

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Switching in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 01-02-024
(Filed February 21, 2001)

Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Loops in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 01-02-035
(Filed February 28, 2001)

Application of The Telephone Connection Local Services, LLC (U 5522 C) for the Commission to Reexamine the Recurring Costs and Prices of the DS-3 Entrance Facility Without Equipment in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-031
(Filed February 28, 2002)

Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Interoffice Transmission Facilities and Signaling Networks and Call-Related Databases in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-032
(Filed February 28, 2002)

Application of Pacific Bell Telephone Company (U 1001 C) for the Commission to Reexamine the

Costs and Prices of the Expanded Interconnection Service Cross-Connect Network Element in the Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-034
(Filed February 28, 2002)

Application of XO California, Inc. (U 5553 C) for the Commission to Reexamine the Recurring Costs of DS1 and DS3 Unbundled Network Element Loops in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-03-002
(Filed March 1, 2002)

**ADMINISTRATIVE LAW JUDGE'S RULING
ON JOINT APPLICANTS' AND SBC PACIFIC'S MOTIONS TO STRIKE**

This ruling addresses several motions to strike filed by AT&T Communications of California (AT&T), WorldCom, Inc. (Worldcom) (collectively, "Joint Applicants"), and Pacific Bell Telephone Company (SBC Pacific or SBC) with regard to opening, reply, and rebuttal declarations in this proceeding. The motions addressed in this ruling are:

1. Joint Applicants' Motion to Strike Portions of the October 18, 2002 Declaration of Dr. Debra J. Aron (filed 2/7/03) (Aron Motion)
2. Joint Applicants' Motion to Strike Certain Portions of the Declarations of Cheryl M. Bash and Ian McNeill (filed 4/10/03) (Bash/McNeill Motion)
3. Joint Applicants' Motion to Strike the Rebuttal Declaration of Donald G. Palmer Jr., the declarations of Jay M. Bishop, and certain portions of the declarations of Gary Mandella (filed 4/11/03) (Palmer/Bishop/Mandella Motion)
4. SBC Pacific's Motion to Strike Limited Portions of Mr. Landis' Declaration (filed 4/11/03) (Landis Motion)

Each of these motions is discussed in turn below.

ARON MOTION

Joint Applicants request an order striking portions of the October 18, Declaration of Dr. Debra Aron on behalf of SBC Pacific, particularly those portions involving an analysis of SBC Pacific's costs that Dr. Aron admits is not intended to reflect total element long run incremental (TELRIC) costs.¹ Joint Applicants explain that the Telecommunications Act of 1996 (the Act) and the FCC regulations implementing the Act require the Commission to establish rates for UNEs based on TELRIC. In contrast, Dr. Aron's declaration contains an analysis focused not on TELRIC, but on SBC Pacific's historic 2001 costs in an attempt to demonstrate that SBC Pacific's current UNE prices are below the costs actually incurred by SBC Pacific to provision UNEs. Dr. Aron also cites a number of investment bank studies to support her argument. Joint Applicants contend that most of Dr. Aron's arguments have already been addressed by the Supreme Court in *Verizon Communications Inc. v. FCC*, wherein the Court upheld the FCC's TELRIC standard for UNE ratesetting. (*Verizon*, 122 S. Ct. 1646, at 1679 (2002).) In *Verizon*, the Court expressly rejected alternatives to TELRIC, such as pricing based on historical or embedded costs methodologies, stating that:

As for an embedded-cost methodology, the problem with a method that relies in any part on historical cost, the cost the incumbents say they actually incur in leasing network elements, is that it will pass on to the lessees the difference between most-efficient cost and embedded cost. [Footnote and citation omitted]. Any such cost difference is an inefficiency, whether caused by poor management resulting in higher operating costs or poor investment strategies that have inflated capital and depreciation. If leased elements were priced according to embedded costs, the incumbents could pass these inefficiencies to competitors in need of

¹ The FCC has defined TELRIC as "the forward looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, such element, calculated taking as a given the incumbent [local exchange carrier's] provision of other elements." 47 CFR 51.505(b). Dr. Aron's declaration states on p. 12 that her analysis "is not intended to reflect TELRIC based costs...."

their wholesale elements, and to that extent defeat the competitive purpose of forcing efficient choices on all carriers whether incumbents or entrants. The upshot would be higher retail prices consumers would have to pay. [Citation omitted.]

There are, of course, objections other than inefficiency to any method of rate making that relies on embedded costs as allegedly reflected in incumbents' book-cost data, with the possibilities for manipulation this presents. Even if incumbents have built and are operating leased elements at economically efficient costs, the temptation would remain to overstate book costs to rate making commissions and so perpetuate the intractable problems that led to the price-cap innovation. [Citation omitted] (*Verizon* at 1673).

Based on this citation and others, Joint Applicants maintain that several portions of Dr. Aron's declaration should be stricken because there is no question that TELRIC is the standard that the Commission must follow and Dr. Aron's declaration involves an embedded cost analysis that the FCC and Supreme Court have both rejected. Accordingly, they contend that any testimony, declarations or exhibits supporting a different method for establishing UNE prices is not relevant.

SBC Pacific responds that Joint Applicants have mischaracterized Dr. Aron's declaration because her central argument is not that TELRIC is the improper standard for setting UNE prices, but that SBC Pacific's current UNE prices reflect a *misapplication* of the TELRIC methodology. SBC Pacific states that Dr. Aron's declaration is directly relevant because she presents evidence that Joint Applicants proposed UNE prices represent a flawed application of TELRIC. According to SBC Pacific, Dr. Aron compares her estimates of SBC Pacific's current UNE costs to the interim UNE rates recently adopted and in place today. From this analysis, Dr. Aron concludes that current TELRIC rates are too low because they depart so dramatically from her estimates of SBC Pacific's current

costs. SBC Pacific states that SBC Pacific's "current costs can and should be used to judge the reasonableness of any proposed UNE cost estimates" and that Dr. Aron's analysis "serves as a necessary validation check on the allegedly TELRIC rates proposed in the instant proceeding." (SBC Pacific Response, 2/24/03, pps. 4-5.) Her analysis of actual costs is meant to demonstrate that TELRIC has been improperly applied to SBC Pacific. SBC Pacific contends that Dr. Aron's analysis is entirely reasonable because it analyzes whether SBC Pacific's costs of providing UNEs deviate significantly from UNE rates and it provides specific information to demonstrate that UNE rates may be confiscatory.

