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BEFORE THE

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IDAHO PUBLIC UTILITIES COMMISSION  
IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION )  
OF QWEST CORPORATION FOR )  
DEREGULATION OF BASIC LOCAL )  
EXCHANGE RATES IN ITS BOISE, NAMPA, )  
CALDWELL, MERIDIAN, TWIN FALLS, )  
IDAHO FALLS, AND POCATELLO )  
EXCHANGES. )  
\_\_\_\_\_ )

CASE NO. QWE-T-02-25

DIRECT TESTIMONY OF BEN JOHNSON, Ph.D.

IDAHO PUBLIC UTILITIES COMMISSION

MARCH 19, 2003

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

Before Commissioners:

Dennis S. Hansen, President  
Marsha H. Smith  
Paul Kjellander

In the Matter of the Application  
of Qwest Corporation for Price  
Deregulation of Basic Local  
Exchange Services

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Case No. QWE-T-02-25

Direct Testimony

of

Ben Johnson, Ph.D.

on behalf of the

Idaho Public Utilities Commission

March 19, 2003

1 **Introduction**

2

3 **Q. Would you please state your name and address?**

4 A. Ben Johnson, 2252 Killlearn Center Boulevard, Tallahassee, Florida 32309.

5

6 **Q. What is your present occupation?**

7 A. I am a consulting economist and president of Ben Johnson Associates, Inc., an economic  
8 research firm specializing in public utility regulation.

9

10 **Q. Have you prepared an appendix that describes your qualifications in regulatory and**  
11 **utility economics?**

12 A. Yes. Appendix A, attached to my testimony, will serve this purpose.

13

14 **Q. Can you briefly explain the corporate names and acronyms that you will be using in**  
15 **your testimony?**

16 A. Throughout my testimony, I will use the terms “Qwest” or “the Company” when referring  
17 to Qwest Corporation, a subsidiary of Qwest Communications International, Inc.

18

19 **Q. What is your purpose in making your appearance at this hearing?**

20 A. My firm has been retained by the Staff of the Idaho Public Utilities Commission (“the  
21 Commission”) to assist with Staff’s participation in this proceeding. We have been asked  
22 to analyze Qwest’s Application for Price Deregulation of Basic Local Exchange Services  
23 (“Application”) and determine whether the deregulation of local exchange rates sought by

1 Qwest in its Application is valid in light of statutory mandates. Specifically, I analyze  
2 whether wireless services are functionally equivalent and comparably priced to Qwest's  
3 wireline local exchange services.

4

5 **Q. Would you please explain how your testimony is organized, and briefly summarize**  
6 **its major elements?**

7 A. Yes. Following this introduction, my testimony has five sections. The first section  
8 contains a brief discussion of the background of this proceeding. In the second section I  
9 analyze whether services provided by wireless carriers are functionally equivalent to  
10 those offered by Qwest. I discuss the concept of functional equivalency from an economic  
11 perspective, and discuss the extent to which consumers can freely substitute wireless  
12 services for wireline local exchange services. In the third section I discuss whether  
13 wireless and wireline services are comparably priced in seven specific Idaho exchanges.  
14 In this section, I outline the difficulties in making competitive pricing comparisons, given  
15 structural differences in the typical pricing of wireless and wireline services, as well as  
16 the fluid nature of the wireless market. In the fourth section I examine various aspects of  
17 the Application from a public interest perspective. In the fifth and final section, I present  
18 my conclusions and recommendations.

19

20

1 **Background**

2

3 **Q. Let's turn to the first section of your testimony. Would you please start by outlining**  
4 **the history of this proceeding?**

5 A. Yes. Qwest filed its Application on December 17, 2002 pursuant to Idaho Code  
6 §62-622(3)(b). Therein Qwest sought the deregulation of its local exchange rates in  
7 seven southern Idaho exchanges: Boise, Caldwell, Idaho Falls, Meridian, Nampa,  
8 Pocatello and Twin Falls (the "seven exchanges"). The Company contends that wireless  
9 carriers are effectively competing with it in these seven exchanges. It put forward five  
10 main pieces of evidence in support of this claim: (1) the functionality of wireless service,  
11 (2) a comparison of wireless and Qwest price plans, (3) the number of wireless carriers  
12 operating in the seven exchanges, (4) the exploding growth of wireless subscription in  
13 Idaho and the increase in wireless substitution for wireline services, and (5) wireline  
14 customers perceive wireless service to be a functionally equivalent, competitively priced  
15 and reasonably available alternative to Qwest's wireline local exchange services in these  
16 seven exchanges. [Application, pp. 6-8] The Company contends that rate deregulation in  
17 the seven exchanges is in the public interest, because it would allow Qwest to better  
18 respond to competitive forces. [Id., pp. 8-9]

19

20 **Q. Can you briefly discuss your understanding of the statutory framework which**  
21 **governs this proceeding?**

22 A. Yes. It is my understanding that, in order for the Commission to approve the Company's  
23 Application under Idaho Code §62-622(3)(b), Qwest must demonstrate that effective

1 competition exists, as indicated by the fact that one or more competitive carriers are  
2 offering “functionally equivalent” and “competitively priced” services to customers in the  
3 seven exchanges. Specifically, the statute states the following.

4  
5 The commission shall cease regulating basic local exchange rates in a local  
6 exchange calling area upon a showing by an incumbent telephone  
7 corporation that effective competition exists for basic local exchange  
8 service throughout the local exchange calling area. Effective competition  
9 exists throughout a local exchange calling area when either

10 (a) Actual competition from a facilities-based competitor is  
11 present for both residential and small business basic local  
12 exchange customers; or

13 (b) There are functionally equivalent, competitively priced  
14 local services reasonably available to both residential and  
15 small business customers from a telephone corporation  
16 unaffiliated with the incumbent telephone corporation.  
17

18 The Commission has dealt previously with a very similar Application. On July  
19 23, 1999, US West (now a part of Qwest) filed an Application pursuant to Idaho Code  
20 §62-622(3) generally seeking deregulation of its basic local exchange rates in its Burley,  
21 Idaho exchange. [Order No. 28369, p. 1] In its Order No. 28369, ruled that Qwest had not  
22 sufficiently demonstrated that effective competition, as outlined in the Code, was present  
23 in the Burley exchange. [Id., p. 13] The Commission pointed out that Idaho Code  
24 §62-602(2) further clarifies the standards that must be met for it to be able to recognize  
25 the presence of effective competition and, in turn, deregulate local exchange rates. Idaho  
26 Code §62-602(2) provides as follows:

27 It is the intent of this legislature that effective competition  
28 throughout a local exchange calling area will involve a significant  
29 number of customers having both service provider and service  
30 option choices and that actual competition means more than the

1           mere presence of a competitor. Instead, for there to be actual and  
2           effective competition there needs to be substantive and meaningful  
3           competition throughout the incumbent telephone corporation's  
4           local exchange calling area.  
5

6           In the case of the Burley exchanges, the Commission found that there was another carrier  
7           operating in that exchange in competition with US West, but that the mere presence of  
8           another carrier “does not demonstrate the existence of effective competition required by  
9           the legislature in Section 62-622(3) for rates to be deregulated.” [Id.]  
10

11   **Q. Can you briefly describe the direct testimony filed by Qwest in this proceeding?**

12   A. Yes. Testimony of Dr. Douglas Lincoln, Harry Shooshan, John Souba, and David Teitzel  
13   was concurrently filed with the Application. In his testimony, Dr. Lincoln presents two  
14   studies meant to show that (1) wireless and wireline services are comparably priced and  
15   (2) that customers view these services as “functionally equivalent, competitively priced,  
16   and reasonably available alternative to Qwest's basic local exchange service in these  
17   seven exchange areas.” [Lincoln, p. 6] Regarding the first of these two studies, Dr.  
18   Lincoln concludes the following.  
19

20           First, one can conclude that wireless service providers have a  
21           variety of service offerings to meet nearly everyone's  
22           telecommunications needs. These options all seem to represent  
23           competitive choices for Qwest's basic local exchange service  
24           customers. Second, it appears that the prices for wireless and basic  
25           local exchange services, while not identical, are comparable.  
26           Differences in prices can be explained based on the additional  
27           functionality (including mobility) and the inclusion of line features  
28           or long-distance benefits in certain wireless packages. Wireless  
29           service providers have clearly priced their services in a comparable

