

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

THE CENTRUYLINK COMPANIES - QWEST CORPORATION; CENTURYTEL OF
WASHINGTON; CENTURYTEL OF INTERISLAND; CENTURYTEL OF
COWICHE; AND UNITED TELEPHONE COMPANY OF THE NORTHWEST

Respondent.

DOCKET UT-240029

**CROSS-EXAMINATION EXHIBIT OF DR. DENNIS L. WEISMAN
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT DLW-__X

Direct Testimony of Dr. Dennis L. Weisman Exh. DLW-1T, *WUTC v. CenturyLink*,
Docket UT-240029 (filed Feb. 16, 2024).

July 15, 2024

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of

THE CENTURYLINK COMPANIES – QWEST
CORPORATION; CENTURYTEL OF WASHINGTON;
CENTURYTEL OF INTERISLAND; CENTURYTEL
OF COWICHE; AND UNITED TELEPHONE
COMPANY OF THE NORTHWEST

To be Competitively Classified Pursuant to RCW
80.36.320

DOCKET NO.: UT-240029

DIRECT TESTIMONY
OF
DR. DENNIS L. WEISMAN
ON BEHALF OF
CENTURYLINK
February 16, 2024

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. OBJECTIVES OF ECONOMIC REGULATION.....	3
III. DEFINITIONS OF “EFFECTIVE COMPETITION” AND “SUBSTANTIAL CAPTIVE CUSTOMER BASE”	8
IV. THE SIGNIFICANCE OF REGULATORY CONTESTABILITY.....	18
V. SUMMARY AND CONCLUSION	19

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND CURRENT POSITION.

A. My name is Dennis L. Weisman. I am Professor *Emeritus* of Economics at Kansas State University. My business address is P.O. Box 1646, Eagle, Colorado 81631, USA.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the CenturyLink ILECs.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I received a B.A. in economics and mathematics from the University of Colorado, an M.A. in economics from the University of Colorado, and a Ph.D. in economics with a specialization in industrial organization and economic regulation from the University of Florida. I have testified in numerous regulatory proceedings to the economic and social impacts of regulatory policies and have served as an advisor to telecommunications firms, electric power companies and regulatory commissions on economic pricing principles, the design of incentive regulation plans and competition policy.

My primary research interests are in industrial organization, economic regulation and applied microeconomics. I have authored or co-authored more than one-hundred fifty articles, books and book chapters. My research has appeared in the *Antitrust Bulletin*, *Economics Letters*, the *Journal of Regulatory Economics*, the *Review of Industrial Organization*, the *Yale Journal on Regulation*, the *Southern Economic Journal*, the *Journal of Policy Analysis and Management*, the *Journal of Competition Law and Economics* and

1 the *Federal Communications Law Journal*. My research has also been cited by the U.S.
2 Supreme Court,¹ and the United States Court of Appeals for the District of Columbia.² I am
3 the co-author of DESIGNING INCENTIVE REGULATION FOR THE TELECOMMUNICATIONS
4 INDUSTRY, published by the MIT press and the AEI press in 1996, and the
5 TELECOMMUNICATIONS ACT OF 1996: THE “COSTS” OF MANAGED COMPETITION, published
6 by Kluwer in 2000. I am also the author of PRINCIPLES OF REGULATION AND COMPETITION
7 POLICY FOR THE TELECOMMUNICATIONS INDUSTRY – A GUIDE FOR POLICYMAKERS, which
8 was published by the Center for Applied Economics in the College of Business at the
9 University of Kansas in 2006. I am currently ranked in the top 10% of authors in terms of
10 the number of manuscript downloads on the Social Science Research Network (SSRN).

11 I currently serve on the editorial boards of the *Journal of Regulatory Economics* and
12 *Information Economics and Policy*. I previously served as an editor for the *Review of*
13 *Network Economics*. In 2003, I served as a guest editor for a special issue of the *Review of*
14 *Network Economics* on incentive regulation. I am currently a co-editor for a special issue of
15 the *Review of Industrial Organization* on incentive (performance-based) regulation.

16 Prior to my academic career, I served as Director – Strategic Marketing for Southwestern
17 Bell (“SBC,” now AT&T). In this position, I supervised a team of economists and business
18 strategists that provided economic consulting to SBC’s subsidiaries.

19 A complete description of my academic and professional background is provided in my
20 curriculum vitae in Exhibit DLW-2.

¹ *Verizon Communications Inc. v. FCC*, 535 U.S. 467 (2002).

² *Comcast Cable Communications, LLC v. FCC et. al.*, 717 F.3d 982(D.C. Cir. 2013).