Joint Applicants' motion to strike portions of Dr. Aron's declaration is granted in part, and denied in part. First of all, I agree that Dr. Aron's analysis is not based on TELRIC and therefore outside the scope of this proceeding. While SBC Pacific defends her analysis as focusing on the "*application*" of TELRIC rather than the reasonableness of TELRIC, the undisputed fact is that Dr. Aron has engaged in an analysis of SBC Pacific's costs and revenues that does not involve a TELRIC analysis. She essentially estimates SBC Pacific's costs based on 2001 historical ARMIS data and these estimates are of little value because the scope of the case centers on estimates of forward-looking costs, not actual ones. Dr. Aron implies that historical ARMIS data equates to or is indicative of SBC's forward-looking costs without offering any explanation to justify this implication. She acknowledges that there are "differences between forward-looking and historical costs" and that "my computations are not meant to replicate the FCC's TELRIC based pricing methodology." (Aron Declaration, 10/18/02, p. 14.) Overall, it makes little difference what the purpose of her

analysis is if it uses a methodology, namely an analysis of embedded costs, that the FCC has told states not to use in setting UNE rates.²

While I agree with SBC Pacific that the level of its actual costs may be reasonable to consider within the context of setting UNE rates, I do not agree with the premise that *any* analysis involving actual costs is necessarily relevant to this proceeding. Actual costs might only be considered to the extent that they are found to be reasonable proxies for forward-looking costs. Dr. Aron's declaration contains an analysis performed at an aggregate level that makes assumptions from total historical company costs to derive costs of providing UNEs.³ Nowhere in her analysis does Dr. Aron suggest that her estimates of 2001 actual costs are reasonable proxies for forward-looking UNE costs. Dr. Aron concludes that current UNE prices are inadequate solely because they differ from SBC Pacific's actual 2001 costs without ever establishing a linkage between actual costs and forward-looking costs. For this reason alone, Dr. Aron's analysis should be stricken as outside the scope of the proceeding because the Commission must set UNE rates based on forward-looking rather than actual costs. Indeed, the record of this case is replete with SBC actual cost data that SBC proposes to use in its cost model in order to derive forward-looking UNE costs. While the Commission may want to consider using actual cost data as a proxy for forward-looking costs in the context of a cost-modeling exercise, it should

² See 47 C.F.R. 51.505 (d) which states, "The following factors shall not be considered in a calculation of the forward-looking economic cost of an element:

(1) Embedded costs. Embedded costs are the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's books of accounts;..."

³ For example, at p. 7 of her declaration, Dr. Aron explains that the ARMIS data she uses represents only the interstate allocation of regulated costs. Therefore, she makes assumptions about the allocation of inter- and intrastate costs to translate ARMIS interstate costs into total loop costs. In addition, she makes assumptions regarding depreciation expenses and costs that may be avoided when moving from retail to wholesale in order to derive her estimate of UNE costs.

only consider doing so after a reasonable justification has been supplied of why actual costs are the best proxy for forward-looking costs. Dr. Aron has not done this. Furthermore, it would not be prudent to rely on a manipulation of actual cost data outside of the cost modeling context to make conclusions about whether UNE prices are reasonable. Finally, the Commission cannot base conclusions about whether UNE rates are confiscatory on an embedded cost analysis, particularly when both the Supreme Court and FCC have cautioned that:

[C]ontrary to assertions by some [incumbents], regulation does not and should not guarantee full recovery of their embedded costs. Such a guarantee would exceed the assurances that [the FCC] or the states have provided in the past. (*Verizon* at 1681.)

Second, I agree that portions of Dr. Aron's declaration that involve analyses by investment analysts using financial information to make assumptions about UNE costs are not relevant to this proceeding. It is unclear how these investment analyses are indicative of SBC's actual costs. The analyses are performed at such an aggregate level using accounting data and filled with assumptions to translate accounting records into cost estimates that it is not clear whether the end results of these analyses bear any relationship to SBC's actual costs to provide UNEs. The analyses and other manipulations of financial data by investors may serve a valid purpose and be a very sound basis for financial decisions, but analysis of SBC's financial health is not the purpose of this proceeding. Investors may very well be concerned whether SBC Pacific's actual costs are higher than its UNE rates, but this is not probative of whether UNE rates, which are meant to reflect forward-looking costs, are reasonable. Thus, since the analyses relied on by Dr. Aron are performed by investors who are not

using TELRIC methodologies, they are not relevant to this proceeding and references to them should be stricken.

Third, Dr. Aron's analysis is somewhat confusing in that she uses 2001 ARMIS data as a proxy for actual costs and compares this to 2002 UNE rates. Dr. Aron states on p. 11 of her declaration that "in 2001, [SBC Pacific] received on the order of \$9.93 for its UNE loops" but, in fact, this \$9.93 price was not adopted until May 2002. Thus, it is unclear whether Dr. Aron realizes she is comparing costs and revenues from different years. Further, since Dr. Aron does not justify her 2001 cost estimate as a reasonable proxy of forward-looking costs as required by TELRIC, it is unclear why the Commission should rely on a comparison of costs and revenues from different years.