1 range with Qwest's basic local exchange service. [Id., pp. 15-16]  
2

3 In his testimony, Mr. Shooshan undertakes an analysis of wireless competition for local  
4 exchange services nationally and in the seven exchanges. He concludes that effective  
5 competition exists both nationally and in these seven exchanges, that wireless service is  
6 an effective substitute for wireline service, and the public benefits from a more  
7 competitive Qwest. [Shooshan, pp. 4, 5, 16, 17] Regarding wireless substitution, Mr.  
8 Shooshan finds

9  
10 While noting studies that estimate that between 3% and 5% of  
11 wireless subscribers have disconnected their wireline phone,  
12 significantly, the FCC describes the "growing evidence that  
13 consumers are substituting wireless service for traditional wireline  
14 communications." In its most recent assessment of the mobile  
15 services market, the FCC acknowledges claims by wireline  
16 telecommunications carriers that the numbers of access lines and of  
17 minutes of use on their networks have decreased as a result of  
18 increasing use of mobile services. Additionally, the FCC cites  
19 studies that indicate all wireline communications (i.e., local and  
20 long distance) are affected. Estimates suggest that 20% of  
21 residential customers have replaced "some" wireline usage with  
22 wireless usage, while 11% have replaced a "significant  
23 percentage." [Id., pp. 9-10]  
24

25 Mr. Souba introduces the other Qwest witnesses, provides an overview of the history of  
26 the issues involved in the case, and lays out functional equivalence and public interest  
27 analyses. [Souba, pp. 4-23] He contends that wireless services are widely available to all  
28 customers in the seven exchanges.

29 Unlike the Burley case, in which the Commission indicated it  
30 would be "difficult to foresee circumstances where competition  
31 could be deemed effective and throughout the local exchange

1 calling area where less than half the customers have a choice of  
2 provider" (Order No. 28369, page 12), the "service area" of  
3 wireless providers tends to blanket the populated areas of the seven  
4 exchanges reaching even areas where no land-based facilities exist  
5 today. ... Essentially all residents and small businesses throughout  
6 the seven exchanges have access to service from wireless  
7 competitors as an alternative to Qwest's basic local exchange  
8 service. [Id., pp. 14-15]  
9

10 Finally, Mr. Teitzel expands on points made by Mr. Shooshan and Mr. Souba in their  
11 testimonies. He describes various attributes of wireless and wireline services,  
12 emphasizing various similarities. [Teitzel, pp. 8, 22-25]  
13

14 The following are service attributes of Qwest's basic local  
15 exchange landline services that should be viewed as points of  
16 reference in determining whether alternative services are  
17 functionally equivalent: the ability to originate or receive a voice  
18 telephone call at a fixed location, the ability to access operator  
19 assistance (by dialing "0" or accessing directory assistance), the  
20 ability to place and receive long distance voice calls, the ability to  
21 contact emergency service providers and the ability to have the  
22 customer's assigned telephone number and address listed in a  
23 printed telephone directory. [Id., p. 8]  
24

25 Mr. Teitzel also presents some evidence concerning wireless promotions in the seven  
26 exchanges. [Id., pp. 25-26]

27 Following receipt of the Application, the Commission issued a Notice of  
28 Application and Notice of Right to Intervene on December 17, 2002. The Commission  
29 notified parties to the case "that all proceedings in this case will be held pursuant to the  
30 Commission's jurisdiction under Title 61 of the Idaho Code and that the Commission  
31 may enter any final Order consistent with its authority under Title 61." [Notice, p. 2]

1 Parties were given 24 days from the date of the Notice to file petitions for intervention if  
2 they so chose. [Id.]

3 Finally, on February 7, 2003, the Commission issued a Notice of Hearing and  
4 Procedural Order which set filing and hearing dates. [Notice, p. 1] My testimony is  
5 submitted in accordance with this schedule.

6  
7 **Functional Equivalency**

8  
9 **Q. Let's turn to the second section of your testimony. Would you please begin by**  
10 **explaining your understanding of why functional equivalency is key to the**  
11 **resolution of this proceeding?**

12 A. Yes. Qwest filed their Application for deregulation of local exchange rates in the seven  
13 exchanges pursuant to Idaho Code §62-622(3)(b). Recall that in order for the  
14 Commission to approve deregulation, the petitioning carrier must demonstrate that

15  
16 there are functionally equivalent, competitively priced local  
17 services reasonably available to both residential and small business  
18 customers from a telephone corporation unaffiliated with the  
19 incumbent telephone corporation. [§62-622(3)(b) emphasis added.]  
20

21 Qwest witnesses claim that wireless service is functionally equivalent to wireline service,  
22 at least in the seven exchanges. In this section, I will explain what I believe "functionally  
23 equivalent" means in the context of effective competition. I will outline the functional  
24 similarities and differences between wireless and wireline services, and I will respond to  
25 the Company's claims that the two services are functionally equivalent.

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*Definition*

**Q. Can you please explain your understanding of the phrase “functionally equivalent”?**

A. Yes. This is best accomplished by carefully looking at the phrase's piece parts. First, the word “functionally” is simply the adverb form of the word functional. Merriam-Webster defines functional as "of, connected with, or being a function."  
[<http://www.m-w.com/cgi-bin/dictionary>] It defines function as "the action for which a person or thing is specially fitted or used or for which a thing exists: PURPOSE." [Id.]  
Second, equivalent is defined as "equal in force, amount, or value" or "corresponding or virtually identical especially in effect or function."

Having defined the components of the phrase, we can combine them to achieve an overall definition. The word “functionally” indicates the active purpose for which an object (service) exists or is used. The word “equivalent” indicates equality in force, amount, or value—suggesting that the two services are virtually identical with respect to their function. Accordingly, for two services to be “functionally equivalent” these services need to be virtually identical with respect to their functional attributes—those characteristics of the service which relate directly to the purpose for which each service is specially fitted or used.

**Q. How has Qwest attempted to meet the definition of functionally equivalent?**

A. Although four Qwest witnesses touch on the issue of functional equivalency in their direct testimonies, none of these witnesses provide a detailed, comprehensive discussion

1 of this issue.

2 Dr. Lincoln suggests that wireless and wireline services are functionally  
3 equivalent based on the results of a survey of 800 residential and business customers in  
4 the seven exchanges. [Lincoln, p. 38] However, the survey did not directly ask customers  
5 whether they considered wireless and wireline services to be functionally equivalent, nor  
6 did it explore this issue indirectly, by probing deeply into consumer attitudes with respect  
7 to these services.

8 Mr. Shooshan discusses functional equivalency as "line substitution" and "usage  
9 substitution" without really analyzing the functions involved, or the extent to which these  
10 functions are accomplished identically. [Shooshan, p. 5] Mr. Souba's testimony contains a  
11 section titled "functionally equivalent service" and an allusion to "functionally equivalent  
12 wireless communications services." However, his discussion is actually quite superficial,  
13 focusing on the presence of wireless competitors and growth in wireless lines. [Souba, pp.  
14 13-15] Finally, Mr. Teitzel argues that

15  
16 multiple unaffiliated wireless providers now offer telephone  
17 services that are certainly similar to and, in fact, have attributes not  
18 available with to Qwest's voice grade landline service. [Teitzel, p.  
19 8]  
20

21 He outlines five service attributes that he feels should be the Commission's standard for  
22 determining that wireless and wireline services are functionally equivalent. [Id.]

23

24

25 *Substitution*

1 **Q. More than one Qwest witness has used substitutability as a proxy for functional**  
2 **equivalency. Is this appropriate?**

3 A. No. If two products are functionally equivalent, they will tend to be substitutable. But, it  
4 is equally true that if two products are substitutable they may or may not be functionally  
5 equivalent. To see why this is true, consider first the example of two Hondas Accords  
6 that are identical in every way except that one is dark blue and the other is light blue.  
7 Clearly these alternatives are functionally identical, and thus substitutable. In contrast,  
8 consider a pickup truck and a sports car. Both are vehicles that can carry two people from  
9 one place to another, but they clearly are not functionally equivalent. For some purposes a  
10 pickup truck is ideal; for others, a sports car is ideal. While it may sometimes be possible  
11 to substitute one for the other, that doesn't change the fact that there are important  
12 functional differences. In evaluating whether or not these functional differences are  
13 significant, it is worth noting that some people own both a pickup truck and a car. This  
14 strongly suggests they are not equivalent—otherwise one or the other would be redundant,  
15 and people would rarely incur the added cost of owning both.