1 **Q. HAVE YOU TESTIFIED BEFORE STATE REGULATORY COMMISSIONS?**

2 A. Yes. I have presented testimony before commissions in Arkansas, California, Colorado,
3 Florida, Kansas, Missouri, Oklahoma and Texas. I have also submitted testimony or filed
4 affidavits with the Federal Communications Commission, the Canadian Radio-Television
5 and Telecommunications Commission (CRTC), the Alberta Utilities Commission, the
6 British Columbia Utilities Commission, the Kansas State Legislature and the United States
7 Court of Appeals for the District of Columbia.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. The purpose of my testimony is to discuss, from an economic perspective, the meaning of
10 the terms “effective competition” (also referred to as “workable competition”) and
11 “substantial captive customer base.” I likewise discuss my conclusion that the
12 CenturyLink ILECs are subject to effective competition in the Washington voice market.
13 CenturyLink’s petition, and the competition study Mr. Gose attaches and supports,
14 provides a comprehensive and granular examination of the extent of intramodal and
15 especially intermodal competition in Washington. The state of competition in the market
16 is such that no objective, fact-based analysis could reasonably conclude that economic
17 regulation is still warranted in these markets.

18 **II. OBJECTIVES OF ECONOMIC REGULATION**

19 **Q. WHAT IS THE PRIMARY OBJECTIVE OF ECONOMIC REGULATION?**

20 A. Economic regulation is a substitute for competition when market forces are deemed
21 insufficient to provide the requisite market discipline. Professor Alfred Kahn observes that

1 “the single most widely accepted rule for the governance of the regulated industries is
2 regulate them in such a way as to produce the same results as would be produced by
3 effective competition, if it were feasible.”³ Similarly, Professor James Bonbright observes
4 that “Regulation, then, as I conceive it, is indeed a substitute for competition; and it is even
5 a partly imitative substitute.”⁴

6 **Q. DOES THIS MEAN THAT A LACK OF EFFECTIVE COMPETITION JUSTIFIES**
7 **CONTINUED ECONOMIC REGULATION?**

8 A. No. Just as the absence of effective competition can result in market distortions (e.g., prices
9 higher than competitive levels), so too can economic regulation. In the absence of
10 significant barriers to entry, prices higher than competitive levels can be expected to attract
11 new entrants. Under these conditions, market distortions are presumptively self-correcting
12 and economic regulation would not be necessary. The appropriate comparison for purposes
13 of crafting sound public policy is not between perfect competition and perfect economic
14 regulation, but rather between imperfect competition and imperfect (and sometimes highly
15 imperfect) economic regulation.⁵

³ Alfred E. Kahn, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS*, Vol. I, New York: John Wiley and Sons 1970, p. 17.

⁴ James C. Bonbright, *PRINCIPLES OF PUBLIC UTILITY RATES*, New York: Columbia University Press 1961, p. 107.

⁵ Professor Kahn argues that “wherever even quite imperfect competition is feasible, it is superior to command-and-control regulation.” He further contends that where regulation continues to be necessary, “it should, to the greatest extent possible, be designed in such a way as to be compatible with competition rather than obstructive of it.” Alfred E. Kahn, *Deregulation: Looking Backward and Looking Forward*, *Yale Journal on Regulation*, Vol. 7, 1990, p. 340.

1 **Q. HOW DO REGULATORY ECONOMISTS GENERALLY VIEW ECONOMIC**
2 **REGULATION WHEN EFFECTIVE COMPETITIVE EXISTS?**

3 A. In my opinion, regulatory control should defer to competition when competition is
4 sufficient to protect consumers, and my opinion is shared by former FCC Chief Economist,
5 Professor David Sappington, who has observed that “It is generally preferable to replace
6 regulatory control with the discipline of competition when competition provides adequate
7 protection for consumers.”⁶ In response to the question of “whether continued ex ante
8 regulation will improve the functioning of the market compared to what would result under
9 market-based competition” in the U.S. telecommunications industry, Former FCC Chief
10 Economist, Professor Howard Shelanski, responded “For the most part, the evidence shows
11 that the answer is no.”⁷ It is important to note that Professor Shelanski arrived at this
12 conclusion almost two decades ago and competition in telecommunications markets has
13 increased significantly over this time period.