Therefore, for the reasons discussed above, the portions of Dr. Aron's declaration concerning her estimate of actual UNE costs, her cost/revenue comparisons, and her discussion of investors analyses of UNE costs should be stricken. Certain portions of Dr. Aron's declaration that Joint Applicants requested be stricken should in fact be retained because they involve Dr. Aron's expert opinion of capital spending in a competitive environment, whether TELRIC permits compensatory prices, and the social costs and benefits of artificially low UNE prices. A copy of Dr. Aron's declaration is attached to this ruling, with the text that is stricken shown in strikeout format.

Bash/McNeill Motion and Palmer/Bishop/Mandella Motion

Joint Applicants request an order striking certain portions of the opening declaration of Cheryl Bash, the rebuttal declaration of Ms. Bash, and the Reply Declaration of Ian McNeill, both filed on behalf of SBC, on the grounds that (1) various statements within the declarations rely on evidence that SBC failed to produce, (2) various statements have no support in the evidentiary record, (3) the

witnesses are unqualified to make these statements, (4) the statements are not appropriate for rebuttal testimony, (5) the statements are false, or (6) the statements are misrepresentations of Joint Applicants' position.

In a similar motion, Joint Applicants request an order striking the rebuttal declaration of Donald Palmer, the reply and rebuttal declarations of Jay Bishop, and certain portions of the declaration of Gary Mandella, all filed on behalf of SBC. Joint Applicants contend that the Palmer and Bishop declarations should be stricken entirely because neither witness was produced in response to Joint Applicants' notice of deposition, thereby prejudicing Joint Applicants' ability to prepare their case. With regard to Mr. Mandella's declaration, Joint Applicants ask that portions be stricken because various statements are not supported, Mr. Mandella is unqualified to make the statements, the statements are contradicted elsewhere by SBC, or the statements misrepresent Joint Applicants' position.

SBC responds that Joint Applicants' motions seek to strike proper and probative evidence and that exclusionary sanctions are not appropriate here. First, SBC maintains that Joint Applicants' notice of deposition did not require it to produce Mr. Bishop or Mr. Palmer because the notice only required the person most knowledgeable regarding its cost studies and/or models and on whom SBC "*intends to rely* to establish the validity of its cost stud(ies) and or models." According to SBC, at the time of the depositions it did not intend to rely on Messrs. Bishop or Palmer to support SBC cost studies/models. SBC later decided to use these witnesses only for reply and rebuttal to certain allegations in Joint Applicants' opening and reply filings. SBC could not have anticipated that it would later rely on Messrs. Bishop and Palmer to reply to and/or rebut Joint Applicants' arguments. SBC also explains that Joint Applicants had the opportunity to request further depositions of other persons if they felt they were

warranted, and did not do so. SBC maintains that Joint Applicants themselves submitted declarations on behalf of individuals that they did not produce in response to an SBC notice of deposition.

Second, SBC responds that there is no basis to strike the various passages of the declarations of Messrs. Mandella, Bishop, McNeill and Ms. Bash. SBC contends that Joint Applicants' grounds to strike these passages are really improper surrebuttal arguments which take issue with the validity or quality of these witnesses' statements, Joint Applicants' declarations contain the same alleged problems, and all of the alleged problems are arguments the Commission can weigh in making its determination in this case. For example, SBC asserts that expert witnesses may properly rely on evidence outside of the factual record and are not required to produce all supporting documents along with their declaration. Nevertheless, in an abundance of caution, SBC filed an errata on May 1, 2003, including a CD with all supporting documents cited by its declarants. SBC also contends that any claims that the witnesses are not qualified does not support striking their statements, but merely goes to the weight of the evidence, not its admissibility.

I will deny both of these motions filed by Joint Applicants. First, I agree with SBC that it would be improper to strike the declarations of Messrs. Palmer and Bishop on the grounds that they were not produced for deposition. At the time the deposition notice was issued, SBC did not intend to rely on Palmer and Bishop and Joint Applicants could have later moved to compel their production for depositions after the filing of their reply and rebuttal declarations.

Second, I will not strike any of the numerous passages of the declarations of Messrs. Mandella, Bishop, McNeill and Ms. Bash, because I agree with SBC that overall, the objections go to the weight of this evidence rather than its

admissibility. Joint Applicants' objections concerning these witnesses qualifications and whether their specific statements extend beyond the scope of their expertise are duly noted and will be weighed when considering the various declarations. Joint Applicants' additional objections--namely that certain portions of the declarations are improper rebuttal, are contradicted by other evidence, or misrepresent Joint Applicants' positions--also go to the weight to be afforded these declarations and not their admissibility. Indeed, vast portions of the motion on these points are essentially surrebuttal. Finally, Joint Applicants claim that certain passages in the declarations rely on evidence not produced by SBC. SBC responds that for each of these instances the evidence was either not requested, was publicly available, or was in fact produced. I will not strike any passages of the declarations based on this last argument, because I agree with SBC that the evidence was either not requested, was publicly available, or was already produced.

LANDIS MOTION

SBC requests an order striking limited portion of the Rebuttal Declaration of Kevin Landis, filed on March 12, 2003 on behalf of Joint Applicants. SBC contends that certain claims in the Landis declaration are factually incorrect because he did not respond fully and completely to the discovery requests of SBC regarding the source code, data, and algorithms that underlie HAI Model 5.3 (HM 5.3) customer locations and clusters of customers. SBC maintains that the accuracy of Mr. Landis' claims on this topic cannot be verified without access to the source code, data, and algorithms that Joint Applicants have not produced. Thus, SBC asks that these statements be stricken.

Joint Applicants respond that Mr. Landis' rebuttal declaration responds directly to criticisms leveled by SBC's declarant Christian Dippon and should not be stricken. (*See Dippon Reply Declaration, 2/7/03.*) Joint Applicants claim they provided SBC with all the information it requested and more than enough information to evaluate the impact of the customer location database and clusters of customers within HM 5.3. For example, they point out that Mr. Dippon performed his own detailed analysis and evaluation of the customer location database and he was able to create alternative customer location databases to run through the HM 5.3 model.

