
BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

COMCAST CABLE COMMUNICATIONS,)
INC., a Pennsylvania Corporation,)
)
 Claimant,)
vs.)
)
 PACIFICORP, dba UTAH POWER , an)
Oregon Corporation,)
)
 Respondent.)

Docket No. 03-035-28

INITIAL TESTIMONY

OF

MICHAEL T. HARRELSON, P.E.

COMCAST CABLE COMMUNICATIONS, LLC

July 2, 2004

TABLE OF CONTENTS

	<u>Page</u>
I. Background.....	2
II. Participation In This Proceeding.....	6
III. The Inventory.....	12
IV. Safety Issues.....	39
V. Recommendations and Conclusions	44

1 **Summary of Direct Testimony Of Michael T. Harrelson, P.E.**

2 In the attached testimony, Mr. Harrelson, a registered professional engineer in
3 Florida and Georgia, expresses his expert opinion that there should be no unauthorized
4 attachment penalty assessed against Comcast for “unauthorized attachments.” He states that
5 any penalty, let alone the \$250 per attachment penalty assessed in this dispute, creates ill
6 will and interferes with the parties’ ability to conduct joint use properly. He also concludes
7 that until very recently there was no standard process in place for permitting attachments in
8 PacifiCorp’s service area, let alone for maintaining ongoing inventories of third-party
9 attachments. He does not believe that accurate records exist to say which attachments were
10 authorized. His investigation reveals that Comcast and its predecessors, in fact, received
11 authorization to attach to PacifiCorp poles.

12 PacifiCorp has suggested that the “unauthorized attachment” issues between the
13 parties, center on safety issues. Mr. Harrelson recommends several concrete steps both for
14 clarifying and classifying such issues and addressing them in a way to avoid additional,
15 expensive and unnecessary disputes.

16

1 **I. BACKGROUND**

2 **Q: Would you please state your name, occupation and on whose behalf you are**
3 **presenting this testimony.**

4 A: My name is Michael T. Harrelson. I am a registered professional engineer (Electrical)
5 in Georgia and Florida, and an engineering consultant. I am appearing in this
6 proceeding on behalf of Comcast.

7 **Q: Would you please summarize your experience and qualifications?**

8 A: I have worked on or around electrical systems and the electricity business for virtually
9 my entire life. I got my start in the business working part time for my father's company,
10 Harrelson Electric Co., when I was 11 years old. When I was 18, in 1963, I started
11 working at Georgia Power in electric distribution in their co-op program where I also
12 began work toward my Bachelor of Science. Working in this co-op program, I received
13 my Bachelor of Science in Industrial Engineering from Georgia Tech. Except for a two-
14 year period from 1970 to 1972 where I served as an officer in the United States Army
15 overseas, I was at Georgia Power in various districts and capacities of electric
16 distribution, engineering, construction and maintenance from 1963-1992. A detailed
17 description of my work history is included in my CV, which is attached as Exhibit 1.

18 **Q: Have you had any experience working with joint use of electric distribution poles**
19 **by communications companies?**

20 A: Yes. I have had extensive experience in this area.

1 **Q: Do you have knowledge of the National Electrical Safety Code (“NESC”), as well as**
2 **the engineering and construction practices of electric utilities, telephone companies**
3 **and cable operators?**

4 A: Yes I do. In fact, I consider myself to be an expert in these areas.

5 **Q: Why is that?**

6 A: As I mentioned a moment ago, I have been working on or around electrical systems for
7 nearly 47 years. I worked for Georgia Power Company for a total of 27 years, including
8 during the late 1960s and early 1970s when the first cable television systems were built
9 in Georgia, and elsewhere around the country. Since I was at Georgia Power until 1992,
10 I also witnessed the upgrade and rebuild of improved generations of cable television
11 systems and saw how both cable companies and pole owners, including power
12 companies, in particular, work together to complete these system upgrades and rebuilds.
13 Since leaving Georgia Power I have worked as a consulting engineer and an expert
14 witness to electric companies, cable companies and others. In fact, I have testified in
15 approximately 20 different litigation matters as consultant and have been qualified as an
16 expert in the NESC, National Electric Code (“NEC”), OSHA and other safety rules and
17 regulations, as well as aerial plant engineering construction and maintenance.

1 **Q: Are there other aspects of your training and background that may be relevant to**
2 **your report?**

3 A: Yes. I think so. In addition to working in the business for quite a number of years, I
4 regularly attend conferences on joint use, conduct training sessions and, in fact, conduct
5 pole-line inspections for pole owners like electric utilities. These inspections are similar
6 those that are at issue in this proceeding. Due to these experiences, I am very familiar
7 not only with standard industry practices as they relate to outside aerial utility plant and
8 joint use, but I am also very familiar with the trends and “state-of-the-art” of utility and
9 communications company practices in this area.

10 **Q: Has your work been limited to field work?**

11 A: No. I have been working with joint use issues for approximately 40 years. In addition
12 to working at the field level where the daily work is performed, I have also worked at
13 the administrative and supervisory levels. My experience also includes working with
14 pole-attachment applications by third parties (such as cable companies).

15 I have consulted as a Registered Professional Engineer in joint use contract
16 interpretation and application for 12 years. This includes inspecting joint use facilities;
17 training field engineers and line workers in the NESC, Joint Use contracts and safe-
18 work rules; and negotiating specific separation, clearance and arrangement requirements
19 (which are additional requirements sometimes imposed by power companies). I have
20 also negotiated procedures, techniques and schedules to complete safety audits, make-

1 ready engineering, make-ready construction and post inspection for joint use projects. I
2 have prepared and conducted numerous workshops or seminars for national joint use
3 conferences and personally conducted several NESC code compliance audits. I have
4 also prepared the necessary make-ready engineering for power companies and
5 communications companies involved necessary to correct violations uncovered during
6 those audits. Additionally, I have been President of local utility coordinating
7 committees in Brunswick and Milledgeville, Georgia, and periodically attending
8 national joint use conferences.

9 **Q: Please describe your work as President of the local utility coordinating**
10 **committees?**

11 A: These organizations are established to foster better communication among the different
12 industries and users that need to use support structures and rights-of-way. We discuss,
13 design and implement ways to accommodate safe, practical and timely access and use of
14 the limited facilities that each of these different companies needs to use to provide their
15 services.

16 **Q: Are these committees to facilitate joint use of poles?**

17 A: Yes, in part. Other issues such as joint trenching, right-of-way restoration, and tree-
18 trimming are also considered. But the principal motive for these particular
19 organizations and ones like them is to provide a forum for inter-industry understanding
20 and finding real-world solutions to real-world problems in the joint use area.

1 **II. PARTICIPATION IN THIS PROCEEDING**

2 **Q: Could you please explain what your assignment from Comcast was in this**
3 **proceeding?**

4 A: I was asked, initially, to evaluate the reasonableness of PacifiCorp's activities as they
5 pertain to permitting attachments to poles and assessing penalties for attachments that
6 PacifiCorp claims to be "unauthorized." In order to do this, I had to consider both the
7 audit that is supposedly revealing "unauthorized" attachments, as well as the permitting
8 practices that Comcast is following today and those that it, or its predecessors, followed
9 in the past. I was also asked to form an opinion on the per attachment unauthorized
10 penalty that PacifiCorp has assessed against Comcast. In the course of this
11 investigation, I came to learn that in addition to imposing \$250 fines on Comcast for
12 "unauthorized" attachments, PacifiCorp is also attempting to call into question
13 Comcast's safety practices. Therefore, I had occasion to examine both PacifiCorp's
14 statements about Comcast's attachments, as well some of PacifiCorp's own facilities,
15 from a safety standpoint.