14 **Q. HOW DOES THIS DIFFER FROM YOUR UNDERSTANDING OF THE**
15 **COMMISSION’S STANDARD FOR “EFFECTIVE COMPETITION”?**

16 A. I understand this Commission is bound by statute to rely upon the “effective competition”
17 standard in determining whether to grant CenturyLink’s Petition for Competitive
18 Classification. I understand “effective competition” to mean that customers of the service
19 have reasonably available alternatives, and the service is not provided to a significant
20 captive customer base.

⁶ David E. M. Sappington, “Price Regulation,” HANDBOOK OF TELECOMMUNICATIONS ECONOMICS, ed. by Martin Cave, Sumit Majumdar, and Ingo Vogelsang, Amsterdam: North-Holland, 2002, Chapter 7, p. 265, note 58.

⁷ Howard A. Shelanski, “Adjusting Regulation to Competition: Toward A New Model for U.S. Telecommunications Policy,” Vol. 24, *Yale Journal on Regulation*, 2007, p. 77 (“To make this argument it is not necessary that the telecommunications market be so competitive that it will perform according to some idealized, textbook model of perfect competition.”).

1 **Q. ARE YOU SUGGESTING WITH THIS DISCUSSION THAT THE COMMISSION**
2 **SHOULD RELY UPON A STANDARD DIFFERENT FROM “EFFECTIVE**
3 **COMPETITION” IN DECIDING THAT ECONOMIC REGULATION IS NO**
4 **LONGER WARRANTED?**

5 A. No. I believe the standard this Commission should rely on in deciding whether economic
6 regulation continues to be justified would recognize that there are costs associated with
7 continued economic regulation as well as costs associated with granting competitive
8 classification when the market is not effectively competitive. The policy question then
9 concerns which form of governance is expected to deliver the greatest benefit to
10 consumers.

11 Suppose, for example, that continued economic regulation yields consumer welfare of
12 \$100, while relying exclusively on market forces even though competition falls somewhat
13 short of the “effective competition” standard yields consumer welfare of \$200. Economists
14 would advocate for reliance on market forces in this case even though the “effective
15 competition” standard is not technically satisfied.

16 While the Commission is bound by statute to rely upon “effective competition,” if upon a
17 careful review of the evidence the Commission finds that “effective competition” is present
18 with high probability, I believe that deferring to the market (rather than economic
19 regulation) is likely to be in the public interest.

20 **Q. WHAT IS THE KEY POLICY MESSAGE TO DRAW FROM THIS DISCUSSION?**

21 A. The key point is understanding that retaining economic regulation “just in case” when the
22 weight of the evidence indicates with high probability that it is no longer required can harm

1 competition and consumers.⁸ This observation does not change the facts on the ground as
2 to whether “effective competition” is present, but neither should it be discounted in its
3 entirety when such determinations are subject to some degree of uncertainty (as discussed
4 below). In other words, the Commission should consider the potential costs to customers
5 from regulation and factor these considerations into its deliberations.

6 **Q. IS IT ALWAYS CLEAR WHEN ECONOMIC REGULATION SHOULD STAND**
7 **DOWN AS THE MARKET BECOMES INCREASINGLY COMPETITIVE?**

8 A. No, it is not, and this can pose certain challenges for regulators. There is a natural tension
9 between economic regulation and market forces as they are substitutes for one another and
10 therefore “compete” to impose market discipline. Indeed, as Professor (and former
11 regulator) Alfred Kahn has observed, there is “no rational half-way house between
12 thorough regulation and free competition.”⁹ Nonetheless, the public policy principle is
13 clear that as the intensity of competition increases, economic regulation should decrease
14 until competitive discipline (in the form of market forces) is the exclusive form of market
15 governance.

16 These tenets imply a continuum over which industries initially in need of
17 regulation (that is, natural monopoly providers of services essential to consumers
18 and/or competitors) are heavily regulated at first. Yet as competitive conditions
19 change (essentially the erosion of the natural monopoly conditions that called for
20 regulation), regulation itself must evolve in order for it to deliver the economic
21 benefits that competition, supplemented by regulation where necessary, can bring.
22 And that evolution entails both reducing the range of services still subject to
23 regulation and replacing particular regulatory mechanisms when they are no

⁸ See Dennis L. Weisman, PRINCIPLES OF REGULATION AND COMPETITION POLICY FOR THE TELECOMMUNICATIONS INDUSTRY - A Guide For Policymakers, The Center for Applied Economics, KU School of Business, Technical Report 06-0525, 2006, § 3.

⁹ Alfred E. Kahn, “The Uneasy Marriage of Regulation and Competition.” *Telematics*, Vol. 1, Number 5, 1984, p. 8.