According to Joint Applicants, SBC's motion to compel access to customer location database information was handled at a November 26, 2002 law and motion hearing wherein the assigned ALJ ordered Joint Applicants to provide SBC access to Mr. Landis and to let the ALJ know if further issues regarding the motion to compel needed to be resolved. Joint Applicants contend that they provided the ordered access to Mr. Landis and SBC later stated that it was "done with Kevin [Landis]." (Joint Applicants' Response to Motion to Strike, 4/28/03, Attachment D.) At no time did SBC return to the ALJ under the procedure she had outlined, for a further order compelling production of customer location source code, data, or algorithms. Therefore, Joint Applicants state it would be improper to strike portions of Mr. Landis' declaration on the grounds that he did not comply with discovery requests. Further, Joint Applicants claim that the source code, data, and algorithms are not needed to evaluate the impact of the customer location database on HM 5.3. SBC has all the information it needs to verify Mr. Landis' statements.

SBC's motion to strike portions of the Landis declaration is denied. Joint Applicants are correct that the ALJ ordered Joint Applicants to provide access to

Mr. Landis and asked the parties to let her know if further disputes regarding the motion to compel on the customer location database issues would need her attention.⁴ SBC did not request the ALJ to issue a further order compelling production of the source code, data, and algorithms. I note that SBC Pacific states in its reply comments that “Mr. Dippon identified a series of errors and flaws in the customer location database” and that the “clustering algorithm is severely flawed and generates clusters in a randomized fashion that bear no resemblance to real world customer groupings. (SBC Pacific Reply Comments, 2/7/03, p. 31.) Apparently Mr. Dippon was able to perform significant analysis of the customer location database and its algorithms even without access to the source code, data and algorithms. The objections to the Landis declaration will go to the weight of the evidence. Joint Applicants contend that Mr. Landis’ statements can be verified without access to the information that SBC describes. If Commission staff and the ALJ find this claim is not accurate as our scrutiny of the cost models continues, then Mr. Landis’ statements will be given less weight.

Accordingly, **IT IS RULED** that:

1. Joint Applicants’ February 7, 2003 motion to strike portions of the Declaration of Dr. Aron is granted in part, and denied in part, as shown in Attachment 1 to this ruling.
2. Joint Applicants’ April 10, 2003 motion to strike is denied.
3. Joint Applicants’ April 11, 2003 motion to strike is denied.
4. SBC Pacific’s April 11, 2003 motion to strike is denied.

Dated May 21, 2003, at San Francisco, California.

⁴ See Reporter’s Transcript, 11/26/02, at 197 wherein the ALJ describes that Joint Applicants will “mak[e] Mr. Landis available for an additional eight hours to Pacific and their expert on the TNS algorithms, and hopefully they can resolve the data needs here. And if not, the parties will check back in with me after the workshop that we’ll have in this proceeding on December 3rd.”

/s/ DOROTHY J. DUDA

Dorothy J. Duda
Administrative Law Judge

ATTACHMENT 1

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Joint Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Switching in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 01-02-024
(Filed February 21, 2001)

Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Loops in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 01-02-035
(Filed February 28, 2001)

Application of The Telephone Connection Local Services, LLC (U 5522 C) for the Commission to Reexamine the Recurring Costs and Prices of the DS-3 Entrance Facility Without Equipment in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-031
(Filed February 28, 2002)

Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Interoffice Transmission Facilities and Signaling Networks and Call-Related Databases in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-032
(Filed February 28, 2002)

ATTACHMENT 1
(cont'd)

Application of Pacific Bell Telephone Company (U 1001 C) for the Commission to Reexamine the Costs and Prices of the Expanded Interconnection Service Cross-Connect Network Element in the Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-02-034
(Filed February 28, 2002)

Application of XO California, Inc. (U 5533 C) for the Commission to Reexamine the Recurring Costs of DS1 and DS3 Unbundled Network Element Loops in Its Second Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050.

Application 02-03-002
(Filed March 1, 2002)

**DECLARATION OF DR. DEBRA J. ARON
ON BEHALF OF
PACIFIC BELL TELEPHONE COMPANY**

October 18, 2002

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ATTACHMENT A

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND POSITION.

A1. My name is Debra J. Aron. I am the Director of the Evanston office of LECG, LLC, and Adjunct Associate Professor at Northwestern University. My business address is 1603 Orrington Avenue, Suite 1500, Evanston, IL, 60201.

Q2. PLEASE DESCRIBE LECG, LLC.

A2. LECG is an economics and finance consulting firm that provides economic expertise for litigation, regulatory proceedings, and business strategy. Our firm comprises more than 300 economists from academe and business, and has 15 offices in six countries. LECG's practice areas include antitrust analysis, intellectual property, and securities litigation, in addition to specialties in the telecommunications, gas, electric, and health care industries.

Q3. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.

A3. I received a Ph.D. in economics from the University of Chicago in 1985, where my honors included a Milton Friedman Fund fellowship, a Pew Foundation teaching fellowship, and a Center for the Study of the Economy and the State dissertation fellowship. I was an Assistant Professor of Managerial Economics and Decision Sciences from 1985 to 1992, at the J. L. Kellogg Graduate School of Management, Northwestern University, and a Visiting Assistant Professor of Managerial Economics and Decision Sciences at the Kellogg School from 1993-

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1995. I was named a National Fellow of the Hoover Institution, a think tank at Stanford University, for the academic year 1992-1993, where I studied innovation and product proliferation in multiproduct firms. Concurrent with my position at Northwestern University, I also held the position of Faculty Research Fellow with the National Bureau of Economic Research from 1987-1990. At the Kellogg School, I have taught M.B.A. and Ph.D. courses in managerial economics, information economics, and the economics and strategy of pricing. I am a member of the American Economic Association and the Econometric Society, and an Associate member of the American Bar Association. My research focuses on multi-product firms, innovation, incentives, and pricing, and I have published articles on these subjects in several leading academic journals, including the *American Economic Review*, the *RAND Journal of Economics*, and the *Journal of Law, Economics, and Organization*. I currently teach a graduate course in the economics and strategy of communications industries at Northwestern University.