16 **Q: Would you please summarize your findings?**

17 A: In a nutshell, my opinion is that there should not be an unauthorized attachment penalty
18 assessed at all. I believe that any penalty, let alone the \$250 per attachment penalty
19 assessed in this dispute, creates ill will and interferes with the parties' ability to conduit
20 joint use properly.

1 I have also come to the conclusion that, until very recently, there was no standard
2 process in place for permitting attachments in PacifiCorp's service areas, let alone for
3 maintaining inventories of third-party attachments. I do not believe that accurate
4 records exist showing which attachments are authorized. My opinion, based on the
5 practices of the parties, and industry practices and norms, is that Comcast and its
6 predecessors received utility authorization to attach to PacifiCorp poles.

7 It also appears from my investigation that this is not a *per-pole* charge, but a *per-*
8 *attachment* charge. In other words, depending on how PacifiCorp defines "attachment,"
9 the penalty would not be \$250, but \$500 or \$750 per pole. I'll explain why this does not
10 fit into standard industry practice below, but suffice it to say that it could result in
11 multiple applications of the \$250 per pole penalty.

12 In addition, it is my opinion that PacifiCorp's position on supposed safety violations is
13 incorrect and unreasonable. PacifiCorp has presented Comcast with approximately
14 15,000 notices of what PacifiCorp claims are safety violations found in the Layton,
15 Ogden and American Fork districts in connection with the current audit. I believe that
16 PacifiCorp's position that Comcast is responsible for the correction of each of these
17 supposed "safety violations" is wrong.

18 **Q: Please explain.**

19 A: Let me start with the \$250 penalty. I simply cannot see either the penalty or the
20 impending "safety" program as a serious attempt to grapple with the complexities of

1 joint use. Joint use can be a tricky business. It involves many different companies, who
2 seek to use essentially the same asset, the poles. Joint use involves a number of things
3 such as safety rules and engineering and safety standards, but also includes real-world
4 considerations such as weather, people communicating effectively, the need to provide
5 new services and the need to hook-up new customers. It is a full-time job to keep all
6 that in balance. Injecting a harsh penalty program into this mix, or preventing the cable
7 company from accessing the poles, is not an effective way to deal with important issues
8 such as coordinating access and safety. Worse still, insinuating that a cable company's
9 "rogue" behavior is the foundation of such a penalty program is counter-productive and
10 encourages abuse, hostility and disputes--not cooperation and joint use solutions.

11 **Q: Do you believe that Comcast is acting like a "rogue?"**

12 A: No. But from my review of the record in this case, from my investigations, and even
13 from the questions I was being asked at my deposition last week, I think that PacifiCorp
14 is going to argue that Comcast is a rogue and the penalties are necessary to keep
15 Comcast in line.

16 **Q: On what do you base this?**

17 A: I read in the transcript of the emergency hearing in this case and learned that PacifiCorp
18 had presented utility division staff with 700 photographs of what it said were Comcast
19 safety violations. But I don't think that the existence of 700 photographs supposedly
20 documenting safety violations proves anything. At best it could show that there are

1 some clearance issues, but it does not show that Comcast, or one of its cable
2 predecessors, caused them. In fact, there is a very good chance that the situations could
3 have been caused by the power company itself.

4 **Q: Have you seen any PacifiCorp violations?**

5 A: Yes. Plenty. I will describe a few of the PacifiCorp problems I saw later in my
6 testimony.

7 **Q: Why are you including these safety issues with your testimony, when you are**
8 **principally concerned with the reasonableness of the pole inventory and**
9 **unauthorized attachment penalty?**

10 A: For four reasons. First, and most generally, to show that joint use issues can be really
11 complicated. If the pole owner's resources are being spent on showing what "bad guys"
12 the cable companies are, rather than focusing on an overall solution to the problems,
13 there will be no solution, just endless accusations, recrimination and litigation. That is
14 not productive. My investigation has revealed that PacifiCorp's mistakenly believes it
15 should have sole discretion to decide what is required as to engineering and construction
16 standards, pole applications, pre-inspections, post-inspections, etc. In other words,
17 PacifiCorp appears to take the position that, if for any reason it wants to change things,
18 it can do so unilaterally. In my opinion, that is no way to handle joint use.

19 Second, I anticipate that PacifiCorp will try to harp on safety issues. From what I've
20 observed, PacifiCorp has already done so. Although I believe PacifiCorp has a lots of

1 its own safety problems, I do not think that a hollering match about who has the most
2 violations is going to solve anything. But I do believe that it is hypocritical for the
3 PacifiCorp lay all the blame on Comcast. PacifiCorp's assertion that its sole opinion is
4 the final word on these matters does not reflect the long-standing industry practices in
5 this country and is a guaranteed formula for endless disputes.

6 Third, some of the PacifiCorp violations I personally observed show that PacifiCorp has
7 built down into Comcast's space on the poles on many occasions. This is significant
8 because in the last agreement between the parties, it says that PacifiCorp will give
9 Comcast 30 days notice before it attempts to re-claim space on the pole. I have not seen
10 any evidence that PacifiCorp provided such notices. Regardless, even if PacifiCorp
11 provides proper notice, they are not allowed by the NESC to build into violation.

12 Finally, the costs that the utility could impose on Comcast for safety issues stand to
13 dwarf those that it has already imposed for unauthorized attachments. It is my
14 understanding that PacifiCorp intends to assess fines on Comcast's attachments that do
15 not comply with PacifiCorp's safety standards. These fines would be in addition to
16 whatever costs PacifiCorp requires Comcast to pay to correct the numerous violations
17 PacifiCorp identified.

18 **Q: Please explain.**

19 A: Certainly. Corey Fitz Gerald, in her deposition, said that it was PacifiCorp's intent to
20 assess fines on Comcast for violations. The millions Comcast has already paid in

1 unauthorized attachment penalties, will seem small compared to what PacifiCorp may
2 be planning to assess on Comcast. I believe that imposing these types of fines would be
3 extremely unwise and would make this dispute even more complicated and contentious.
4 Furthermore, I must point out that out of the approximately 15,000 violation notices
5 PacifiCorp presented to Comcast, a very substantial portion were for communications
6 cable that were less than twelve inches apart. That is *not* an NESC violation. The 12-
7 inch separation issues are not even mentioned in the NESC until the 2002 edition of the
8 Code.

9 **Q: Do you have an opinion as to how this issue should be handled?**

10 A: From the samples of poles I have observed in the field, it is likely that many thousands
11 of PacifiCorp safety violations exist across PacifiCorp's service territory in Utah. To
12 the extent that PacifiCorp (and the Commission) are going to attempt to resolve safety
13 issues, I would like to offer several concepts or questions to consider in identifying and
14 correcting the legitimate safety issues.

15 First, identify *what* is in fact a violation that requires correction. As I stated above, I do
16 not believe that all of the safety "violations" PacifiCorp has cited really are violations.

17 Second, on existing poles, the NESC should be the standard, particularly on poles that
18 are crowded. It is not fair to apply a standard that PacifiCorp has the ability to amend in
19 its sole discretion without input from the other users of the poles.