16 A similar factual situation exists with regard to wireless and wireline service.  
17 Because of important functional differences, the vast majority of consumers do not  
18 substitute wireless for wireline service or vice versa. Most people purchase both services,  
19 using their mobile phone in situations where it will function best and using their  
20 conventional phone where it will function best. The very fact that so many people keep  
21 both phones (if they can afford to double their expenditure on phone service) tends to  
22 prove that these services are functionally different. Similarly, some people can afford, and  
23 are willing to pay for, both a pickup truck and a car, but very few people own two cars

1           that are functionally identical.

2                     If the data revealed that 95% of all satellite TV customers disconnect their cable  
3           television service upon subscribing to DirectTV or the Dish Network and vice versa, we  
4           could reasonably conclude that satellite service and cable service are close substitutes.  
5           However, that wouldn't necessarily mean they are functionally equivalent. There might,  
6           for example, be significant functional differences with respect to local programming or  
7           the reliability of the signal during rain storms.

8                     Clearly, the mere existence of some degree of substitution is not sufficient to  
9           demonstrate or infer functional equivalence. To the contrary, substitution and functional  
10          equivalency are distinctly different concepts. Because of budget constraints, consumers  
11          will sometimes substitute one item for a different item even though it has completely  
12          different functional characteristics. For example, a family might decide not to vacation in  
13          France this year, and instead decide to install a swimming pool. From a budgetary  
14          perspective, and in terms of keeping the family happy during the summer, the new  
15          swimming pool may be an adequate substitute for a European vacation, but these  
16          alternatives are not functionally equivalent.

17                    Unlike satellite and cable television services, the available evidence concerning  
18          consumer substitution patterns strongly suggests that wireless and wireline services are  
19          not close substitutes, and this same evidence tends to prove the latter services are not  
20          functionally equivalent. By Qwest's own admission, less than 10% of all wireless  
21          customers disconnect their Qwest wireline service upon subscribing to a wireless service.  
22          It is reasonable to infer that wireless and wireline services are not close substitutes, and  
23          that they are not functionally equivalent from the perspective of most consumers. If the

1 two services were functionally equivalent, they would tend to be redundant and thus most  
2 people would decide it was a waste of money to pay for both services at the same time.

3 In any event, evidence concerning whether, or to what extent, wireless and  
4 wireline services are substitutes (or complements) is not sufficient to determine whether  
5 they are functionally equivalent for purposes of this proceeding. This is particularly clear  
6 in this context, where the evidence (and the issue of functional equivalence) is a step  
7 towards addressing the ultimate question of whether or not effective competition exists.  
8 The mere existence of a limited degree of substitution cannot be sufficient to reach this  
9 conclusion anymore than one can reasonably conclude that effective competition exists  
10 for Boise swimming pool contractors merely because a small percentage of the people in  
11 Boise would rather take a vacation in England than buy a new swimming pool if airline  
12 ticket prices are low.

13 To adequately address the question of effective competition, Qwest needs to  
14 demonstrate, among other things, that wireless and wireline services are "corresponding  
15 or virtually identical" in the functions they perform (with respect to their intended use).  
16 Qwest has instead set out to prove that some consumers can or do disconnect their  
17 conventional phone and rely exclusively on their mobile phone. While this type of limited  
18 substitution may be feasible or necessary for some consumers (e.g. due to budget  
19 constraints), it doesn't adequately address the question of functional equivalence.  
20 Consumers can and do make trade-offs between all sorts of products and services that are  
21 not functionally equivalent. A limited degree of substitution is clearly not sufficient to  
22 infer functional equivalence, much less suggest that effective competition exists.

23

1 **Q. Would you please explain the concept of product substitution in the context of**  
2 **standard economic theory?**

3 A. Yes. One text define substitutes as

4

5 products that have a relation such that an increase in the price of  
6 one will increase the demand for the other or a decrease in the price  
7 of one will decrease the demand for the other. [Economics, Robert  
8 B. Ekelund, Jr. and Robert D. Tollison, Little, Brown and  
9 Company, 1986, p. 74]

10

11 A simple example of this concept would be apples and oranges. Many people like both of  
12 these fruits and they tend to purchase some of each. It is fair to primarily classify these  
13 fruits as substitutes because, when the price of apples goes up, consumers tend to  
14 decrease their consumption of apples and increase their consumption of oranges.

15 Although they are substitutes, apples and oranges are not close substitutes, as indicated by  
16 the fact that people tend to eat oranges (rather than apples) at breakfast, and they tend to  
17 use apples (rather than oranges) when baking a pie.

18 The opposite concept in economics is that of complements. In the same text,  
19 Ekelund and Tollison define this concept as

20

21 products that have a relation such that an increase in the price of  
22 one will decrease the demand for the other or a decrease in the  
23 price of one will increase the demand for the other. [Id.]

24

25 An example here would be peanut butter and jelly. Since many people like to consume  
26 these products together on sandwiches, if the price for one increases, consumption of both  
27 goods will typically decrease. If a poor crop leads to more expensive peanut butter, for

1 example, consumers will tend to buy less jelly. Another good example of complements  
2 are copier toner and paper.

3 In many cases, products have characteristics that allow them to be either  
4 substitutes or complements—it is simply a matter of degree. If goods and services are  
5 close complements, an increase in the price will typically lead to a decrease in the  
6 consumption of the other. However, some degree of substitution may also be possible.  
7 Similarly, goods may be close substitutes, but a decrease in the price of one product may  
8 nevertheless lead particular consumers to reduce their consumption of the other product  
9 under certain circumstances. Thus, it is more meaningful to think about these concepts as  
10 matters of degree.

11 In this regard, it is helpful to remember that some goods and services may be  
12 totally unrelated and thus it would be impossible to classify them as substitutes or  
13 complements without careful empirical research. Consider, for example, the relationship  
14 between eggs and gasoline. Fluctuations in the price of eggs will have virtually no  
15 measurable impact on consumption of gasoline, and the reverse would also be true  
16 except, perhaps, for what is referred to as an “income effect” (the impact of a price  
17 change on the consumer’s overall budget constraint).

18 Some products have characteristics that potentially would allow them to be  
19 substitutes, but in practice they may accurately be classified as complements. For  
20 example, from a consumer perspective, hamburger buns and hamburger meat are  
21 complementary. I am not aware of any empirical studies evaluating the pricing  
22 relationship between these two goods, but I suspect they would be appropriately classified  
23 as complements. Thus, for example, an increase in the price of hamburger probably leads

1 to a decrease in the demand for hamburger buns. Of course, upon reflection one realizes  
2 that it is possible to substitute one of these products for the other, at least under some  
3 circumstances. For example, when planning a school picnic, if the price of hamburger  
4 meat increases, it is possible to buy less meat and more buns, putting a smaller burger on  
5 each bun. Some folks will eat more potato salad, others will eat an extra burger, but the  
6 overall level of caloric consumption may be about the same—at lower cost than if larger  
7 burgers were served. However, this situation is the exception to the general rule. More  
8 typically, the limited degree of substitution that is possible between hamburger buns and  
9 meat will be swamped by the complementary characteristics of these products.

10  
11 **Q. How do wireless and wireline service relate to this discussion?**

12 A. While a limited degree of substitution occurs in practice, these services are primarily  
13 complementary to each other. Some consumers stop purchasing Qwest's service when  
14 they obtain a mobile phone, but even these consumers don't necessarily consider these  
15 services to be "close substitutes" nor do they necessarily think they are functionally  
16 equivalent. Perhaps they want the functional advantages of a mobile telephone, they can't  
17 afford (or don't want to pay for) two telephones, and they can live without the functional  
18 advantages of a wireline telephone.

19 In the more typical situation, a consumer will continue to use their wireline  
20 telephone after they get a mobile phone. In fact, their total volume of calling may  
21 increase, and there will be calls from their wireline phone to their mobile phone and vice  
22 versa. For instance, they may start calling their spouse at home during their afternoon  
23 commute—calls that did not occur before they obtained wireless service. Rather than

1           reducing the benefit of having a wireline phone at home, their mobile phone will serve a  
2           complementary function, increasing the value of that phone. For instance, when shopping  
3           for groceries they can call home to find out whether they need to buy more of a certain  
4           item (or to obtain their spouse's opinion concerning which brand to buy).