I have consulted on numerous occasions to the telecommunications industry on competition, costing, pricing, and regulation issues in the U.S. and internationally. I have testified in several states regarding economic and antitrust principles of competition in industries undergoing deregulation; measurement of competition in telecommunications markets; the proper

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interpretation of Long Run Incremental Cost and its role in pricing; the economic interpretation of pricing and costing standards in the Telecommunications Act of 1996 ("TA96" or "the Act"); limitations of liability in telecommunications; Universal Service; and proper pricing for mutual compensation for call termination. I have testified in a number of states on issues pertaining to broadband markets, broadband deployment, and incentives for broadband investment. I have also submitted affidavits to the Federal Communications Commission ("FCC") analyzing the merits of SBC Ameritech Michigan's application for authorization under Section 271 of the Telecommunications Act to serve the in-region interLATA market, CC Docket No. 97-137; explaining proper economic principles for recovering the costs of permanent local number portability, CC Docket No. 95-116; explaining the economic meaning of the "necessary and impair" standards for determining which elements should be required to be unbundled under TA96, CC Docket No. 96-98; and an analysis of market power in support of Ameritech's petition for Section 10 forbearance from regulation of high-capacity services in the Chicago LATA, CC Docket No. 95-65. I have consulted to carriers in Europe, the Pacific, and Latin America on interconnection and competition issues, and have consulted on issues pertaining to local, long distance, broadband, wireless, and equipment markets. I have conducted analyses of mergers in many other industries under the U.S.

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Department of Justice and FTC Merger Guidelines. In addition, I have consulted in other industries regarding potential anticompetitive effects of bundled pricing and monopoly leveraging, market definition, and entry conditions, among other antitrust issues, as well as matters related to employee compensation and contracts, and demand estimation. In 1979 and 1980, I worked as a Staff Economist at the Civil Aeronautics Board on issues pertaining to price deregulation of the airline industry. In July 1995, I assumed my current position at LECG. My professional qualifications are detailed in my curriculum vitae, which is submitted as Schedule DJA-1.

Q4. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE CALIFORNIA PUBLIC UTILITIES COMMISSION ("COMMISSION")?

A4. Yes. I testified on behalf of SBC Pacific Bell on issues related to proposed unbundling of the Company's broadband infrastructure.⁵

Q5. WHAT IS YOUR UNDERSTANDING OF THIS PROCEEDING?

A5. I understand that SBC Pacific Bell ("Pacific Bell" or "the Company") is filing cost studies and supporting documentation and testimony for certain unbundled network elements ("UNEs") that are the subject of the California Public Utilities Commission's ("CPUC" or "Commission") annual reexamination of UNE costs for the purpose of determining UNE prices.

ATTACHMENT A

Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A6.

Q7. DR. ARON, PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S CURRENT UNE PRICES IN CALIFORNIA.

A7. In California, the method of pricing Pacific Bell's UNEs ostensibly has been based on forward-looking engineering assumptions about the configuration of a hypothetical network composed of the best, most efficient technology currently available, assuming the existing placement of the Company's wire centers. I will discuss how the improper application of the Federal Communications Commission's ("FCC's") total element long-run incremental cost ("TELRIC") methodology to Pacific Bell has resulted, however, in the omission of legitimate forward-looking costs I conclude that the Company's current UNE prices reflect a misapplication of the FCC's TELRIC methodology In fact, I show:

- Pacific Bell's interim UNE loop ("UNE-L") and platform ("UNE-P") prices are among the lowest in the nation;
-

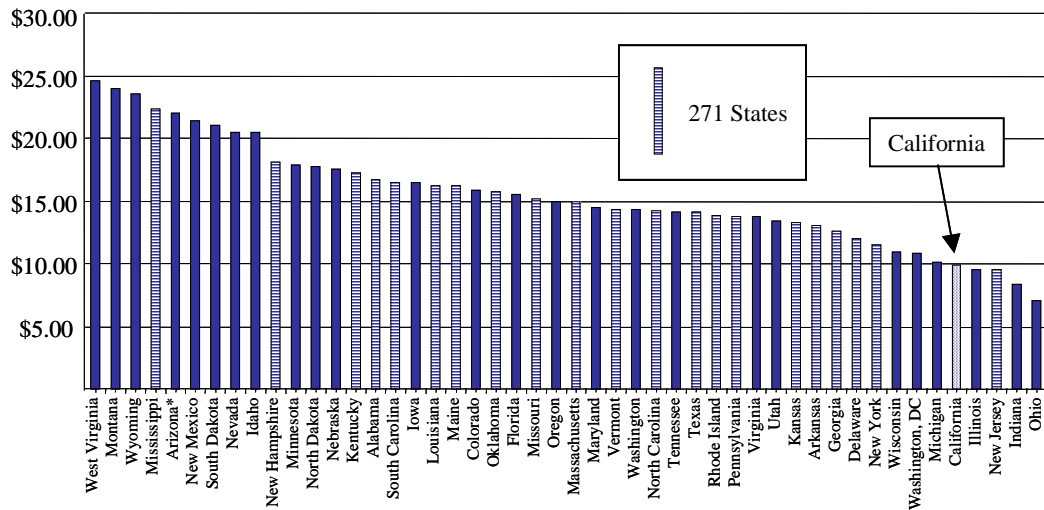
Q8. HOW DO PACIFIC BELL'S CURRENT UNE PRICES IN CALIFORNIA COMPARE TO THOSE IN THE REST OF THE U.S.?