1 Third, identify which party created the violation. A fair and equitable solution depends
2 on allocating expenses to the parties that caused the violations, regardless of whether it
3 is the cable operator, power company, telephone company or other user.

4 Fourth, once engineering guidelines have been established, priorities should be set to
5 correct such items as low-hanging cables, inadequate guying, truly insufficient spacing
6 between communications plant and energized electric facilities. This type of “triage”
7 must be the starting point.

8 **III. THE INVENTORY**

9 **Q: Turning now to just the pole inventory, why do you think it is unreasonable?**

10 A: First, because the amount of the penalty is excessive. I have heard about pole
11 agreements that contain unauthorized attachment penalties, but I have not seen them
12 actually applied. The penalties with which I am familiar are much more modest, usually
13 three to five years’ back rent, or perhaps a one-time charge that is a fraction of what
14 PacifiCorp has attempted to charge here. Also, this \$250 charge is not even in the
15 agreement (that I understand PacifiCorp canceled). The charge in that agreement was
16 \$60, which, in my experience, is still extremely high.

17 By comparison, I recently reviewed another pole attachment agreement that had a very
18 stiff unauthorized attachment penalty in it. But, the agreement was very clear that the
19 penalty would be only for attachments made – and this is very important – after a certain

1 date. All existing attachments until that date were to be grandfathered in. If there is
2 going to be any kind of penalty, it should be applied on a prospective basis only.

3 **Q: What do you think about the way PacifiCorp has applied the penalty to Comcast?**

4 A: It concerns me. As I understand it, PacifiCorp's basis for imposing the penalties is
5 comparison of its audit results to the permitting records it maintains in its database.
6 Based on the documentation PacifiCorp provided to Comcast, the only permitting
7 records it has are those generated contemporaneously from its database. So, as far as I
8 can tell, PacifiCorp assesses a penalty for each pole Comcast is attached to that is not
9 marked as authorized in its database. Under the PacifiCorp approach, the burden shifts
10 to Comcast to come forward with the evidence that it is authorized to be there. The
11 premise underlying this must be that PacifiCorp had authorized attachments by issuing
12 individual permits, or granting very specific and detailed authorization to the cable
13 operator to attach. However, I have seen nothing to lead me to conclude that PacifiCorp
14 has been methodical or meticulous in its permitting and record-keeping processes in
15 either collecting or retaining this information. Consider the following examples:

16 First, I have learned that Osmose has produced a proposal to PacifiCorp to develop a
17 plan to find 15,000 poles in Salt Lake City which PacifiCorp believes it owns, but does
18 not know where to find. This, of course, begs the question: if PacifiCorp can eventually
19 find these poles for which it has no records, and if Comcast is attached to those poles,
20 will it assess Comcast an unauthorized attachment penalty? Following the pattern

1 PacifiCorp has established in assessing these penalties, I would anticipate that, upon
2 finding no record of authorizations to attach, PacifiCorp would assess penalties.

3 Second, I understand that PacifiCorp has placed its ownership tags on poles that it does
4 not even own, much to the annoyance of the telephone companies that actually do own
5 these poles. I further understand that PacifiCorp has assessed unauthorized attachment
6 penalties against these telephone companies who are simply occupying their own poles.

7 **Q: What is your opinion regarding PacifiCorp's pole application process?**

8 A: Based on the evidence I have seen, I conclude that there was considerable variation and
9 inconsistency over time within PacifiCorp (or its predecessor Utah Power) regarding the
10 pole application process. That evidence shows that while there are more standardized
11 procedures for pole access now, record keeping--indeed PacifiCorp's entire approach to
12 joint use administration--has ranged from haphazard to non-existent. Now, PacifiCorp
13 appears to be, at best, over-compensating for its past lapses, or , at worst, attempting to
14 profit from them – at Comcast's expense.

15 PacifiCorp's historically varied and inconsistent processes is not particularly unusual.
16 In that respect, PacifiCorp is really no different than similar companies in other parts of
17 the country. What I find unusual is the extent to which PacifiCorp has attempted to reap
18 extraordinary profits from it.

1 **Q: Can you explain what you mean by that?**

2 A: As indicated previously, I worked for a large electric company much like PacifiCorp
3 during the time the cable television industry was developing. My experience was that
4 while sometimes agreements would attempt to add some formality to the application
5 process, the procedures were not closely followed after the initial build out. Sometimes
6 they were never followed at all.

7 There are many reasons for this. In those days, there were comparatively few attachers
8 and there was plenty of room to make cable television attachments without having to
9 perform make-ready. (Make-ready is the process by which facilities that are already on
10 the pole are re-arranged to allow the new attachment). As long as the poles remained
11 safe and clearances were maintained, it was generally okay to attach.

12 Utilities often granted oral permission either in person or by telephone. After some
13 specified period, the parties would agree to an audit. A “refreshed” number of poles
14 with attachments would be identified, and the utility’s billing systems would be updated.

15 This was often done on the basis of the relationships and trust that developed in the field
16 between power company employees, and their counterparts at the cable companies. To
17 this day, these field relationships remain a vital part joint-use. In my opinion they are as
18 important as legal agreements and relationships, safety standards such as the NESC, and
19 well-intentioned and legitimate formal utility processes.

1 **Q: Please explain what you mean by “a vital part joint-use?”**

2 A: My personal experience has been that formal permit application processes established in
3 joint use contracts are sometimes only practical when the parties are engage in large
4 scale new construction or rebuilds where substantial numbers of new attachments are
5 involved (as opposed to just modifying of existing attachments). The contracts do not
6 typically have practical provisions for permitting small line extensions or even service
7 drops. My experience, which reflects the norm in the industry, is that it is typical for
8 local field-level employees to make informal arrangements with employees of the other
9 companies to allow them to accomplish their daily line extensions and service drops.

10 But these relationships can be severely strained by pole owner policies that favor profit
11 generation over rational joint use policies. I have found some evidence of that here in
12 Comcast’s and PacifiCorp’s relationship. I believe that the penalty situation here has
13 embittered people on both sides of the table and sapped their will or energy for trying to
14 find practical solutions for timely access, or even for addressing certain clean-up issues
15 that need to be addressed.

16 **Q: How have you seen joint use applications handled elsewhere?**

17 A: It varies. In my experience, it is has not been unusual for local district supervisors or
18 managers to be aware that cable operators were attaching to their poles but not require
19 detailed permitting information. In fact, the only information many pole owners needed
20 was notice of where the construction crews were going to be or if they needed to move

1 their facilities (perform make-ready) to make room for the new cable attachment.
2 Frankly, many pole owners just did not need to know that much information or want to
3 be that involved in the process. The idea of a real-time running inventory of paper
4 permits that both the utility and the cable operator would maintain in their own files is,
5 in my experience, a fiction. Most pole attachment agreements provided for periodic
6 audits to count foreign (*i.e.*, cable) attachments to the poles, and this was often the way
7 billing records were kept up to date. Historically, these audits were not punitive, but
8 were tools for maintaining accurate billing records. I can say from my review of the
9 evidence that is available in this case that Utah Power was no different, at least until this
10 audit got under way.