5           Of course, it is also true that once a consumer purchases wireless service, they  
6           may use their mobile phone for some conversations that would otherwise have occurred  
7           using a conventional phone. Data analyzed by the FCC and presented by Mr. Shooshan  
8           bears this out, though the frequency of this type of usage substitution is surprisingly  
9           small. According to Yankee Group analyst Knox Bricken, just 20% of residential  
10          customers use their mobile phone for "some" calls for which they would have otherwise  
11          used a conventional phone. This implies that the vast majority of residential customers  
12          never use their mobile phone for calls they can place using a conventional phone. In  
13          other words, most consumers only use mobile phone when they need to place a call while  
14          traveling around—because of the usage fees associated with wireless calls, poorer sound  
15          quality, physical discomfort, or other reasons.

16          Moreover, according to Mr. Bricken's data just 11% of residential customers have  
17          replaced a "substantial number" of conventional phone calls with mobile phone calls. At  
18          the extreme, just 3 to 5% of wireless customers now use their wireless phone exclusively.  
19          [Seventh Report, FCC 02-179, July 3, 2002, p. 32] The lack of substitution in practice is  
20          confirmed by the fact that although 45% of Americans now purchase wireless service,  
21          more than 90% of all Americans still have wireline service. [Id., pp. 31, 32] It is evident  
22          from these statistics that most consumers do not view wireless and wireline service as  
23          close substitutes, much less functionally equivalent. To the contrary, these are largely

1           complementary services which are only substitutable to a limited degree under special  
2           circumstances.

3

4   **Q.   Don't the results of Dr. Lincoln's consumer research contradict this conclusion?**

5   A.   No they do not. For one thing, the data contained in Dr. Lincoln's study is much too  
6       limited to be reliable. Dr. Lincoln arrived at his definition of *functional equivalent* from  
7       his interpretation of a survey of

8

9                   36 adults living in the Boise and Twin Falls areas. We asked these  
10                  individuals what the three terms used in the statute meant to them.  
11                  Each individual wrote down and then submitted their responses.  
12                  Dr. MacDonald and I next independently reviewed all 36 responses  
13                  to identify the most common interpretation of the key terms. After  
14                  considering our separate reviews, we arrived at agreement as to  
15                  how most of the respondents interpreted the statutory terms. We  
16                  found that "functionally equivalent" means that one product could  
17                  serve as a substitute for another. Our respondents spoke about the  
18                  two products being able to "do the same thing." [Lincoln, p. 19]

19

20               This is certainly an unusual way of grappling with issues of statutory interpretation. The  
21               survey results confirm that this small group of individuals had a good, intuitive grasp of  
22               the concept of "functional equivalence." However, they weren't provided with nearly  
23               enough information to allow them to be precise in their definition, or to provide much  
24               insight into whether or not wireless and wireline services qualify as functionally  
25               equivalent as this term is used in Idaho Code §62-622(3)(b). Nor is there any opportunity  
26               to cross examine these individuals concerning their responses. For instance, we have no  
27               way of knowing what these 36 individuals would say if they were confronted with the

1 example of a pickup truck and a sports car. If they were told two vehicles can be used to  
2 drive from one end of town to the other, they might agree these vehicles can "do the same  
3 thing." But, if they were told one of the vehicles was a pickup truck and the other was a  
4 sports car, and the driver needs to carry a large quantity of lumber between the two  
5 locations, they might agree that these two vehicles actually cannot "do the same thing."

6 When dealing with a subtle issue like functional equivalency, the conclusion one  
7 reaches may depend upon how much information one is provided and how carefully  
8 relevant aspects of the issue are considered. According to Dr. Lincoln's interpretation of  
9 this survey data, the respondents generally agreed that wireless and wireline service can  
10 "do the same thing." [Id.] But, that doesn't necessarily mean these services can do all of  
11 the same things, or that they can do them equally well—just as pickup trucks and cars can  
12 sometimes "do the same thing" but not equally well.

13 The other survey data provided by Dr. Lincoln is also problematic. A group of  
14 consumers were asked if they "could solely rely upon cell phone service for the purpose  
15 of making and receiving local phone calls." [Id.] Half of residential users responded yes  
16 they could, 40% responded in the negative, and 10% were undecided. Of the small  
17 business customers, 31% percent said they could solely rely on wireless while 65%  
18 responded in the negative. [Id., pp. 28, 33]

19 There are two key problems with this survey. First, the results are skewed upward  
20 because the question fails to consider whether consumers are willing to solely rely upon  
21 wireless service. To use an example, I could give up my mobile phone and rely solely on  
22 wireline service, but I would rather not. The convenience of being able to make calls  
23 while traveling around town more than outweighs the expense. Likewise, I could get rid

1 of my wireline service but I'm not willing to—unless someone forces me to (e.g. by  
2 drastically raising the price). By using the word "could" in the question, Dr. Lincoln  
3 ensured that a large percentage of the respondents would answer in the  
4 affirmative—regardless of how dissimilar these services might be. We can safely assume  
5 that the great majority of the respondents who stated they could give up their wireline  
6 phone have not actually done so. Dr. Lincoln didn't ask enough questions to find out why  
7 these respondents haven't actually done so, despite the fact that they indicated they could.

8 Just because a consumer could rely entirely on a mobile phone does not mean that  
9 all of the same purposes would be fully and adequately served if they were to do so. For  
10 example, one could exclusively rely on a bicycle, motorcycle or taxi services, but very  
11 few people actually do so. Even if 50% of customers were to answer a survey that they  
12 "could" get rid of their car wouldn't mean the alternatives are functionally equivalent.  
13 The fact that many customers "could" solely rely on taxis doesn't mean they would freely  
14 choose to do so, or that taxi service is functionally equivalent to car ownership.

15 Dr. Lincoln's interpretation of his survey results is contradicted by the fact that so  
16 few consumers today actually do solely rely on a cell phone. If wireless and wireline  
17 service were functionally equivalent, we would see many more users eliminate one  
18 service or the other. There would be no need to pay for both services, since wireline  
19 service would be redundant and therefore a waste of money. Yet, according to data cited  
20 by the FCC, only 3- 5% of telecommunications consumers use their mobile phone as their  
21 only phone.

22 Further, I find it puzzling that Dr. Lincoln can conclude that wireless and wireline  
23 services are functionally equivalent when over 40% of residential customers and 65% of

1 small business customers say they could not solely rely on cell phone service. Even under  
2 the ambiguous standard used by Dr. Lincoln ("could"), a very large number of residential  
3 and business customers indicate they could not survive without their regular telephone.  
4 These responses would not make sense unless these consumers perceive significant  
5 functional differences between wireless and wireline services. For these customers, the  
6 functional differences are sufficiently important and vivid that they don't consider these  
7 services to be substitutable even as a possibility—much less something they would be  
8 willing to do.

9  
10 **Q. How does the economist's concept of product substitution relate to the economist's**  
11 **concept of effective competition?**

12 A. Usually, four conditions are considered sufficient to ensure that sellers will behave as  
13 "price takers," or effectively compete with each other. If any one of these conditions is  
14 absent, the prospects for effective competition are diminished or eliminated.

15 First, no one firm can have a dominant share of the market. If a firm engages in  
16 price leadership, dominant firm pricing, or price discrimination, its behavior is  
17 inconsistent with competitive behavior. Needless to say, this condition is violated in the  
18 provision of any service where a firm's market share is considerably greater than that of  
19 all its competitors combined.

20 Second, the products of the supplying firms must be reasonably uniform (from the  
21 perspective of the buyers in the market). If consumers view the product or service as  
22 unique, the firm will not need to behave as a "price taker."

23 Third, the number of supplying firms must be large enough so that the total

1 amount supplied to the market cannot be restricted. It always is in the interest of suppliers  
2 to limit the total amount supplied to the market, because by limiting supply, they can  
3 charge a higher rate and earn greater returns (economic profits) than under the conditions  
4 of competition.

5 Fourth, as noted in the criteria cited above, firms must be free to enter and exit the  
6 market. If any firm decides to produce the service, no substantial legal, financial, or other  
7 barrier must stand in its way. Patents or trademarks (such as brand names) and other legal  
8 barriers can preclude effective entry, making effective competition less likely.

9 The concept of product substitution pertains directly to the second criteria for  
10 effective competition-the reasonable uniformity of competing products. To the extent  
11 consumers perceive two products to have very similar attributes, and thus consider them  
12 to be close substitutes, the availability of these alternatives will enhance the prospects for  
13 effective competition.