⁵ Re Open Access and Network Architecture Development, Decision No. 96-08-021 (Aug. 2, 1996).

ATTACHMENT A

A8. According to an analysis by investment house Commerce Capital Markets ("CCM"), Pacific Bell's interim prices for unbundled loops and the platform are among the lowest of the 48 states.⁶ (See Charts 1 and 2).

**Chart 1
Prices of UNE Loops**



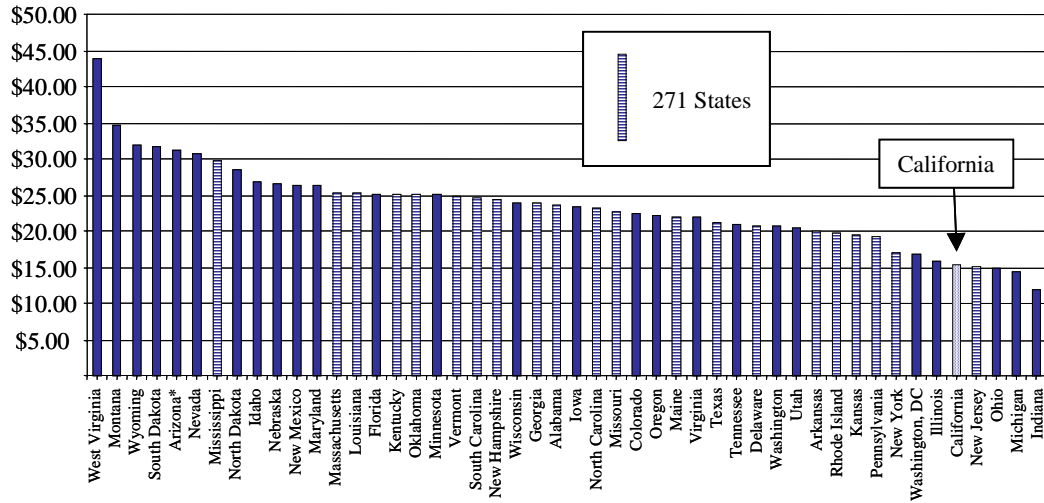
CCM August 2002. See also, Anna Maria Kovacs et al., "The Status of 271 and UNE-Platform in the Regional Bells' Territories," Commerce Capital Markets Equity Research, May 1, 2002, p. 15. (Hereafter CCM May 2002). Also www.fcc.gov/Bureaus/Common_Carrier/in-region_applications for FCC 271 approval listings.

* Arizona UNE Loop price derived from CCM May 2002 study as per conversation with CCM that revealed incorrect prices reported in the August 22, 2002 study.

⁶ CCM reviewed 47 continental U.S. states (Connecticut was unavailable) and Washington, D.C. The numbers relied upon for the analyses that follow are a weighted average of zone-specific UNE-L (for Chart 1) and UNE-P (for Chart 2) prices as developed by investment analyst Dr. Anna Maria Kovacs. See Anna Maria Kovacs et al., "The Status of 271 and UNE-Platform in the Regional Bells' Territories," Commerce Capital Markets Equity Research, August 22, 2002, p. 1 (hereafter, "CCM August 2002"). The weights are the number of lines served by zone by the particular Bell operating company ("BOC").

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**Chart 2
Prices of UNE “Platform”**



See CCM August 2002 and CCM May 2002. Also, www.fcc.gov/Bureaus/Common_Carrier/in-region_applications for FCC 271 approval listings.
 * Arizona UNE-P price derived from CCM May 2002 study as per conversation with CCM that revealed incorrect prices reported in the August 22, 2002 study.

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Q12.

Q14.

Q16.

Q17. ARE THESE REDUCTIONS IN CAPITAL SPENDING WHAT ONE WOULD EXPECT AS COMPETITION TAKES HOLD IN A MARKET?

A17. No, not necessarily. If prices are compensatory, Pacific Bell will have the incentive to sell UNEs to buyers, to upgrade its network, and to make a business of wholesale network elements even under very competitive conditions. Moreover, economically-priced UNEs will improve the viability of facilities-based CLECs, thereby improving the diversity of networks and services. Compensatory UNE prices are a necessary component to reestablishing health to the telecommunications marketplace.

Q18. ARE YOU ASKING THE COMMISSION TO GUARANTEE A PROFIT FOR PACIFIC BELL?

A18. No.

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Q19. DR. ARON, DO THE 1996 TELECOMMUNICATIONS ACT AND THE FCC'S PRICING RULES IMPLEMENTING THE ACT NECESSARILY RESULT IN NON-COMPENSATORY UNE PRICES?

A19. I am not an attorney, nor do I seek to render a legal opinion, but my reading of the plain language of the 1996 Act and the Supreme Court's recent opinion in the *Verizon* case is that the FCC's TELRIC-based pricing methodology must be understood to permit compensatory prices, through the proper selection of inputs to reflect the idealized assumptions of the FCC's TELRIC model. In fact, the Court rejected incumbent carriers' argument that the FCC's TELRIC-based pricing model, even when properly applied, does not permit recovery of costs associated with increased risk and shortened asset lives. According to the Court:

The argument, however, rests upon a fundamentally false premise, that the TELRIC rules limit the depreciation and capital costs that rate setting commissions may recognize. In fact, TELRIC itself prescribes no fixed percentage rate as risk-adjusted capital costs and recognizes no particular useful life as a basis for calculating depreciation costs. On the contrary, the FCC committed considerable discretion to state commissions on these matters.⁷

That is, the Court concluded that proper application of the FCC's TELRIC-based pricing methodology requires recognition and recovery of the costs the carriers would incur as a result of increased cost of capital, increased risk of sunk assets,

⁷ Verizon at *34.