11 **Q: Can you provide some specific examples?**

12 A: I'd be happy to. But it might be helpful to mention how I came to these conclusions. In
13 addition to reviewing documents and depositions of PacifiCorp personnel, I also have
14 interviewed a number of Comcast personnel who have many years of experience in
15 engineering and building cable systems here in the Salt Lake Valley. Many of these
16 individuals worked for Comcast predecessors such as AT&T Broadband, TCI, Insight
17 and other companies.

18 One individual, Gary Goldstein, has been here since the early days of the Utah cable
19 industry in the late 1970s. Mr. Goldstein, Rodney Bell and Mark Deffendall, who I
20 believe are submitting testimony for Comcast in this proceeding, had some interesting

1 information. Their knowledge, along with the documents, and some of the deposition
2 testimony that PacifiCorp offered through Corey Fitz Gerald, James Coppedge, Joseph
3 Clifton and John Cordova, was very useful in ascertaining the important details of this
4 case.

5 **Q: Were you able to find some examples that illustrate your observations about how**
6 **what occurred here in Utah is similar to your experience elsewhere?**

7 A: Yes. I spoke to Mark Deffendall and understand that he will be testifying that when he
8 first came to Utah he found PacifiCorp's standards to be quite different than what he
9 was used to after many years of permitting and construction for a cable system in
10 California. I spoke to Mr. Deffendall about these differences, and I won't repeat in
11 detail what he told me. One event however, stands out in my mind and is absolutely
12 consistent with my experience and what was typical in the industry.

13 Before coming to Utah, Mr. Deffendall spent many years working in southern
14 California. The utility he was used to dealing with there had very detailed permitting
15 requirements for new attachments. While many pole owners at the time required—at
16 most—some kind of a map and a narrative description of where the new cables were to
17 be placed, this California utility required much more detailed applications from the
18 cable operator before it would allow attachment. In addition to maps of the routes, the
19 utility also required a diagram of each pole, specific detail about other facilities on the
20 pole, where the new attachment was to go, and so on.

1 After moving to Utah and starting in his new position with another cable system, Mr.
2 Deffendall completed a number of individual pole applications in the way that he did in
3 California and delivered these applications personally to the Utah Power representative
4 who was responsible for joint use in that area. According to Mr. Deffendall, the Utah
5 Power man replied, in effect, that the “procedure” was to go out to the pole and if there
6 was space to make the attachment, you attach.

7 While I did not participate in that conversation, I can say that this episode is consistent
8 both with my experience, and with my review of the evidence in this proceeding.

9 **Q: There is other evidence that you believe supports this point?**

10 A: Yes. The deposition testimony of at least two PacifiCorp witnesses, Corey Fitz Gerald
11 and John Cordova, strongly support this point. Each of them admits that up until
12 approximately 2002, there were no uniform, or even relatively standardized procedures
13 in place. Mr. Cordova and Ms. Fitz Gerald both testified that there were approximately
14 35 different operating districts in Utah and each of these districts handled joint use
15 issues differently. For example, they testified that when Utah Power entered into pole
16 attachment agreements with cable operators, it was normal practice for Utah Power to
17 keep a copy of that agreement both in the district office and in the central records office
18 in Salt Lake City, but that the district offices had responsibility for administering pole
19 attachments. With so many different districts spread out across the state, my experience
20 would lead me to conclude that there very likely was a wide variation among Utah

1 Power's operating districts at the time. As I had mentioned before, the relationships and
2 trust that develop between electric utility employees and their counterparts at the cable
3 company is a very significant factor in determining what processes are followed and
4 how standards are applied.

5 **Q: Did you come across any other instances of variation in the permitting process to**
6 **support your conclusions?**

7 A: Yes. Gary Goldstein testified that the procedures he followed were different than those
8 that Mark Deffendall followed. Mr. Goldstein has testified that when he began working
9 for Comcast's predecessor, Tele-Communications, Inc., in 1979, the process in the Salt
10 Lake Valley was to submit maps identifying the poles to which Tele-Communications,
11 Inc. sought to attach. According to Mr. Goldstein, approvals were granted on a map-
12 wide basis and permits were not given for individual poles.

13 Thus, while Mark Deffendall learned from his contact at Utah Power that he only
14 expected to hear from the cable operator if make ready were required, Mr. Goldstein's
15 experience was that Tele-Communications, Inc. routinely submitted fairly detailed
16 mapping data to his Utah Power counterpart.

17 **Q: Have you reviewed documents relating to permitting procedures and records in**
18 **preparation for giving this testimony?**

19 A: Yes. Many—both from the cable company and the electric company.

1 **Q: What did you find?**

2 A: I have found that for the past several years, Comcast has been submitting extremely
3 detailed permit applications to PacifiCorp for both new attachments and for overlashing
4 to existing attachments. I understand that Comcast's Marty Pollock, who administers
5 and maintains these voluminous records, will be submitting separate testimony on these
6 requirements.

7 **Q: What about older permits?**

8 A: I have also found that in terms of historical system records, there is a wide variation.
9 Gary Goldstein has retained voluminous and detailed records dating as far back as 25
10 years for at least one utility district. But in other areas, no records appear to exist at all.

11 **Q: What conclusions do you draw from these disparities?**

12 A: In the abstract, it could be that records were kept and lost, or were destroyed. It could
13 also mean that records were never kept. Without additional evidence, it cannot be said
14 *exactly* why records do not exist.

15 **Q: Do you have an opinion as to why there seem to be so few Comcast records?**

16 A: Yes, I do. I cannot dismiss the possibility that records were lost or destroyed, and I
17 cannot completely rule out that some poles that should have been applied for were not.
18 But I see no evidence of this. More importantly, to the extent that procedures did exist,
19 I see no evidence that either Comcast or its predecessors systematically violated them.

1 A more likely explanation for the lack of records is that PacifiCorp's joint use processes
2 in Utah were, until recently, very lax. All evidence points to this conclusion.

3 I think it is also appropriate to point out here that it is not right to cast blame on
4 Comcast for not having complete records. If the procedures Utah Power or PacifiCorp
5 had in place didn't generate a lot of paperwork or other records, then it shouldn't be
6 surprising at all that Comcast does not have a lot of documentation. From what I have
7 been able to discover, Comcast (or its predecessors) have followed whatever procedures
8 were in place at the relevant time.

9 **Q: What about PacifiCorp permit records?**

10 A: There is very little from PacifiCorp. I understand that there are many reams of paper
11 computer printouts that appear to be output from the audit that its contractor Osmose
12 performed, and I have reviewed samples of these printouts, but I have not seen any
13 evidence of original pole permits from PacifiCorp.

14 **Q: Can you draw conclusions from the documents that PacifiCorp has produced?**

15 A: Not really. It just appears to me that if those records reflect an accurate tabulation of
16 Comcast attachments to PacifiCorp poles, Comcast is on a lot of poles. But I cannot say
17 if those records are accurate, or whether they accurately track "unauthorized"
18 attachments.

1 **Q: PacifiCorp has alleged, in essence, that Comcast or its predecessors have**
2 **essentially “stolen” pole space from the power company. Have you found evidence**
3 **of that?**

4 A: No. I have heard that allegation, but I have not seen any evidence of that at all. I have
5 also heard PacifiCorp’s theory that Comcast has been ignoring permitting requirements
6 in an effort to speed along its upgrade and that as a result, a great number of supposedly
7 unauthorized attachments are turning up.

