in the pro-rata evaluation. The total number of attachments was then

7	Q.	Does this conclude your testimony?
6		number of Comcast attachments, as detected in the 2002/2003 Audit.
5	A.	Comcast's pro rata share was determined by multiplying the pro rata rate by the
4	Q.	How was Comcast's pro rata share of the 2002/2003 Audit determined?
3		spreadsheet illustrating the methodology I have described.
2		was invoiced based on the number of attachments. Attached as Exhibit PC 2.5, is a
1		were then averaged to arrive at an across-the-board per-attachment rate. Each licensee

8 A. Yes it does.