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and shorter asset lives associated with the hypothetical, idealized assumptions of the TELRIC methodology. It is not only within the purview of the state commission to ensure that these costs are recognized, it is the state commission that is charged with that task. In my opinion, if properly accounted for, it is likely that recognition of such costs would bring UNE prices towards or into a range where, on an expectational basis, they could be compensatory.

Q20. IS THERE A SOCIAL BENEFIT TO KEEPING UNE PRICES ARTIFICIALLY LOW SO AS TO ENCOURAGE COMPETITIVE ENTRY INTO CALIFORNIA?

A20. No. Encouragement in this manner is neither necessary nor desirable. Setting UNE prices below any reasonable level of cost to provide life support for some CLECs and a toehold for others is not in the public interest. Rather, it is manufacturing "synthetic" competition, to use the D.C. Circuit Court's term,⁸ and artificially assisting competitors, at the expense of genuine competition.

Q21. WHAT ARE THE SOCIAL COSTS OF ENGINEERING ARTIFICIALLY LOW UNE PRICES TO ENCOURAGE COMPETITIVE ENTRY?

⁸ In its May 24 2002, opinion in United States Telecom Association v. FCC, the United States Court of Appeals for the District of Columbia Circuit characterized as "completely synthetic competition" that competition which is "performed with ubiquitously provided ILEC facilities" provided at "Commission-imposed prices [that] are highly attractive to CLECs." United States Telecom Association v. FCC et al., 290 F.3d 415, 424 (D.C. Cir. 2002) (hereafter, U.S. Telecom Association).

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A21. When telecommunications infrastructure is priced too low, one result is the deterioration of the infrastructure that occurs whenever prices are held below compensatory levels. The phenomenon is similar to what happens in cities subject to "rent control." Rent control holds prices below compensatory levels and results in (1) demand in excess of the

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social optimum; (2) supply that is less than the social optimum; (3) deterioration of the existing infrastructure; and (4) little or no investment in infrastructure.

Untenably low UNE prices based on a TELRIC study that uses unrealistic cost inputs lead to the rent control problem: High demand for UNEs relative to self-supply (provided that the retail price for telecommunications services is adequate to entice entry), and little or no new investment in infrastructure.

Consumers are harmed in several ways:

- Genuinely new choices are not developed: CLECs do not develop them because they are better off using the existing network at cut-rate prices, and ILECs do not develop them because they would wind up bearing alone the costs of anything new that does not succeed in the marketplace, and sharing with CLECs, at non-compensatory prices, anything new that does succeed;⁹
- New technologies are ignored or even discouraged;
- Too little capital is invested in the existing infrastructure; external sources of such investment dry up; and economically rational ILECs become reluctant to invest in the network. And everyone loses, including UNE-based CLECs, if the ILEC network deteriorates as a result.

Furthermore, as with rent controls, once long-run economic decisions are made on the basis of uneconomically low prices, the effects of inefficient choices become costly to undo. In the subsidized housing context, this has resulted in the deterioration in the housing stock, depressed incentives to invest in new

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housing supply, and an artificial lack of mobility of renters who acquired a subsidized apartment. The same economic principles apply here. UNE prices that are uneconomically low encourage inefficient reliance on the existing network, which leads to inefficient and depressed incentives by all parties—incumbents and CLECs—to invest in the existing infrastructure, in new infrastructure, and in new technology.

Moreover, to the extent that elements are shared among competitors, there is reduced competition in the production of that element. Supreme Court Justice Stephen Breyer articulated this fact well when he wrote:

Nor are any added costs imposed by more extensive unbundling requirements necessarily offset by the added potential for competition. Increased sharing by itself does not automatically mean increased competition. It is in the *unshared*, not in the shared, portions of the enterprise that meaningful competition would likely emerge. Rules that force firms to share *every* resource or element of a business would create not competition, but pervasive regulation, for the regulators, not the marketplace, would set the relevant terms.¹⁰

⁹ As the United States Court of Appeals for the District of Columbia Circuit observed in *U.S. Telecom Association*, "If parties who have not shared the risks are able to come in as equal partners on the successes, and avoid payment for the losers, the incentive to invest plainly declines." *Id.* at 424.

¹⁰ *AT&T Corp. v. Iowa Utilities Board*, 525 U.S. 366, 429 (1999) (Breyer, concurring in part and dissenting in part, concurring in relevant part).

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It is a straightforward economic principle that the more that is shared, the less will be the competition along that particular dimension and the greater the call for additional regulation. CLECs that rely on the incumbent's network do not, by definition, provide any innovation in the provision of the underlying facilities. Accordingly, UNE-P and resale providers have fewer avenues by which to make contributions to the marketplace. The result is not only less investment, but also, very fundamentally, less competition.

Q22. ARE THERE OTHER SOCIAL COSTS OF ENCOURAGING

"COMPETITION" THROUGH UNECONOMICALLY LOW UNE PRICES?

A22. Yes. Competitors that avail themselves of underpriced UNEs may come to view these UNEs as an entitlement, and may demand that underpriced UNEs continue to be available even after the justification for the unbundling of any particular element has disappeared, in order to preserve their valuable "options" on technology. This is a classic flaw associated with what is known as the "infant industry" argument.

Often implemented in the form of tariffs to protect a fledgling domestic industry from foreign competition, the infant industry rationale induces policy makers to bestow temporary preferential treatment on a certain industry or class of competitors in order to boost their ability to compete until the industry or

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competitors mature. In addition to distorting incentives to enter the market, the problem with infant industry protectionism is that it is very difficult to eliminate the preferential treatment once the infant industry is on its feet. As noted by economists Alfred Kahn and William Taylor:

[S]o long as companies are insulated from competition, they are, to that extent and for that reason, less likely ever to grow up and attain the ability to compete without such special protections. . . .