8 **Q: Is this a valid concern?**

9 A: Not in my opinion. First, as I have said, it appears that Comcast was doing a very good
10 job in complying with the PacifiCorp procedures, even as they changed. Second,
11 Comcast isn’t really making much in the way of new attachments in connection with the
12 upgrade.

13 **Q: Why not?**

14 A: Comcast has upgraded large portions its system by lashing a new fiber-optic conductor
15 to the existing attachments. This process is called overlashing. Considering that this is
16 just a slight modification to an existing attachment, the idea that there is some massive
17 increase of unpermitted attachments associated with the upgrade is nonsense.

18 **Q: Do you have any thoughts on PacifiCorp’s overlash permitting requirements?**

19 A: I understand that PacifiCorp is requiring Comcast to submit applications for each pole it
20 intends to overlash a new wire to an existing attachment. I understand that PacifiCorp

1 has expressed concern about its poles being overloaded by the size, weight and tension
2 of additional Comcast cable and, as a result, Comcast must submit a detailed pole permit
3 for each overlash. However, the fact is that a small incremental addition such as a thin
4 fiber-optic conductor 10 to 20 feet down from the top of the pole has minimal effect on
5 the loading component of the poles.

6 By comparison, the power equipment, because of its larger size and weight and because
7 of its position on top of the pole, creates a much larger “load” on the pole. As a result,
8 from an engineering perspective, the electric facilities should be the focus of any
9 loading study. In my experience, it is rare that a fiber optic cable overloads a pole. To
10 the extent that an overlashed pole is overloaded, the more likely explanation is that the
11 loading condition existed *prior* to overlashing.

12 The above notwithstanding, PacifiCorp’s Joseph Clifton stated (at page 85 of his
13 deposition) that PacifiCorp does not do loading calculations in connection with the
14 applications Comcast submits because its field inspectors are not trained to do this. This
15 prompts two additional conclusions.

16 First, it is my understanding that when Comcast submits an application to overlash,
17 PacifiCorp sends an inspector out into the field to collect detailed information about the
18 pole in question and then charges Comcast an inspection fee for this service. It seems to
19 me that if PacifiCorp is not conducting loading analyses, there should no reason for
20 PacifiCorp to be out in the field collecting this data—at Comcast’s expense. The

1 inspection is limited to determining if space is available on the pole and if make-ready
2 engineering and make-ready work is required.

3 Second, if PacifiCorp's principal reason for requiring overlashing permits is to ensure
4 that the poles are not overloaded, it is, in my opinion, absurd that it does not have
5 inspectors qualified to perform the loading analyses.

6 **Q: A little earlier you said that the idea the upgrade has generated a large number of**
7 **unauthorized attachments is nonsense. Why is that?**

8 A: It is illogical. Comcast simply isn't creating a large number of new attachments in
9 connection with the upgrade. I believe the penalties and the application process are
10 designed for purposes other than tracking third-party attachment inventory.

11 **Q: Do you have an idea what those purposes might be?**

12 A: Yes. Making money, generating revenue from the poles, keeping track of the pole plant.

13 **Q: You mentioned that your investigations led you to speak to Comcast's permit**
14 **coordinator Marty Pollock, is that correct?**

15 A: Yes it is.

16 **Q: What did you learn from Mr. Pollock?**

17 A: I learned a lot about both Comcast's and PacifiCorp's permitting process. Generally, I
18 learned that PacifiCorp's process is very mixed up and constantly changing. More
19 specifically, I learned that the established process is that Comcast can attach 24 hours

1 after submitting an application. If this arrangement weren't in place, it would have been
2 extremely difficult for Comcast to move forward on its upgrade because essentially,
3 PacifiCorp's processes are a mess.

4 **Q: Please explain.**

5 A: There are five principal problems that I would like to highlight. The first is that this is a
6 cable-system upgrade, meaning—again—that the vast majority of the expansion of the
7 system is accomplished through simply adding, or overlashing another cable to the
8 existing cable plant. An overlash is not a new attachment. It is only a modification to an
9 existing one. As I stated previously, this adds very minimal loading to a pole and I do
10 not believe that there should be a separate permit required for this. At most, I believe
11 that simple notice of the overlash to the utility, together with any make ready work
12 required, is sufficient.

13 Second, there is an unreasonable amount of delay in approving permits. Mr. Pollock
14 told me that there are some cases where permit applications have been pending for 18
15 months or more. Similarly, PacifiCorp is forcing Comcast to go through a full-blown
16 application process for hooking up new customers using service or drop poles. That is
17 not reasonable either.

18 Third, PacifiCorp's application of the NESC and other standards is unfairly one-sided. I
19 can provide an interesting example. According to the terms of the pole attachment
20 agreement, PacifiCorp claims the right to reclaim space on the poles from

1 communications attachers so long as it provides 30 days notice. I understand that
2 Comcast's Rodney Bell has testified he never recalled receiving such a notice.
3 Regardless, I observed that PacifiCorp has placed its facilities in the communications
4 worker safety zone, creating violations on the pole. That PacifiCorp is attempting to
5 hold Comcast to what I believe is an unreasonably strict interpretation of the NESC,
6 while at the same time ignoring the standards as they apply to PacifiCorp's facilities
7 shows that the processes are unreasonable and one-sided and need to be reformed

8 Fourth, any kind of Comcast activity on a state road presents its own set of problems.
9 Unfortunately, the Utah Department of Transportation ("UDOT") will not approve
10 Comcast to work on poles along a state highway unless PacifiCorp, as the pole owner,
11 gives its approval first. My investigation has revealed that PacifiCorp is not in any
12 hurry to do this.

13 Fifth, Marty Pollock has informed me that there are constantly changing requirements.
14 He provided me with one recent example that incorporates a number of these elements.
15 Comcast's permit requests are routed through a central permit processing office in
16 Portland, Oregon where PacifiCorp has its headquarters. These permit applications are
17 routinely rejected for supposed deficiencies for such things as missing pole numbers,
18 street numbers or if for some reason (that Comcast could not possibly have control over)
19 pole numbers do not appear in PacifiCorp's database.

1 According to Mr. Pollock, on June 21, 2004, PacifiCorp sent back one application
2 because the pole numbers supposedly did not match pole numbers in PacifiCorp records
3 and the physical addresses of the poles were incomplete. What had happened was that
4 PacifiCorp had recently set new poles and Comcast had to relocate its existing
5 attachments from the old poles to the new poles. The poles were along a UDOT right-
6 of-way and so Comcast submitted an application to move the attachments. Mr. Pollock
7 included the numbers PacifiCorp assigned the newly-set poles on the application form,
8 but was unable to provide a street address for each individual pole. Mr. Pollock told me
9 that he included the street addresses for the poles at the beginning of the run and at the
10 end of the run, but that there was a big field without a street address in the middle of the
11 run, so he could not provide any other street address information. Considering that
12 these were brand new poles, I do not think that PacifiCorp should have had any problem
13 identifying the poles in question.

14 **Q: So what is the result of this?**

15 A: Comcast decided that it would be easier to go underground than to try to get approval
16 for the pole transfers. Since the work was in a UDOT right-of-way, Comcast would
17 have had to re-submit the application and wait for approval prior to doing the transfers.
18 In my opinion, this just shows how uncooperative PacifiCorp has been. The pole
19 number is supposed to be the utility's primary identifier—its should have been
20 absolutely clear to which poles Comcast was applying.