14

15 *Attributes*

16

17 **Q. What attributes of Qwest's wireline services does the Company think should be**  
18 **compared to wireless services, in order to determine whether these services are**  
19 **functionally equivalent?**

20 A. Qwest witness Teitzel lists the following attributes, which he recommends be used as  
21 "points of reference" when determining whether these services are functionally  
22 equivalent: 1)the ability to originate or receive a voice telephone call at a fixed location;  
23 2) the ability to access operator assistance (by dialing "0" or accessing directory

1 assistance), 3); the ability to place and receive long distance voice calls; 4) the ability to  
2 contact emergency service providers; and, 5) the ability to have the customer's assigned  
3 telephone number and address listed in a printed telephone directory. [Teitzel Direct, p. 8]  
4 Mr. Teitzel concludes that each of these attributes are “reasonable available” from  
5 wireless service providers in the 7 exchanges.  
6

7 **Q. Are there problems with the list of “attributes” provided by Mr. Teitzel?**

8 A. Yes. First, there is some redundancy in this list. For example, the third item is really a  
9 subset of the first item. More importantly, the list is not sufficiently comprehensive or  
10 detailed. Thus, it doesn’t allow one to draw meaningful conclusions concerning whether  
11 wireless and wireline services are functionally equivalent. Rather than limiting my  
12 discussion to Mr. Teitzel’s list, I will respond to his suggested attributes in the context of  
13 a longer list of attributes and a broader discussion of the relative advantages of wireless  
14 and wireline services.

15 Comparing these services on a more detailed basis may help the Commission to  
16 gain a better understanding of why so many consumers choose to pay for both services.  
17 As well, I believe this detailed analysis confirms that these are not “functionally  
18 equivalent”. In fact, there are many functional differences between these services. The  
19 importance of specific attributes, and the extent to which specific attributes represent  
20 advantages or disadvantages can vary from customer to customer and, in some cases,  
21 from call to call.  
22

23 **Q. What advantages does wireless service have over wireline services?**

1 A. The primary advantage of wireless services is mobility; certainly this is its strongest  
2 advantage over traditional wireline service. Wireline services can offer a limited amount  
3 of mobility. For example, with cordless phones one can talk while roaming around one's  
4 house or yard, and possibly while walking short distances from one's property. Also, with  
5 the use of extension phones, and/or through the use of call forwarding, one can place and  
6 receive calls at other fixed locations. However, the mobility offered by wireline phones is  
7 not equivalent to the mobility offered by wireless services. With a wireless phone, one  
8 can make and receive calls on the same line from literally anywhere in the country, as  
9 long as the location is close enough to a wireless tower or antenna. With wireless  
10 services, one can make calls and be reached by acquaintances while traveling around  
11 town, out of town, or across the country. Even within a single town or city, the mobility  
12 provided by wireless services is far superior to that offered by wireline service.  
13 Customers can place and receive calls while traveling around town and they can even  
14 start a conversation in one location, continue talking while walking to their car, and can  
15 then finish the call while driving to another location. This type of flexibility is only  
16 offered by wireless services, and it largely explains why these services have grown so  
17 popular. In this respect, wireline services are not functionally equivalent to wireless  
18 services.

19  
20 **Q. Are there other differences between wireline and wireless services that help explain**  
21 **why relatively few consumers simply pick one or the other?**

22 A. Yes. I have identified 10 key attributes of wireline services that distinguish them from  
23 wireless services.

1           First, there are ergonomic differences between conventional and mobile phones.  
2           Due to differences in the size and shape of the phone instrument, as well as the fact that  
3           some mobile phones warm up during usage, people may find a conventional phone to be  
4           more comfortable to use than a mobile phone, particularly during long phone calls, and  
5           thus they will opt to use their wireline service whenever feasible.

6           Second, wireline services typically provide higher quality, more reliable  
7           communication than wireless services. Calls placed over land lines are typically dropped  
8           less often than calls placed over wireless facilities. Further, land line calls are less subject  
9           to weather interference; they are not subject to structural interference; they are less  
10          subject to congestion problems; they are less frequently subject to cross talk; and, they are  
11          less frequently subject to static and poor sound quality. Because of these quality  
12          differences, wireless services are not functionally equivalent to wireline services. Given a  
13          choice between pulling a cell phone out of their pocket or walking across the room to use  
14          a conventional phone, consumers will often choose the latter option because of these  
15          quality differences.

16          Third, wireline services provide the ability to have multiple (extension) phones  
17          share the same line and the same phone number. Most residential consumers have more  
18          than one phone in their home. It is not uncommon to have a phone in the living room, the  
19          kitchen, and every bedroom. Many small businesses also have multiple phones sharing a  
20          single line. Functionally, wireless service is very different. Customers are typically  
21          provided with a separate wireless account for each phone desired, although they can  
22          “share” the same package of minutes. Even if the minutes associated with a single  
23          account are “shared”, the consumer is required to pay substantial additional monthly fees

1           for each additional phone. Furthermore, each wireless phone will have a separate phone  
2           number, which defeats one of the purposes of extension phones.

3           Fourth, wireline services allow multiple family members or employees to share  
4           the same line. With multiple wireless phones, other parties need to dial different numbers,  
5           depending upon which family member or employee they are trying to reach. With  
6           wireline service, a family or business can be reached at a single number, and anyone can  
7           take the call from any location within the house or business. In contrast, with wireless  
8           service multiple accounts and phone numbers are typically maintained. Whether this is an  
9           advantage or disadvantage will depend on the context, but clearly there is a functional  
10          difference in the way the two services are offered and used.

11          Fifth, wireline services allow consumers to reliably and conveniently access the  
12          internet, and transmit large volumes of data at minimal cost. Although it is possible to  
13          access the internet and transmit data through wireless facilities, it cannot be accomplished  
14          with the same reliability, speed and ease associated with wireline services. If one wants to  
15          access the internet through their wireless services, they must either use their mobile  
16          phone or PDA, with their small screens and limited keypads, or combine technologies in  
17          unusual ways. While wireless services are improving their capabilities, the speed at which  
18          data can be transmitted over wireless services is typically slower than the speed at which  
19          one can typically transmit data over land lines, and the user isn't necessarily given the  
20          option of connecting to the internet service provider of their choice.

21          Sixth, wireline services allow consumers to conveniently and reliably transmit and  
22          receive faxes. While it may be theoretically possible to transmit faxes using wireless  
23          service, in practice consumers do not use mobile phones for this purpose. From the

1 perspective of most consumers, only wireline service offers the option of transmitting and  
2 receiving paper FAXes.

3 Seventh, wireline services currently provide better access to emergency services,  
4 particularly E911 services. Although the FCC wants the wireless industry to develop and  
5 implement technology which will allow the transmission of a wireless caller's location  
6 and 10 digit phone number to emergency service operators, deployment of this  
7 technology is not yet widely available.

8 Eighth, wireline service subscribers automatically have their phone number listed  
9 in the telephone directory for free. Wireless subscribers have the option of having their  
10 number listed, but they must pay an additional monthly fee. In practice, most consumers  
11 do not opt to have their mobile number listed, and thus a major functional difference  
12 exists. If another party wants to talk with a wireless subscriber, they cannot do so unless  
13 they somehow discover, or are told, their mobile phone number.

14 Ninth, wireline service subscribers can keep (port) their phone numbers when they  
15 change carriers. Wireless subscribers currently cannot port their numbers from carrier to  
16 carrier.

17 Tenth, there are safety concerns (real or perceived) associated with wireless  
18 services that do not apply to wireline services. For example, there are concerns that  
19 extensive hand-held mobile phone usage can cause brain cancer or other medical  
20 complications. As well, many gasoline stations have warnings on their gas pumps  
21 advising customers to leave their cell phones in their cars while fueling because of the  
22 danger of sparks from the phone igniting fumes from the gas line or the automobile fuel  
23 tank. Due to these warnings and concerns, some consumers may refuse to use a wireless

1 phone, or they may try to avoid using one as much as possible.

2

3 **Q. Do these differences help explain why consumers use both wireline and wireless**  
4 **services?**

5 A. Yes. Because of these functional differences, wireline and wireless services are often used  
6 for different purposes. As a result, most consumers who choose to purchase wireless  
7 service also continue to purchase wireless service. Whether consumers perceive particular  
8 differences to be significant advantages or disadvantages can vary, depending on their  
9 respective tastes and preferences, as well as the particular purposes for which the service  
10 will be used.