1 longer effective. The end-state of this evolutionary continuum is full competition
2 with no regulation.¹⁰

3 **Q. IN YOUR OPINION, DOES CENTURYLINK’S PETITION FOR COMPETITIVE**
4 **CLASSIFICATION TAKE A MEASURED AND GRADUAL POSITION IN TERMS**
5 **OF COMPETITION AND REGULATION?**

6 A. Yes. I believe CenturyLink demonstrates an understanding of the above-referenced
7 measured approach to competitive classification. This is demonstrated by the voluntary
8 restrictions the companies are proposing to impose on their operations in the form of
9 multiple conditions, which I discuss in more detail later in my testimony.

10 **III. DEFINITIONS OF “EFFECTIVE COMPETITION” AND “SUBSTANTIAL**
11 **CAPTIVE CUSTOMER BASE”**

12 **Q. HAS THE WASHINGTON LEGISLATURE PROVIDED THE COMMISSION**
13 **WITH DEFINITIONS OF THE TERMS “EFFECTIVE COMPETITION” AND**
14 **“SUBSTANTIAL CAPTIVE CUSTOMER BASE”?**

15 A. Yes and no. While I am not testifying as a legal expert in this proceeding, I understand that
16 RCW 80.36.320 provides a definition of the term “effective competition.”¹¹ “Effective
17 competition” is defined by the Legislature (in RCW 80.36.320(1)) as meaning “that the
18 company’s customers have reasonably available alternatives and that the company does not
19 have a significant captive customer base. In determining whether a company is
20 competitive, factors the commission shall consider include but are not limited to:

21 *(a) The number and sizes of alternative providers of service;*

¹⁰ Timothy J. Tardiff and William E. Taylor, “Aligning Price Regulation with Telecommunications Competition,”
Review of Network Economics, Vol. 2(4), December 2003, p. 345.

¹¹ I note that the Commission’s rules, specifically WAC 480-121-061(5), utilize the same definition of “effective
competition.”

- 1 **(b) The extent to which services are available from alternative providers in the**
2 **relevant market;**
- 3 **(c) The ability of alternative providers to make functionally equivalent or**
4 **substitute services readily available at competitive rates, terms, and conditions;**
5 **and**
- 6 **(d) Other indicators of market power which may include market share, growth in**
7 **market share, ease of entry, and the affiliation of providers of services.”**

8 The Legislature does not, however, specifically define the concept of “significant captive
9 customer base.”

10 **Q. DOES THE RCW 80.36.320(1) DEFINITION OF “EFFECTIVE COMPETITION”**
11 **COMPORT WITH THE MEANING OF THAT TERM IN THE ECONOMICS**
12 **LITERATURE?**

13 A. Generally speaking, yes it is consistent with the economic concept of “effective
14 competition” (or, “workable competition”). Economists may use different terminology, but
15 the statutory definition asks the Commission to take into account some critically important
16 factors in evaluating whether, in this case, CenturyLink is subject to effective competition,
17 or whether it has market power over a substantial number of its customers.

18 **Q. WHAT IS THE COMMONLY ACCEPTED DEFINITION OF MARKET POWER?**

19 A. Market power is generally defined as the ability to raise price profitably above competitive
20 levels for a non-transitory period of time.¹² In other words, any firm can raise prices above
21 competitive levels, but only a firm with market power can do so profitably. For example, in
22 deciding whether to approve a merger, the Department of Justice and the Federal Trade

¹² Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, 1992 [Inclusive of April 8, 1997 Revisions], § 0.1. (A firm possesses market power when it has “the ability profitably to maintain prices above competitive levels for more than a transitory period of time.”) <https://www.justice.gov/atr/2023-merger-guidelines>. See also W. Kip Viscusi, Joseph E. Harrington Jr., and David E. M. Sappington, *ECONOMICS OF REGULATION AND ANTITRUST*, Fifth Edition, Cambridge MA: The MIT Press, 2018, p. 90.

1 Commission seek to determine whether prices are likely to rise as a result of the merger –
2 whether the merger would permit the exercise of significant market power.

3 **Q. HOW DO ECONOMISTS DETERMINE WHETHER A MARKET IS SUBJECT TO**
4 **EFFECTIVE COMPETITION?**

5 A. Economists generally rely upon measures of market concentration, including market
6 shares, the number of competitors in the market and the capacity of those competitors.
7 Given the technologically dynamic nature of the telecommunications industry, it is also
8 instructive to examine how these metrics are changing over time. In general, when a firm
9 faces effective competition, it would be able to exercise little or no significant market
10 power. Whereas no single metric alone may be dispositive in determining whether market
11 power is present, each of these metrics may have probative value depending on the
12 particular application.