1 When a pole owner is uncooperative like this, it is not just a matter of timing or
2 inconvenience. It also has a real financial effect. It is well-known in the industry that it
3 is significantly less expensive to attach facilities on poles than it is to install them
4 underground. For example, I learned from Comcast's Tyson Stone that the cost to do
5 the pole-to-pole transfers that it wants to do, and that reasonably it should be allowed to
6 do, is around \$500.00. However, when Comcast has to install its facilities underground,
7 it has to put in new fiber and splice it into the network at a cost of about \$6,000. That's
8 an 1100% cost increase for which, in my opinion, PacifiCorp has no justification.

9 **Q: Getting to the root of this dispute and your testimony, is PacifiCorp still charging**
10 **the \$250 fee?**

11 A: Yes, I believe so.

12 **Q: It appears that you don't believe either the \$250 fee, or the way that PacifiCorp has**
13 **gone about applying it is reasonable, is that correct?**

14 A: That's correct.

15 **Q: Why is it not reasonable?**

16 A: It's actually very simple. First, it is not in the pole attachment agreement. Second, I do
17 not really understand PacifiCorp's explanation (as set forth in the transcript of the April
18 2004 hearing) of how it calculated the \$250 fee. It makes more sense to me, though, in
19 the context of Oregon state law.

1 **Q: What does Oregon state law have to do with this dispute in Utah?**

2 A: As I mentioned above, I attend a number of conferences discussing pole attachment
3 engineering and joint use. At one such conference, I recall there was discussion of
4 regulations in Oregon, PacifiCorp's home state, that struck me as providing a great
5 potential for pole owner benefit. I have since learned that one of those regulations
6 allows a utility to charge \$250 each time that there is an "unauthorized attachment." It
7 seems more than coincidence that this is the same amount that PacifiCorp has been
8 getting from Comcast here.

9 **Q: Are there other reasons why you believe the \$250 penalty isn't reasonable?**

10 A: Yes. The scheme does not seem totally forthright to me. It would be an entirely
11 different matter if a) PacifiCorp had both detailed and uniform permit processes in place
12 across the all its service districts in its Utah service area since the cable industry first
13 arrived, *and* b) that it had reliable records showing who was attached to its poles.
14 Because all evidence points to PacifiCorp having haphazard processes and incomplete
15 records, it is illogical to assume that the only thing that *could* account for the
16 discrepancies is that Comcast "stole" pole space from PacifiCorp by attaching without
17 notice.

18 **Q: Why do you believe that these things are not totally forthright, as you say?**

19 A: Because PacifiCorp's own people are saying that there was no consistent permit process
20 and no reliable records. In addition, I believe that Comcast and its predecessors were

1 following what it reasonably believed were the procedures that PacifiCorp had in place
2 at the local or district level. Finally, my investigation has revealed nothing to support
3 PacifiCorp's contention that Comcast deliberately attached without authorization to
4 complete its upgrade more quickly. What I've found is the opposite: that Comcast has
5 bent over backwards to try to comply with PacifiCorp procedures, even when they
6 changed.

7 **Q: Can you provide some examples of what has been said by PacifiCorp's employees**
8 **to support your conclusion that there were no procedures in place?**

9 A: Certainly. Both Corey Fitz Gerald and John Cordova admitted in their depositions, that
10 historically, PacifiCorp's procedures were lax here that no system for dealing with joint
11 use existed. I found these statements to be particularly interesting because Ms. Fitz
12 Gerald not only seemed to have very extensive knowledge about this area, but appeared
13 to have been specifically tasked with bringing the consistency in this area that was so
14 obviously lacking. Mr. Corodova's testimony is equally as compelling to me because
15 he has been with Utah Power and PacifiCorp for nearly 30 years in the areas of
16 distribution operations and joint use and also speaks from considerable personal
17 experience.

1 **Q: Are you aware whether PacifiCorp has charged Comcast fees in addition to the**
2 **\$250 unauthorized attachment penalties?**

3 A: I understand that PacifiCorp has also charged Comcast for the survey itself, for costs
4 associated with bringing their contractor Osmose onto the scene.

5 **Q: Do you have an opinion on this?**

6 A: I would even say that it is reasonable for a communications company to make some
7 contribution toward an inspection, whether that is by providing manpower or
8 contributing toward expenses. In my opinion, the best way to deal with this is to work
9 out the details in advance. This should include establishing the purpose of the
10 inspection, (*e.g.* counting attachments for billing or for safety); the scope of the
11 inspection; who will conduct the audit; what the cost will be; and how the costs will be
12 allocated between all parties. My opinion is that if the cable operator is going to be
13 expected to share the cost of conducting the survey, it should be allowed to participate
14 in selecting the contractor. If the cable operator is not permitted to participate, I would
15 suspect that the audit this is being done for the utility's benefit.

16 Ultimately, I am concerned with the best way to get the job done. And the "job" as far
17 as I'm concerned is to ensure that everyone who must use the poles can do so safely,
18 timely, and with a fair allocation of the costs. These goals must always be kept at the
19 forefront, whether we are talking about inspections, permits, identifying and clearing
20 NESC issues, or billing.

1 **Q: Do you believe that PacifiCorp has proceeded reasonably here and tried to work**
2 **toward these goals?**

3 A: No. My investigation has revealed that PacifiCorp canceled its contract with Comcast,
4 announced that it was conducting a state-wide audit of pole plant and then started
5 sending invoices. I don't believe that PacifiCorp seriously worked toward the goal of
6 ensuring that everyone who must use the poles can do so safely, timely, and with a fair
7 allocation of the costs. I think that they did the exact opposite.

8 **Q: Do you believe that PacifiCorp should be able to charge Comcast for the audit?**

9 A: No I do not. First, it appears from PacifiCorp's own testimony in this proceeding that it
10 is recovering the audit costs several times over. Ms. Fitz Gerald testified in her
11 deposition that PacifiCorp paid Osmose, the contractor performing the audit,
12 approximately \$12 per pole surveyed. However, Ms. Fitz Gerald also testified that
13 PacifiCorp charged, for each attachment on each pole, approximately \$13 for the audit,
14 effectively adding a \$1 per-attachment surcharge, ostensibly to cover PacifiCorp's
15 overhead in administering the audit. Assuming that Qwest and Comcast are on most of
16 the same poles, PacifiCorp is recovering twice the cost of the audit. On poles where
17 Qwest or Comcast have more than one attachment, or where there are other
18 communications attachers, PacifiCorp could be recovering three, four or five times the
19 cost of the audit, plus its \$1.00 surcharge. All of this is in addition to the the \$250
20 unauthorized attachment penalty. Notably, PacifiCorp does not charge itself for any of
21 these costs.

1 **Q: Do you have other concerns?**

2 A: Yes. I believe that this survey is not just about counting Comcast attachments on
3 PacifiCorp poles or even finding “safety” issues (which I will address in a moment), but
4 much more.

5 **Q: What do you mean?**

6 A: PacifiCorp has used this audit to collect all kinds of additional information for its own
7 use. As I indicated previously, it is my opinion that PacifiCorp did not have reliable
8 plant records. From reviewing materials that were produced by PacifiCorp’s contractor,
9 it appears to me that the survey was—among other things—to identify poles that were
10 not in the utility’s records, but *were* in the field and *vice versa* (*i.e.*, in the records but
11 not in the field). PacifiCorp collected digital photographs of every pole and updated
12 digital maps of the entire distribution grid. In addition, GPS coordinates for each and
13 every pole were taken. This is all now the property of PacifiCorp, apparently developed
14 and maintained at Comcast’s expense.