11 While apples and oranges may be substitutes, most families buy both types of  
12 fruit, because they are so different. Much the same can be said for wireless and wireline  
13 services. Consumers who want, and can afford, greater mobility will purchase a wireless  
14 service, but that doesn't mean they necessarily stop using their wireline service.

15 The differences between apples and oranges may range from highly significant to  
16 relatively unimportant, depending on the tastes and preferences of each consumer as well  
17 as the particular purpose for which the fruit will be used. The same can be said about  
18 wireless and wireline services. Some customers' top priority may be mobility and giving  
19 all their friends a single number where they can always be reached. In that case, they may  
20 decide to save money by dropping their wireline service. Another consumer's top priority  
21 may be quality and reliability of service, in which case they may not obtain a mobile  
22 phone, or they may use it as little as feasible.

23 Finally, it should be noted that there are pricing differences that can influence

1 consumer purchasing decisions. Wireline services are typically priced on a flat fee  
2 (unlimited usage) basis. Wireless services, on the other hand, are typically priced on a  
3 usage basis. The more you use the phone, the higher your monthly bill. This difference in  
4 pricing structure follows directly from differences in the underlying cost characteristics of  
5 the two technologies. Wireless costs are primarily a function of the usage. A wireless  
6 carrier incurs little, if any, additional cost with the addition of more phone “lines”  
7 (actually, just additional phone numbers). In contrast, wireline costs are primarily a  
8 function of the number of access lines on their network. A wireline carrier incurs very  
9 little additional cost as more phone calls are placed over its network.

10 Consistent with this underlying cost difference, the pricing structure of wireline  
11 services typically allows users to pick up the phone as often as they want, and allows  
12 them to talk as much as they want, without having to be concerned they might receive a  
13 large bill at the end of the month. The limited number of package minutes available with  
14 most wireless services, and the very high charges imposed on excess usage (typically in  
15 the vicinity of 35 to 45 cents per minute) discourage customers from using their wireless  
16 phone. This difference in billing risk gives consumers an incentive to keep and to  
17 continue to use their wireline phone (rather than relying entirely on a wireless phone).

18  
19 **Q. At pages 5 and 6 of his direct testimony, Mr. Shooshan claims that, to the extent**  
20 **some consumers need Qwest’s wireline service for use with internet access and fax**  
21 **machines, this relates to “non-voice” services, and is therefore irrelevant to this**  
22 **proceeding. Do you agree?**

23 **A.** No. To begin with, I would point out that ordinary local exchange lines are routinely

1           used to place and receive fax transmissions, and to connect with internet access providers.  
2           These types of transmissions take place using sounds that occur within the same  
3           frequency range as the human voice, and thus the same line can be used for ordinary  
4           conversations and fax and internet communications. When customers obtain an extra  
5           phone line for their fax machine (or decide to occasionally use an existing line for this  
6           purpose) they pay the tariffed basic local exchange rate. The same holds true for  
7           customers who use their phone line to reach America Online or another internet access  
8           provider. While it might be fair to characterize these uses as “data or ‘non-voice’ uses,”  
9           they are fully relevant to this proceeding, contrary to Mr. Shooshan’s assertion. If basic  
10          local exchange service is deregulated in this proceeding, and as a result Qwest increases  
11          its basic local exchange rates, customers who depend on basic local service for fax  
12          transmissions and internet access will be forced to pay the higher rates. Wireless service  
13          does not provide a viable competitive alternative for these local exchange customers,  
14          since wireless service is not functionally equivalent to basic local exchange service in the  
15          context of these types of phone calls.

16                 Furthermore, as pointed out by Staff witness Wayne Hart, the term “basic local  
17          exchange services” is used throughout Section §62-622. However, in subsection  
18          §62-622(3)(b) (the section under which Qwest filed its application), the Legislature used  
19          the broader term “local services”. As discussed by Mr. Hart, in order to determine  
20          whether two different services are functionally equivalent, one must consider both their  
21          similarities and their differences. If the legislature wanted the Commission to limit its  
22          analysis to the use of tariffed services for two-way switched voice communications, it  
23          could have clearly stated this. Given the overall purpose of this portion of the statute (a

1 determination of whether or not services should be deregulated because of the presence of  
2 effective competition) it would be inappropriate to artificially exclude consideration of  
3 those types of phone calls where the services being compared are not functionally  
4 equivalent.

5  
6 **Q. In your opinion, are wireless and wireline services functionally equivalent?**

7 A. No. Wireless and wireline service are clearly not "corresponding or virtually identical"  
8 with regard to their functional attributes. These differences largely explain why most  
9 wireless customers continue to pay for wireline service—and why they would continue to  
10 do so even if the price of wireline service were to increase substantially.

11  
12 **Competitive Pricing**

13  
14 **Q. Please turn to Section 3 of your testimony. Can you clarify your understanding of**  
15 **Idaho Code § 62-622(3)(b) with respect to the phrase “competitively priced”**  
16 **alternatives?**

17 A. In order for a service to be deregulated under § 62-622(3)(b), Qwest must show that there  
18 are “competitively priced” alternative services. While more than one interpretation of this  
19 provision is possible, given the context (whether or not effective competition exists), I  
20 interpret this language to mean that the alternative service must compete with the service  
21 to be deregulated on the basis of price. In other words, the issue isn’t whether the price of  
22 the alternative service (e.g. wireless service) is determined by competitive market forces.  
23 Rather, the issue is whether the price of wireless service and the price of the wireline

1 services that are the subject of this proceeding are similar enough, and viewed by market  
2 participants as being closely related, so that one can conclude that the services in question  
3 are “competitively priced.”

4 The phrase “competitively priced” isn’t specifically defined in the statute. From  
5 my perspective as an economist, this phrase suggests that prices of the alternative services  
6 aren’t determined independently of each other; rather, providers are forced by competitive  
7 pressures to keep their prices in close alignment with the prices set by providers of the  
8 alternative services. As well, it suggests that the prices observed in the market are  
9 relatively similar, indicating that customers who are using one alternative could choose  
10 another alternative without experiencing a significant increase in the amount they pay for  
11 the services in question.

12  
13 **Q. Has the Company provided evidence that competitive pressures push wireless**  
14 **providers to keep their prices closely aligned with the price of Qwest’s wireline**  
15 **services, or vice versa?**

16 **A.** No. The Company has provided a small amount of data showing some recent examples of  
17 wireless service rates. This data is not comprehensive, and it certainly isn’t sufficient to  
18 draw the conclusion that wireless and wireline prices are closely aligned due to  
19 competitive market forces. Furthermore, the Company hasn’t even taken the necessary  
20 steps to meaningfully compare wireless and wireline prices from a consumer perspective.  
21 These services typically have different pricing structures which makes it difficult to make  
22 an “apples to apples” comparison between particular wireline services and particular  
23 wireless offerings.

1    **Q.    Can you elaborate on the differences between the pricing of wireless services and**  
2    **wireline services?**

3    A.    The primary difference relates to usage. Most wireless services are priced on the basis of  
4    usage. Wireless plans usually include a flat per month charge which entitles the customer  
5    to a limited number of minutes per month. The wireless provider typically charges higher  
6    rates for plans that include more minutes, and they impose substantial per-minute fees for  
7    every minute in excess of the package allowance. Hence, wireless service costs some  
8    customers a lot more than other customers. In fact, any given customer could pay widely  
9    different amounts, depending upon the plan they select and the number of calls they place  
10   and receive each month. On the other hand, most wireline local services are not usage  
11   based. Customers can place an unlimited number of outgoing local calls, and they can  
12   receive an unlimited number of incoming calls, without needing to select a particular  
13   “plan” and without running the risk of incurring additional per-minute charges.

14  
15   **Q.    Are there other pricing differences which make it difficult to compare wireless and**  
16   **wireline services?**

17   A.    Yes. For example, most wireless services price incoming and outgoing calls the same. In  
18   selecting a particular calling plan, the customer needs to consider both incoming and  
19   outgoing calls. Furthermore, if the customer exceeds the allowed number of minutes  
20   associated with their calling plan during a particular month, they will be charged  
21   extra—regardless of whether the excess relates to calls they place or calls they receive  
22   from others. Although there are some very minor exceptions, such as collect calls, most  
23   wireline services do not impose any charge for incoming calls, and thus customers don’t

1           have to be concerned about how many calls they receive, regardless of whether the  
2           incoming calls are local or long distance.