13 **Q. HOW DOES THIS CORRELATE WITH THE COMMISSION'S FACTORS FOR**
14 **DETERMINING EFFECTIVE COMPETITION IN RCW 80.36.320?**

15 A. The Commission should apply the economic policy described above as guidance to
16 complement its consideration of the factors the Commission must consider in RCW
17 80.36.320. The factors in RCW 80.36.320 provide a useful measure for determining
18 effective competition, but the economic policy considerations above provide additional
19 guidance that may assist the Commission in its deliberations.

1 **Q. ARE THERE LIMITATIONS TO MEASURES OF MARKET CONCENTRATION**
2 **THAT THE COMMISSION SHOULD BE COGNIZANT OF?**

3 A. Yes. As I indicated above, the various metrics commonly employed to draw inferences
4 about market power are probative, but none of them in isolation is necessarily dispositive.
5 Moreover, while sustained losses in market share are strongly suggestive of a lack of
6 market power, the converse does not necessarily hold true. Specifically, high market share
7 measures may not be indicative of market power, particularly in technologically dynamic
8 industries such as telecommunications. The FCC has previously opined on this issue.

9 We find that the presence and capacity of other firms matter more for future
10 competitive conditions than do current subscriber-based market shares. In
11 particular, current market shares understate the likely future competitive
12 importance of Verizon Wireless, Sprint, T-Mobile, and Nextel. These firms all
13 compete fiercely for customers; all are investing substantially in capacity and new
14 services in this sector; and Verizon Wireless, T-Mobile, and Nextel have been
15 gaining nationwide market share over recent quarters (underlining added).^{13, 14}

16 **Q. HOW DO ECONOMISTS DETERMINE WHETHER A MARKET PARTICIPANT**
17 **HAS A SUBSTANTIAL CAPTIVE CUSTOMER BASE?**

18 A. Economists would typically seek to determine the proportion of customers in the market
19 that have no alternatives or relatively few alternatives to CenturyLink for voice telephony.
20 This metric is naturally of considerable importance to the Commission because customers
21 with limited options may not be able to partake in the myriad benefits of “effective
22 competition.” Nonetheless, as I discuss in more detail below, even those customers are
23 likely to realize the benefits of “effective competition” in light of the self-imposed

¹³ FCC, In the Matter of Applications of AT&T Wireless, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, etc., WT Docket Nos. 04-70, 04-254, and 04-323, *Memorandum Opinion and Order*, October 26, 2004, ¶ 148.

¹⁴ See also Dennis L. Weisman, “A ‘Principled’ Approach to the Design of Telecommunications Policy,” *Journal of Competition Law & Economics*, Vol. 6(4), December 2010, pp. 927-956.

1 constraint that CenturyLink has proposed to continue in the form of no additional price de-
2 averaging.

3 **Q. SHOULD A RELATIVELY SMALL NUMBER OF CUSTOMERS WITH LIMITED**
4 **OPTIONS PRECLUDE THE COMMISSION FROM FINDING THAT THE**
5 **CENTURYLINK ILECS ARE SUBJECT TO EFFECTIVE COMPETITION?**

6 A. No. While I am not testifying as a legal expert, I note that the statute inquires about the
7 existence of a “substantial” captive customer base. My understanding is that CenturyLink
8 has very few, if any, captive customers in Washington. CenturyLink’s petition identifies
9 approximately 800 “protected customers,” a class of customer CenturyLink identified for
10 purposes of this proceeding. It includes customers who have access to both CenturyLink
11 copper-based service and commercial satellite service. Hence, I do not believe it is
12 appropriate to characterize those customers as “captive” per se.

13 It is my understanding that CenturyLink has agreed not to engage in any additional price
14 de-averaging. This is significant, in my view, because it means that CenturyLink does not
15 intend to identify those customers that have limited competitive options and target them for
16 price increases. As a result, the same competitive pressures that serve to discipline
17 CenturyLink’s prices in Seattle, Spokane and Tacoma will serve to protect those relatively
18 few customers with limited competitive alternatives. In other words, these customers are de
19 facto beneficiaries of “effective competition” even though their current competitive
20 alternatives are more limited.