15 **Q: Should Comcast pay for the audit functions that you have just described?**

16 A: No. As I said previously that audits designed without cable television participate are
17 likely designed for the pole owner’s benefit. That PacifiCorp included the functions
18 described above in the audit supports my conclusion that that PacifiCorp conceived,
19 designed and executed the audit to overhaul its plant records.

1 **Q: Do you have an opinion about how these costs should be allocated, assuming that**
2 **survey was properly conceived, designed and executed?**

3 A: Yes. There is a fairly simple rule of thumb for joint use cost allocation that parties who
4 are committed to reasonable and cooperative working relationships attempt to follow.
5 The guidelines are: a) whether the cost incurred would have been incurred if the
6 communications attachment had not been on the pole and b) whether the third party
7 receives a “benefit” from the work. This of course also assumes that the underlying
8 costs are reasonable themselves in and of themselves. My opinion is that the costs of
9 digital maps, database building, digital photographs, field verification that poles on the
10 maps were in the field and *vice versa*, among other things, should be PacifiCorp’s
11 responsibility.

12 **Q: It sounds as though you have concerns with the integrity of PacifiCorp’s survey**
13 **and its records and processes.**

14 A: If you mean do I have concerns that PacifiCorp’s contractor properly counted all the
15 poles and attachments to those poles that it should have counted, I really cannot say at
16 this point. Even if you assume that the survey was perfect, down to every last pole and
17 every last Comcast contact on every last pole, you have to compare the ultimate count to
18 something. To my knowledge, PacifiCorp had not been able to produce a reliable
19 “something” to compare it to.

1 **Q: In the course of your investigation, did you come across a survey that PacifiCorp**
2 **conducted in Utah during the 1997 to 1999 timeframe?**

3 A: No. I came across quite a bit of *discussion* of such a survey but I have never seen a
4 copy of the survey itself.

5 **Q: What was the discussion of this survey that you saw?**

6 A: I had seen that PacifiCorp was relying on this 1997-1999 survey to serve as a “base
7 line” for the 2003 and 2004 audit in dispute here. I have not been able to determine
8 what PacifiCorp means by that. If this just means that PacifiCorp counted more cable
9 attachments in the 2003/2004 survey than it did in the 1997/1999 survey, I have some
10 real concerns about PacifiCorp calling these attachments “unauthorized.”

11 **Q: Please describe your concerns.**

12 A: My first concern is that I have not seen the records from the 1997/1999 audit. From
13 what I understand, PacifiCorp’s only records are the joint use data in its mainframe, but
14 that it does not have any separate records of the 1997/1999 audit. Without being able to
15 examine the data input, I cannot trust that this audit is a reliable baseline. More
16 importantly, witnesses for both sides have attested to the lack of uniform procedures. I
17 cannot assume that the 1997/1999 audit provided a methodical and meticulous pole by
18 pole accounting of Comcast’s predecessor’s attachments.

19 Second, although it solicited a bid from the company that performed the 1997/1999
20 audit, PacifiCorp did not hire that company to perform the 2003/2004 audit. That

1 certainly raises a question in my mind about whether there was a problem with the
2 1997/1999 audit.

3 Third, PacifiCorp's explanation of how and why it conducted the 1997/1999 audit is not
4 clear. For example, Ms. Fitz Gerald testified that the survey "was merely verifying the
5 pole on the map versus the pole in the field to assure that we had the correct pole and
6 stating which companies were attached. It did not seek to count attachments or count
7 violations." (Fitz Gerald Dep. at 61). However, she went on to say that the survey "was
8 used as the basis for all future pole attachment rental billings." (Fitz Geral Dep. at 62).
9 Since no records are available, I do not understand the purpose or, for that matter, the
10 relevance of the 1997/1998 audit as it relates to the 2003/2004 audit. Quite frankly,
11 based on the conflicting information PacifiCorp has given, I'm not sure PacifiCorp does
12 either.

13 Finally, no one I've talked to at Comcast was even aware of this audit before PacifiCorp
14 raised it in connection with this case.

15 I think I've highlighted some serious issues that cast doubt on the suitability of the
16 1997/1999 audit to be a "base line" for future audits. I am also concerned about the way
17 PacifiCorp has accounted for and kept records of drop poles.

1 **Q: What do you mean by drop poles?**

2 A: Drop poles are the poles that are set to give service drops (cable, telephone and electric)
3 from mainline distribution poles the necessary ground clearance so that the drops can
4 reach the house safely. Because a service provider must hook up a customer very
5 quickly after a request for service comes in, attachments to drop poles cannot and do not
6 go through normal pole permit processing channels (assuming there are any). My
7 experience has been that failure to properly track drop poles often accounts for
8 discrepancies in attachment records. Depending on when the prior survey was
9 conducted and the how big the system is, this could be quite a discrepancy. Obviously,
10 where there is no procedure in place even for mainline poles, the discrepancy would be
11 much larger.

12 **Q: Do you know what PacifiCorp paid for the 1997/1999 audit?**

13 A: Ms. Fitz Gerald testified that the contractor charged PacifiCorp \$0.81 per pole, and then
14 an additional \$1.20 for placing an identification tag.

15 **Q: Aside from the 1997/1999 audit and the current 2003/2004 audit, are you aware of**
16 **any other audits PacifiCorp has conducted?**

17 A: Yes. As I understand it, PacifiCorp conducted another survey of its pole plant in 2001.
18 It is my understanding that PacifiCorp was concerned primarily with identifying electric
19 attachments, but if third-party facilities could be detected they would be identified as
20 well.

1 **Q: What do you think about this survey?**

2 A: I find it interesting, but also a little confusing, that PacifiCorp conducted three different
3 inspections over the last few years that appear to have some degree of overlap, but no
4 real relation to one another. Rather than having three surveys, it seems to me that you
5 could have consolidated them or at least made greater effort to harmonize or coordinate
6 them.

7 **IV. SAFETY ISSUES**

8 **Q: Do you have any other conclusions about the survey?**

9 A: Yes. As I mentioned previously, PacifiCorp has recently submitted a large number of
10 violation notices that it has indicated that it expects to Comcast to remedy. Assuming
11 that PacifiCorp generated these notices using Osmose's results, my opinion is that
12 PacifiCorp should have included Comcast in the process from the very beginning,
13 instead of just dumping the notices on Comcast after the fact. As I discussed above,
14 face-to-face meetings and cooperative problem-solving are critical to resolving these
15 kinds of complex joint use issues.

16 **Q: How do you think we got to this point?**

17 A: The seeds for major problems existed before this dispute arose. As I stated before, I
18 understand PacifiCorp canceled the parties' prior pole agreement. I assume that this is
19 because PacifiCorp wanted greater protections for itself. But even that old agreement
20 was—in my opinion—overly intrusive and unreasonable.