3                     Another difference is that many wireless services treat at least some long distance  
4           calls the same as local calls. Depending upon the particular wireless carrier and calling  
5           plan, calls within some specified geographic area will be treated, for billing purposes, as  
6           if they were placed across town. These geographic areas are typically larger than the local  
7           exchange area used in pricing wireline services. It may include a large portion of the state,  
8           the entire state, a large portion of the country, or the entire country. On the other hand,  
9           with most wireline services, long distance calls are more expensive than local calls (local  
10          calls are typically “free”). Similarly, most wireless services charge more for calls placed  
11          during the day than for those placed at night or on the weekend. With the exception of  
12          some long distance prices, most wireline prices do not distinguish between weekday and  
13          night/weekend calls. Finally, the price of most wireless service plans include features like  
14          Voice Mail and CallerID, regardless of whether the customer wants or uses the feature. In  
15          sharp contrast, most wire line services charge a premium price for these features.  
16          Customers who don’t want these features can reduce their bill by avoiding them.

17  
18  
19   **Q.    What is the significance of these differences in wireless and wireline pricing**  
20   **characteristics?**

21   A.    These differences make it impossible to draw meaningful comparisons between wireless  
22          and wireline prices in the highly simplified manner used by Qwest’s witnesses. Instead, it  
23          is necessary to consider a wide variety of different wireless pricing plans, and it is

1           necessary to analyze these prices from the perspective of a variety of different types of  
2           customers. Even a comparison between a single wireless rate plan and a typical local  
3           exchange rate will only be meaningful for a small group of customers with specified  
4           usage characteristics.

5           To prepare a meaningful comparison between wireless prices and wireline prices,  
6           one must take into consideration both incoming and outgoing usage patterns. One must  
7           assume the number of minutes that are used in an average month, as well as the number  
8           that are used in a busy month (when the customer's usage peaks above its long term  
9           norm). It also becomes necessary to consider what vertical features the customer likes to  
10          use, and whether they are willing to pay a premium for the use of these features. Finally,  
11          it is necessary to take into consideration the fact that customers don't necessarily have  
12          enough information to select the least costly, or optimum wireless plan. Needless to say,  
13          regardless of how carefully these factors are considered, they may or may not be accurate  
14          with respect to particular individuals. The comparison will be meaningless with respect to  
15          customers with characteristics that are significantly different than those assumed.

16  
17  
18

19   **Q.    Hasn't Qwest attempted to compare its prices to prices charged by wireless**  
20   **providers in the 7 southern Idaho exchanges?**

21   A.    Yes. Staff Witness Wayne Hart provides a more detailed discussion of the Company's  
22          attempt to compare the price of wireless and wireline services. However, I offer the  
23          following brief comments.

1           Qwest witness Lincoln presents a study in which he compares wireless and  
2           wireline prices. The study was intended to “identify the degree to which prices and  
3           features were comparable”. [Lincoln Direct, p. 6] Dr. Lincoln compares Qwest’s local  
4           exchange prices to 3 different wireless calling plans. Dr. Lincoln labels these plans  
5           “Economy”, “Standard” and “Premium”. [Id., p. 13] As explained by Dr. Lincoln,

6  
7           The first service package is aimed at customers who use the phone  
8           infrequently, who require few, if any, line features and who wish to  
9           minimize their communications expenditure. ... The second service  
10          package is tailored for those customers who do not need a large amount of  
11          conversation time, but do require more conversation time than they can  
12          obtain with the economy plan. These customers also do not require or do  
13          not wish to pay extra for line features. ... The third service package is  
14          designed for those customers who are heavy users of telecommunications  
15          services. They require a large amount of conversation time. They also  
16          value many of the line features designed to improve the efficiency and  
17          convenience of telephone usage. [Id., pp. 14, 15]  
18

19          From this greatly oversimplified comparative analysis, Dr. Lincoln draws the following  
20          conclusion:

21  
22                 [It appears that the prices for wireless and basic local exchange services,  
23                 while not identical, are comparable. Differences in prices can be explained  
24                 based on the additional functionality (including mobility) and the inclusion  
25                 of line features or long-distance benefits in certain wireless packages. [Id.,  
26                 pp. 15-16]  
27

28          To the extent some wireless services are comparably priced, or cheaper than, some  
29          wireline services, this isn’t sufficient to conclude that wireless service is competitively  
30          priced with the services included in Qwest’s request. Even if some customers could

1 substitute wireless service for their wireline service without experiencing a significant  
2 increase in their monthly bill, this doesn't mean that all customers could do so, or that  
3 most customers perceive wireless services to be an affordable alternative to Qwest's local  
4 exchange service. To the contrary, many customers may place or receive so many calls,  
5 wireless service would be much more costly. Other customers may be risk averse, and  
6 unwilling to switch from a flat rated service to one that can vary with usage—especially if  
7 their usage fluctuates from month to month, and thus it is difficult to predict how much  
8 their monthly bill will be (unless they select an extremely costly plan that includes a very  
9 large package of minutes).

10  
11 **Q. To the extent wireless prices have been declining, isn't it possible that they will be**  
12 **competitively priced with wireline service in the future?**

13 A. This is certainly a possibility, since some wireless prices have been declining. However,  
14 there are indications that this downward trend has slowed, and there is no basis for  
15 assuming that wireless prices will eventually decline below the level of Qwest's local  
16 exchange rates. Regardless of whether wireless prices decline further, flatten out, or  
17 increase, wireless prices may continue to be determined independently of wireline prices.  
18 There is no evidence that wireless providers have been forced by competitive pressures to  
19 keep their prices in close alignment with the Qwest's wireline prices (or vice versa), and  
20 there is no reason to assume this will happen in the future. Although the total cost of  
21 some wireless services may currently be below the total cost of using Qwest's local  
22 exchange services for some customers, this is only true for some customers. For other  
23 customers, wireless service doesn't provide a viable alternative (even aside from all the

1 functional differences) because they use the phone too much, and thus they would  
2 experience a significant increase in the amount they pay for telephone service. In any  
3 event, differences in wireless and wireline pricing structures will continue to make it  
4 difficult for customers (or the Commission) to meaningfully compare the two types of  
5 services.

6  
7 **Q. Aren't some wireless providers beginning to price their services in a manner more**  
8 **comparable to wireline pricing?**

9 A. As noted by Qwest witness Shooshan, at least one wireless provider operating in Idaho is  
10 currently experimenting with an "unlimited minutes" pricing plan. [See, Shooshan Direct,  
11 p. 6] Leap Wireless, through its Cricket subsidiaries, is marketing "Comfortable  
12 Wireless". "With this service, customers can make unlimited calls in their local service  
13 area – and receive calls from anywhere in the world – for as low as just \$32.99 a month  
14 plus tax". [<http://leapwireless.com/bindex.html>; obtained March 11, 2003] However, this  
15 remains an anomaly—a pricing approach that has not been copied by other, better  
16 established wireless carriers. In fact, Leap Wireless' business plan, which is based  
17 primarily on its "unlimited minutes" pricing plan, is largely unproven.

18  
19 **Q. Is there any indication that Leap Wireless' business plan may not be successful?**

20 A. Yes. Although I have not performed an in-depth analysis of this company's financial  
21 condition, it is clear that Leap Wireless is struggling to meet its debt obligations. In May,  
22 2002, Leap began cutting jobs in order to improve its cash position. [Leap Wireless  
23 Comes Tumbling Down, Telephony, September 9, 2002, obtained from

1           [http://currentissue.telephonyonline.com/ar/telecom\\_leap\\_wireless\\_comes/](http://currentissue.telephonyonline.com/ar/telecom_leap_wireless_comes/)] A few months  
2           later, Leap announced slowing subscriber growth, and lowered future growth estimates.  
3           [Id.] By September 30, 2002, the company was in default on vendor credit facilities  
4           totaling approximately \$1.5 billion. [See,  
5           <http://news.moneycentral.msn.com/ticker/sigdev.asp?Symbol=US%3aLWIN>] In April,  
6           2002, Leap's shares were trading in the \$10-11 range. By July, 2002, Leap's shares were  
7           trading for less than \$1. On December 11, 2002, the company announced that it had been  
8           delisted by NASDAQ. [Id.] Leap's shares are now trading for approximately \$0.13.