1 **Q. DO THE COMPETITORS’ AND CENTURYLINK’S SERVICE OFFERINGS**
2 **NEED TO BE PERFECT SUBSTITUTES FOR THERE TO BE “EFFECTIVE**
3 **COMPETITION”?**

4 A. No. Outside the textbook model of perfect competition, no two or more products or
5 services are likely to be perfect substitutes for one another. Nonetheless, real world markets
6 thrive with relatively few services subject to economic regulation. In other words,
7 “effective competition” is present for the vast majority of goods and services in the
8 economy despite the fact that no real-world market is likely to satisfy the textbook
9 definition of “perfect competition.” For example, the Honda Accord, the Nissan Altima and
10 the Toyota Camry are considered substitutes for one another despite the fact that they differ
11 in terms of pricing, styling, features, performance, functionality, etc. Even though
12 automobiles may be considered an essential form of transportation, I am not aware of any
13 credible claim that this market is characterized by an absence of “effective competition”
14 that would warrant economic regulation.

15 **Q. HAS THIS ISSUE BEEN EXAMINED IN THE SPECIFIC CASE OF**
16 **TELECOMMUNICATIONS SERVICES?**

17 A. Yes. MIT Professor Jerry Hausman has observed that “Because competition takes place at
18 the margin, only a small proportion of the ILEC’s customers need to defect to defeat its
19 attempted price increase.”¹⁵ Professor Hausman contemplates a hypothetical 5% price
20 increase by the ILEC and poses the following question: What reduction in the quantity
21 demanded of the service would the ILEC have to experience for this price increase to be
22 self-defeating in the sense that it would decrease rather than increase earnings? In the

¹⁵ Jerry A. Hausman., “Regulated Costs and Prices in Telecommunications,” in Gary Madden (ed.), International Handbook of Telecommunications Economics, Vol. 2: Emerging Telecommunications Networks, 2003, p. 226.

1 simple example provided by Professor Hausman, only 6% of customers would need to
2 defect in order to discourage the ILEC from this contemplated price increase.¹⁶ This critical
3 value of 6% contrasts sharply with the model of perfect competition in which any price
4 increase above the market level, no matter how small, would result in complete (100%)
5 defection of customers.¹⁷ This necessarily implies that a little competition can go a long
6 way in constraining ILEC price behavior given the cost and demand conditions that prevail
7 for these providers.¹⁸ CenturyLink obviously faces a great deal more than a “little
8 competition” in the vast majority of its operating territory.

¹⁶ In the more realistic case in which the ILEC sells services that are complementary to voice service (e.g., broadband, long-distance, vertical services, etc.), the critical value can be markedly less than 6%. This is the case because a CenturyLink customer that discontinues voice service due to a price increase is very likely to discontinue the other (complementary) services that it purchases from the company. In general, the stronger these cross-elastic effects and the higher the price-cost margins, the smaller the critical value of the demand reduction required to defeat a price increase. See, for example, Dennis L. Weisman, “When Can Regulation Defer to Competition for Constraining Market Power?: Complements and Critical Elasticities.” *Journal of Competition Law & Economics*, Vol. 2(1), March 2006, pp. 1-12.

¹⁷ In a classic treatise, the eminent economist Joseph Schumpeter was emphatic that the model of perfect competition should not inform the practice of economic regulation. Joseph A. Schumpeter, *CAPITALISM, SOCIALISM AND DEMOCRACY*, New York: Harper & Brothers, 1942, p. 106.

In this respect, perfect competition is not only impossible but inferior, and has no title to being set up as a model of ideal efficiency. It is hence a mistake to base the theory of government regulation of industry on the principle that big business should be made to work as the respective industry would work in perfect competition.

¹⁸ As Mitchell and Vogelsang observe:

In telecommunications networks, production facilities have well-determined capacities, and the costs of operation are nearly independent of the flow of services through those facilities Consequently, . . . variable costs are very small.

Bridger M. Mitchell and Ingo Vogelsang, *TELECOMMUNICATIONS PRICING: THEORY AND EVIDENCE*, New York: Cambridge University Press, 1991, p. 9. For wireline telecommunications, the vast majority of costs are incurred in providing for the option of use rather than actual use. This implies that the ratio of price to avoidable cost at the time of sale is large. As a result, even modest reductions in demand can lead to sizable reductions in net revenue for the ILEC.

1 **Q. DOES THIS DISCUSSION HAVE IMPLICATIONS FOR THE MERITS OF**
2 **CENTURYLINK’S PETITION FOR COMPETITIVE CLASSIFICATION IN THIS**
3 **PROCEEDING?**

4 A. Yes. The rates, terms of services, features, functionality, ergonomics and general customer
5 experience do not have to be identical (or even reasonably close to identical) for customers
6 to have viable competitive alternative to CenturyLink’s voice service offerings. A
7 relatively small proportion of customers willing to vote with their feet and substitute other
8 service providers should CenturyLink attempt to raise prices above market levels is
9 sufficient to render the contemplated price increase unprofitable.