1 **Q: Please explain.**

2 A: For example, under the “safety” provisions at Article IV there is the requirement that
3 Comcast provide the utility with the name of every Comcast contract employee. There
4 is the additional requirement that Comcast and its contractors, comply strictly with
5 unnamed and changing safety and security rules. This prompts the question, why didn’t
6 the contract simply require compliance with applicable OSHA regulations, local and
7 state laws and the NESC? After all, the NESC is the national standard for aerial outside
8 plant construction. I also have to ask, why would PacifiCorp want to be in the business
9 of micro-managing Comcast workers *and* developing new safety standards? The answer
10 may be that with this broad (and in my view unreasonable reservation) PacifiCorp
11 reserves itself the right to deny access to any of its poles by claiming a particular person
12 is not qualified, or that an accepted industry standard, like the NESC, is not good
13 enough.

14 I’m not a lawyer, but this strikes me as inconsistent with the broad indemnification
15 provisions in Article V of the agreement that purport to insulate PacifiCorp from
16 liability. My opinion is that it would be far better to leave it to Comcast to ensure the
17 competence of its workers and the integrity of its plant. If a problem develops, then the
18 indemnification provision is there.

1 **Q: Do you have other concerns along these lines?**

2 A: Yes. Even though the primary purpose of my investigation here was to look at the audit
3 procedures, part of the audit is clearly a “safety” inspection. Each of these functions
4 suffers from the same basic flaw.

5 **Q: What is that flaw, in your opinion?**

6 A: It’s a flaw in premise of the utility’s entire approach to “unauthorized” attachments and
7 plant safety: that the utility can simply dictate exactly how the process is to occur and
8 that the licensee will follow whatever the utility says. This could work if the utility
9 were being reasonable, but being reasonable in this area requires cooperation,
10 collaboration and even trust. So it’s a circular problem. To make joint use to work well
11 there has to be good communication and collaboration. I don’t see that here.

12 **Q: What do you think it would take to make it work?**

13 A: A good, clear agreement; reliance on a few accepted standards; and rational cooperation.
14 There is complex interplay between the various NESC rules that can involve some level
15 of interpretation. From what I have seen with this audit, I can already tell that
16 PacifiCorp is going to take a “my way or the highway” approach to penalize Comcast
17 for “safety.” I believe under PacifiCorp’s view that Comcast will continue to be guilty
18 until proven innocent.

1 **Q: Can you give me an example of the “complex interplay” you referred to?**

2 A: Certainly. Normally when we consider aerial plant engineering and construction, we
3 consider two articles of the code. Article II deals with clearances, and Article IV deals
4 with worker safety, or more precisely, for the operation of electric supply and
5 communications lines and equipment. Article IV covers work rules to be followed in
6 the installation, operation and maintenance of electric supply and communications
7 systems. Section 41 covers rules for supply and communications workers. Section 42 is
8 applicable to both groups of workers. Section 43 contains additional rules for
9 communications employees and states that communications workers should only avoid
10 contact with secondary voltage lines or equipment at 300 volts or less; should be at least
11 1’ 0” from facilities and equipment operating between 301 and 750 volts; should be at
12 least 2’ 2” from 751 volts to 15000, etc. From my investigation, it appears to me that
13 PacifiCorp is couching its requirements in terms of concern for communication worker
14 safety, particularly if communications facilities are closer than 40” to secondary power.
15 However, the NESC and OSHA 1910.268 specify that qualified employees may work as
16 close to “avoid contact” with that power secondary. In addition, the NESC permits
17 secondary leads of street lights and secondary leads of service attachment points to be
18 12” from communications. Yet, PacifiCorp appears to be taking a hard line that 40” of
19 separation is required for communications workers to work safely near power
20 secondaries. I do not know whether they are doing this to be intentionally difficult or
21 out of ignorance of the Code and the complexities of its application, but it is certainly, in
22 my opinion, unreasonable.

1 **Q: Is there a link between this and the whole audit plan?**

2 A: I believe there is. If PacifiCorp is truly and principally concerned with plant integrity
3 and worker safety and getting a handle on its distribution inventory, my opinion is that
4 PacifiCorp is not going about it in the right way. PacifiCorp is taking a heavy handed
5 and punitive approach that is both unnecessary and counter-productive. I am very
6 concerned that the heavy handedness, the penalties, the millions and millions of dollars
7 that Comcast has paid for the audit and penalties so far could dwarf what PacifiCorp is
8 setting Comcast up to pay for on the safety side.

9 **Q: You mentioned earlier that you looked at PacifiCorp poles with PacifiCorp**
10 **violations in the field, is that correct?**

11 A: Yes. I spent a good deal of time on my own in the field and I spent approximately two
12 hours with Comcast's Rodney Bell. We looked at several locations where PacifiCorp
13 has recently done work.

14 **Q: Can you summarize, briefly, what you found?**

15 A: I found lots of safety violations, not just on old poles but brand new poles. This
16 demonstrates to me a lack of proper training and a lack of quality control on the part of
17 PacifiCorp. I found examples of where the power company puts cable into violation and
18 where it would be very easy to make those facilities code compliant, but for whatever
19 reasons, PacifiCorp has not done this.

1 I saw other kinds of violations as well. In one case, the power company has placed its
2 electric cables one inch above cable television (where it should have been 40 inches),
3 making it impossible for the cable company to transfer its facilities from the old pole to
4 the new pole, and I even saw places where the power company was tying
5 communications facilities up on new poles with rope! This is a very unsafe practice and
6 after we discussed this situation, Rodney Bell notified the power company and then took
7 steps to correct the problem.

8 **V. RECOMMENDATIONS AND CONCLUSIONS**

9 **Q: Do you have a recommendation on how the Commission might resolve this**
10 **dispute?**

11 A: I do have some ideas, yes. First, I do not believe that any unauthorized attachment
12 penalties should be assessed against Comcast. I have found no evidence that they
13 disregarded permitting procedures either historically or with respect to their almost-
14 completed upgrade. Even if you assume that the results of the current survey are 100%
15 accurate, there is still nothing reliable to compare them to. There admittedly is a dearth
16 of historical permitting records, but I conclude that this is due to the fact that there were
17 not set permitting or record-keeping procedures. Under these circumstances, I do not
18 believe that it would be reasonable to impose any penalty on Comcast.

19 As to paying survey costs, despite the fact that Comcast had no ability to participate in
20 the selection of the contractor or have any meaningful notice that the survey was about

1 to be undertaken, I believe that that it is reasonable for Comcast to pay some amount.
2 But given these facts, and the fact that the facilities of other parties were being inspected
3 in the survey, it should be a small fraction of the per pole amount that PacifiCorp was
4 being charged by its contractor.

5 Finally, I believe that the parties need to agree on a reliable number of attachments
6 today and that should be the basis both for present billing, and future audits. I think that
7 some “penalty” or surcharge on a going-forward prospective basis would not be
8 unreasonable.

9 **Q: Do you have parting thoughts on some of the safety issues that you discussed?**

10 A: Yes. Just like with the inventory process, it is not reasonable for the utility to just
11 impose a regime, expect the licensee to comply and then when it cannot comply force
12 the company to stop its upgrade until it does. To the extent there are safety issues that
13 must be addressed, the priorities I outlined earlier of (1) defining a violation;
14 (2) determining the standard to be applied for repairing that violation; (3) determining
15 responsibility for repairing the violation; and (4) setting the priorities for repairing the
16 violations should be firmly established. As with the “unauthorized” attachment regime,
17 there should be no penalties, or the threat of penalties to force compliance. There must
18 be communication, collaboration, good engineering judgment and trust.

19 **Q: Does that conclude your testimony?**

20 A: Yes it does.