9           Some have suggested that Leap's unusual pricing strategy has contributed to its  
10          financial difficulties—which could be one reason why other carriers have declined to  
11          follow its lead in pricing wireless services more like wireline services.

12  
13           The company has little room to maneuver, though, in part because its  
14           all-you-can-talk pricing plans. Restricting coverage within the city limits  
15           of any given market initially yielded cost savings on infrastructure,  
16           licenses, marketing and distribution. Leap's cost per gross add, however,  
17           increased in the second quarter to \$316 from \$246 in the first quarter  
18           because of higher marketing expenses, lower customer additions, price  
19           competition and fraud. Meanwhile, Leap's churn runs higher than the 3%  
20           industry average. Indeed, many question whether Leap's business plan —  
21           conceived when wireless competition was less fierce — is still applicable.  
22           [Leap Wireless Comes Tumbling Down, Telephony, September 9, 2002]  
23  
24

25           **Public Interest Analysis**

26  
27           **Q.     Please turn to Section 4 of your testimony. How should the Commission proceed**  
28           **under Idaho Code § 62-622(3)(b)?**

1 A. The Idaho legislature has left the appropriate interpretation of the terms “functionally  
2 equivalent” and “competitively priced” to the Commission’s judgment. Given the  
3 ambiguities involved, I believe the Commission should proceed cautiously and should not  
4 reclassify services prematurely. Qwest has been operating under a regulated monopoly  
5 structure for nearly a century. While there has been a strong trend towards increased  
6 competition, this trend is still in its infancy—particularly in local exchange markets.

7 Despite the best efforts of the Idaho legislature, this Commission, the U.S.  
8 Congress, and the Federal Communications Commission (FCC), local competition has  
9 been slow to emerge. Much uncertainty remains concerning how competitive local  
10 exchange markets will become. The Commission should not assume that wireless carriers  
11 are providing effective competition merely because some people use mobile phones to  
12 place calls they previously would have placed using Qwest’s local exchange service, nor  
13 should it assume that the trend towards increased competition will continue unabated. If  
14 the Commission were to grant Qwest’s application, to my knowledge, it would be the first  
15 state commission to deregulate local exchange services on the basis of wireless  
16 competition.

17

18 **Q. Are there important considerations the Commission should keep in mind when**  
19 **evaluating Qwest’s application?**

20 A. Yes. There certainly has been an increased demand for and reliance upon wireless  
21 services. At the end of 2001, the FCC estimated a national penetration rate for wireless  
22 services of 45%. [Annual Report and Analysis of Competitive Market Conditions With  
23 Respect to Commercial Mobile Services, Seventh Report, July 3, 2002, p. 20] However,

1 according to reports cited by the FCC, at the end of 2001, only 3-5% of these wireless  
2 customers had eliminated their land line. [Id., p. 32] In other words, only 1.4% to 2.3% of  
3 the nation had eliminated their land line in favor of wireless services by the end of 2001.  
4 (3-5% times 45% equals 1.4-2.3%) These statistics indicate that a few customers treat  
5 wireless and wireline services as substitutes, but most treat them as complementary  
6 products.

7 More than half of all households still do not have a mobile phone. Of those  
8 households that do subscribe to a wireless services, the vast majority have less than one  
9 cell phone per household member. Thus, it is not surprising that an extremely high  
10 percentage of all households still depend upon their land line for most of their phone  
11 calls. A small minority of all households have replaced traditional wireline service with  
12 wireless service, but that does not demonstrate these two services are functionally  
13 equivalent. To the contrary, the lack of more widespread substitution strongly suggests  
14 that they are not good substitutes, because they differ in so many important ways.

15 The significance of these differences varies from attribute to attribute, and from  
16 customer to customer. Clearly, for most customers these wireless and wireline services  
17 are no more functionally equivalent than apples and oranges, peanut butter and jelly, or  
18 pickup trucks and sports cars. Many customers could survive without one or the other of  
19 these alternatives, but that doesn't mean they are functionally equivalent, or that one  
20 effectively competes with the other.

21 Due to functional differences, competition in the wireless market doesn't  
22 necessarily spill over to the wireline market—any more than airline competition spills over  
23 to the market for swimming pool contractors. If the Commission were to grant Qwest's

1 request in this proceeding, most customers would be placed at the mercy of Qwest's  
2 monopoly power, forced to pay whatever rates it elects to impose. Some customers might  
3 abandon their land lines in protest, or due to budget constraints, but that would be true  
4 even if wireless service did not exist. At this early stage in the evolution towards a more  
5 competitive market, the Commission continues to have an important role in protecting  
6 captive customers from monopoly power.

7  
8 **Q. Would your opinion change if the evidence showed that more and more customers**  
9 **were dropping their land lines in favor of wireless services?**

10 A. Not necessarily. Even if the majority of customers were willing to “cut the cord”, that  
11 wouldn't necessarily confirm that these services are functionally equivalent—any more  
12 than an increase in the popularity of pickup trucks proves they are now equivalent to cars.  
13 To the extent functional differences remain between these two services, and a substantial  
14 number of customers would not freely abandon their wire line service because they  
15 perceive it to be redundant to their wireless service, Qwest will continue to have  
16 substantial monopoly power in this market segment, and it would not be subject to  
17 effective competition due to wireless offerings. When evaluating Qwest's application, the  
18 Commission must consider the interests of all customers, not just those for whom  
19 functional differences are not important. Rather than focusing on those customers who  
20 would rather own a pickup truck than a car, one must also consider the extent to which  
21 functional differences exist that are important to a significant fraction of the overall  
22 market.

23

1 **Q. Why should the Commission be concerned about those customers who do not**  
2 **consider the services to be equivalent?**

3 A. Even if this segment of the market were to dwindle in size (e.g. due to changing  
4 perceptions or improving technology), it will remain important because Qwest will retain  
5 monopoly power over these customers, for whom functional differences are significant.  
6 This segment of the market will be unable or unwilling to abandon their land line, and  
7 therefore Qwest will be able to charge higher rates, extracting monopoly profits from this  
8 market segment.

9

10 **Q. Has Qwest indicated whether it intends to raise any rates if its application is**  
11 **granted?**

12 A. Qwest has conceded this is a possibility. Qwest witness Souba explains that the Company  
13 is seeking the same pricing freedom for local services that it gained for other services in  
14 1989 [Souba Direct Testimony, pp. 10-12] Mr. Souba explains that after services were  
15 deregulated in 1989, access and long distance prices were lowered. However, “[p]rices  
16 for other services, including line features and certain data transport services, were  
17 increased over time to meet competitive offerings or to help cover their provisioning  
18 costs. [Id., p. 11] When asked whether local exchange prices could increase if it were  
19 giving pricing freedom, Mr. Souba states:

20

21 Yes, of course that is possible. Certainly in an open market, prices move  
22 up or down depending on a variety of factors. As I stated before, and as  
23 supported by Dr. Lincoln, I believe wireless competition limits the amount  
24 Qwest could raise its prices without risking significant loss of customers.  
25 It is equally possible that some prices may be decreased in order to

1                    respond to competitive market forces. [Souba Direct Testimony, pp. 19-  
2                    20]  
3

4                    Mr. Souba further states:  
5

6                    The current competitive environment will not allow Qwest to charge  
7                    "excessive" rates for local exchange services without a significant risk of  
8                    losing large numbers of customers to wireless providers. [Souba Direct  
9                    Testimony, p. 17]  
10

11                    **Q. Do you agree that wireless competition will prevent Qwest from charging**  
12                    **"excessive" rates?**

13                    A. No. Admittedly, some customers may react in the manner Mr. Souba suggests—those who  
14                    are indifferent to the functional differences between these two services. For instance,  
15                    some aren't particularly concerned about sound quality and reliability, they don't send or  
16                    receive large amounts of data or faxes, they don't care about access to E911 services and  
17                    they don't want or need to have multiple family members share the same phone line. For  
18                    these customers, the obvious response to an increase in basic exchange rates would be to  
19                    abandon their land line and rely exclusively on wireless service. For most other  
20                    customers, wireless service doesn't provide much relief from Qwest's monopoly power.  
21  
22  
23

24                    **Q. Hasn't Qwest provided data which shows that customers are using wireless phones**  
25                    **for calls that would otherwise be carried over a wireline network?**

26                    A. Qwest witness Shooshan cites an FCC Report for the assertion that