10 What is more, as any knowledgeable marketing manager in the telecommunications
11 industry can attest, it is several times more costly to induce a customer to return than it is to
12 retain that customer. It is well established that customer “churn” is extremely costly for
13 businesses which explains why they are continually searching for innovative strategies to
14 reduce it.

15 **Q. DID YOU HAVE AN OPPORTUNITY TO REVIEW CENTURYLINK’S PETITION**
16 **FOR COMPETITIVE CLASSIFICATION INITIATING THIS PROCEEDING?**

17 A. Yes, I did.

1 **Q. IN YOUR OPINION, DOES THE WEIGHT OF THE EVIDENCE CONTAINED IN**
2 **THAT PETITION INDICATE THAT THE CENTURYLINK ILECS ARE**
3 **SUBJECT TO EFFECTIVE COMPETITION IN THE MARKET FOR RETAIL**
4 **VOICE SERVICES IN THEIR WASHINGTON SERVICE TERRITORIES?**

5 A. Yes. While I have not performed independent quantitative analyses, and will rely on Mr.
6 Gose to support the contents of the competition study that underlies the petition, the
7 petition provides a comprehensive and granular examination of the extent of intramodal
8 and especially intermodal competition in Washington. The depth and breadth of
9 CenturyLink’s rivals presents a compelling case for granting the company’s petition for
10 competitive classification. As a result of the competitive pressures from myriad entrants in
11 Washington’s telecommunications ecosystem, CenturyLink has experienced dramatic and
12 consistent access line loss over the past two decades, while other providers (especially
13 those utilizing other technologies) have expanded their footprints across all of
14 CenturyLink’s Washington wire centers. This is a strong indication of the absence of
15 barriers to entry. I believe that CenturyLink satisfies both the statutory and economic
16 definition of “effective competition” and that CenturyLink does not have a substantial
17 captive customer base in its Washington service territories. In other words, the state of
18 competition in the market is such that no objective, fact-based analysis could reasonably
19 conclude that economic regulation is still warranted in these markets. Importantly,
20 however, retaining economic regulation – or in this case, *reimposing economic regulation*
21 given that CenturyLink has been under alternative forms of regulation (“AFORs”) for
22 many years – under these market conditions has the potential to harm consumers.

1 **Q. IS IT SIGNIFICANT THAT CENTURYLINK’S WHOLESALE OBLIGATIONS**
2 **UNDER THE 1996 TELECOMMUNICATIONS ACT REMAIN IN PLACE**¹⁹
3 **SHOULD THE PETITION FOR COMPETITIVE CLASSIFICATION BE**
4 **APPROVED?**

5 A. Yes. In fact, at least two prominent regulatory economists (including a former FCC Chief
6 economist and the former chair of the New York Public Service Commission) contend that
7 wholesale regulation of the type required under the 1996 Telecommunications Act is
8 sufficient for deregulation of retail rates.²⁰ This means that deregulation (competitive
9 classification) of retail rates may be warranted even if there were no intermodal
10 competition whatsoever. That is obviously not the case in Washington, as established in
11 CenturyLink’s petition and Mr. Gose’s direct testimony.

12 **Q. SHOULD ANY OTHER CONSIDERATION INFORM THE COMMISSION’S**
13 **DELIBERATIONS?**

14 A. Yes. The Commission should recognize the significance of *regulatory contestability* in
15 further disciplining CenturyLink’s behavior. I turn to this concept in the next section.

¹⁹ Petition for Competitive Classification ¶ 46.

²⁰ Joseph Farrell, Chief Economist, Federal Communications Commission. “Prospects for Deregulation in Telecommunications,” FCC Washington D.C. May 9, 1997. [May 9, 1997 Speech by Joseph Farrell, Chief Economist, FCC](#); and Alfred E. Kahn, LETTING GO: DEREGULATING THE PROCESS OF DEREGULATION, Michigan State University Institute of Public Utilities: East Lansing, 1998, pp. 56-58. (“What has yet to be generally remarked is that in telecommunications the obligations imposed on the ILECs by the Telecommunications Act and complementary state policies have come as close as conceivable to making the provision of telephone services *at retail* perfectly contestable *and therefore regulation of the retail rates simply unnecessary*”(p. 56)).

1 **IV. THE SIGNIFICANCE OF REGULATORY CONTESTABILITY**

2 **Q. WOULD A COMMISSION DETERMINATION IN THIS PROCEEDING THAT**
3 **CENTURYLINK IS SUBJECT TO EFFECTIVE COMPETITION BE**
4 **PERMANENT IN NATURE?**

5 A. Yes and no. It would be “permanent” in the sense that unlike CenturyLink’s existing AFOR
6 it would not be subject to a stipulated expiration date.²¹ It would, however, not be
7 permanent in the sense that the Commission retains the authority to reverse course should it
8 find credible cause to do so. This is significant in my view because it means that
9 CenturyLink is subject to what I refer to as *regulatory contestability*.

10 **Q. ARE YOU ABLE TO ELABORATE ON THE ROLE THAT REGULATORY**
11 **CONTESTABILITY PLAYS IN DISCIPLINING CENTURYLINK’S BEHAVIOR?**

12 A. Yes. It is important to emphasize that unlike the approval of a merger, the competitive
13 classification that CenturyLink seeks in this proceeding is a revocable regulatory act.
14 Suppose for the sake of argument that CenturyLink retains a degree of residual market
15 power *pro tempore* even though it has been granted competitive classification. It would not
16 necessarily constitute a rational (profit-maximizing) strategy on the part of CenturyLink to
17 fully leverage this residual market power because doing so runs the risk that the

²¹ Petition for Competitive Classification, note 2.

1 competitive classification would be rescinded.²² This is what is meant by the term
2 *regulatory contestability* – the mere threat of re-regulation imposes market discipline.²³

3 This implies that CenturyLink is subject to both competitive discipline from market forces
4 and (continued) regulatory discipline from the prospect of re-regulation.²⁴ It may be
5 instructive to conceive of the Commission granting CenturyLink’s petition for competitive
6 classification as removing *ex ante* regulation, but retaining a form of *ex post* regulation.

7 **V. SUMMARY AND CONCLUSION**

8 **Q. CAN YOU BRIEFLY SUMMARIZE THE KEY POLICY MESSAGES THAT YOU**
9 **WOULD LIKE THE COMMISSION TO DRAW FROM YOUR TESTIMONY?**

10 A. Yes. First, I believe that the granular competitive analysis that Mr. Gose has provided
11 presents a compelling case that voice services in CenturyLink’s operating territory are
12 subject to effective competition, and that CenturyLink has few, if any, captive customers in
13 Washington. Based on this analysis, I believe the risk that CenturyLink could exercise

²² CenturyLink also risks reputational harm in the sense that it would suffer a loss of credibility with the Commission. This is not *Ivory Tower theorizing* on my part. In the 1980s and early 1990s, I was employed as an economist with SBC. The company had developed over a period of time that pre-dated my employment a rather “frosty” relationship with two state regulatory commissions. This trust-challenged relationship was not short-lived, nor were the financial consequences to the firm inconsequential. In fact, there was a general sense that this problematic relationship adversely affected virtually every order issued by these commissions pertaining to the company. A significant amount of managerial time and effort was devoted to improving relations between the company and these regulators but, at least from my vantage point, with limited success. Having worked in the regulatory arena for virtually my entire professional career, I have come to appreciate that maintaining a trustworthy relationship with regulators is far less costly than rebuilding any such trust that has been lost. I believe that most companies subject to economic regulation understand this reality and work diligently, albeit not always successfully, to avoid falling into the “abyss” from which extrication can be difficult, costly and exceedingly long in duration.

²³ See Amihai Glazer and Henry McMillan, “Pricing by the Firm under Regulatory Threat,” *The Quarterly Journal of Economics*, Vol. 107(3), 1992, pp. 1089-1099. It is noteworthy that the authors observe that “Firms may alter their product prices more in response to changes in the perceived probability or strictness of regulation than to the actual implementation of regulation” (p. 1096).

²⁴ Howard A. Shelanski, “Adjusting Regulation to Competition: Toward A New Model for U.S. Telecommunications Policy,” *Yale Journal on Regulation*, Vol. 24, 2007, pp. 55-105.

1 significant market power is *de minimis*. Second, even customers with limited competitive
2 alternatives are still the beneficiaries of “effective competition” as a result of
3 CenturyLink’s commitment not to engage in any additional de-averaging of prices. Third,
4 the determination that CenturyLink’s voice services are effectively competitive is not
5 irreversible. The threat of future regulatory intervention (what I have referred to as
6 *regulatory contestability*) can be expected to exert additional discipline on CenturyLink’s
7 behavior in the market for voice telephony. For these reasons, I believe the Commission
8 can be confident that a finding that CenturyLink’s voice services are subject to effective
9 competition is in the public interest.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 A. Yes.

12

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