It takes very little imagination or information about the industry today and about the actual identity of the emerging new competitors of the LECs (such as of US West with Time Warner, of MCI with various cable systems and metropolitan competitive access providers, and of the ill-fated multi-billion dollar alliance of Bell Atlantic and TCI, the largest owner of cable systems in the country) to envision the consequences of a policy of introducing such systems of competitive handicaps of incumbents and preferences for entrants. History clearly justifies the prediction: if commissions adopt such recommended policies as identifying new entrants as struggling infants, they will continue to find themselves for years subject to similar entreaties by billion-dollar "infants," suitably diapered and with mendicant bowls in hand, continuing to play the game of regulatory rent-seeking, in order to avoid having their merits subjected to an unbiased market test.¹¹

Kahn and Taylor vividly and accurately describe a key flaw in protectionist public policy towards new entrants: The protection depresses the protected firm's imperative to create unique and marketable value added for consumers. It

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is the creation of such value for consumers that provides the basis for firms to survive in competitive markets in the long run, and create value for the economy.

II. THE TELRIC APPROACH IN CALIFORNIA

Q23. ARE THERE PARTICULAR COST-DRIVERS THAT AFFECT TELRIC-BASED PRICES?

A23. Yes. I will comment on two significant ones: fill factors and stranded costs.

Q24. WHAT ARE FILL FACTORS?

A24. The FCC defines a "fill factor" as the proportion of a network facility that will be filled with network usage.¹² In the context of a TELRIC cost model, a higher fill factor translates into lower average estimated costs. However, that is not necessarily true in the real world, because higher fill factors themselves impose costs on a system and these costs should also be accounted for.

The FCC's TELRIC methodology requires that unit costs be derived from total costs by using "reasonably accurate 'fill factors' (estimates of the proportion of a facility that will be 'filled' with network usage)" and, more specifically, notes that unit costs can be derived "by dividing the total cost associated with the element

¹¹ Alfred E. Kahn and William E. Taylor, "The Pricing of Inputs Sold to Competitors: A Comment," 11 *Yale Journal on Regulation* 225-240 (footnote omitted).

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by a reasonable projection of the actual total usage of the element."¹³ If this is not done, and, instead, if unrealistically high fill factors are used, one would also need to recognize and account for the other costs that would be increased as (real world) fills increased.

Q25. PLEASE PROVIDE AN EXAMPLE OF WHAT A FILL FACTOR MEANS IN THE REAL WORLD.

A25. In the real world a firm typically carries spare capacity, which means that its plant is not running flat out at all periods of time. There are a number of reasons that spare capacity is efficient and necessary in a telecommunications network. First, it is entirely unrealistic to suppose that a real-world firm will know with 100 percent certainty what or where its actual future demand will be. In economics, there is a principle attributed to Nobel Laureate George Stigler that a real-world efficient firm will incur costs that are higher than what it might otherwise incur if it were to build a rigid, inflexible plant that is incapable of responding efficiently to changes, variability, and uncertainty in the market.¹⁴ A real-world firm will incur higher costs to build an *adaptable* plant that can accommodate changes in the economic or market situation. This principle applies not only to spare capacity needed for flexibility in accommodating

¹² Local Competition Order, ¶ 682.

¹³ Id.

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uncertain growth in demand, but spare capacity is necessary to accommodate variability in demand, with or without net growth. Airlines, for example, historically have run on average at 50-70 percent fill factors (or what is called in that industry "load factors"). Airlines maintain spare capacity not necessarily because they expect demand to grow next year, but because demand is higher on Friday evenings than Wednesday mornings, and because some Fridays are simply and unpredictably busier than others. Similarly, networks must maintain spare capacity because it is impossible to predict which households will demand new or additional lines.

For example, consider two Sacramento suburbs, Elk Grove and Carmichael. It could turn out that 30 percent of households in each neighborhood demand a second line. Or it could turn out that 60 percent (or 100 percent) of households in Elk Grove demand second lines, and none do in Carmichael. Of course, all scenarios in between are possible as well. Planning for 30 percent in each suburb will not suffice to handle the possibilities (and statistical likelihood) of unbalanced patterns of demand, because plant installed in one area cannot be used to serve demand in another. To handle at least some of those possibilities

¹⁴ George J. Stigler, *The Theory of Price*. (New York: Macmillan Publishing, 1966), pp. 130-131.

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in an efficient way, more than 30 percent spare capacity must be installed in *each* neighborhood if 30 percent additional lines are expected on average.

A TELRIC model in which the engineering specifications are based on an assumption that the network is built to precisely meet a pre-determined demand, without considering how to accommodate future moves and changes, violates Stigler's adaptability principle. The costs that need to be incurred to flexibly accommodate uncertainty are costs that are part of a forward-looking, efficient network. An efficient provider knows that its demand will materialize over time (not all at once) and that end-users may move around, thereby requiring new capacity in one geographic area while capacity is unused in another. The efficient provider will account for these factors in its capacity planning decisions.

Efficient forward-looking firms utilize spare capacity as a way to hold down other costs, manage risk, and maintain service quality. Accordingly, spare capacity is a legitimate, economic, and efficient cost of doing business.

Q26. WHAT ARE SOME OF THE OTHER REASONS FOR HAVING SPARE CAPACITY?

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A26. The following represent some examples that are based on issues of (1) an economic tradeoff between inputs; (2) technological considerations; (3) service quality; and (4) prudent response to risk.

- **Economic Tradeoff Between Inputs.** It would be unduly costly to install distribution plant overnight at new locations whenever such new plant is called for, with the thought of coming back again in the near future (and opening up a street perhaps) to install additional plant – all in the anticipation of running at a higher average utilization rate during a particular time period. The placement of new plant involves such tasks as siting, obtaining permits, trenching (or placing of utility poles), and other construction activities. Some of these costs will have to be incurred again and again every time new plant is called for in a particular location.
- **Technological Constraints or "Breakage."** Technological constraints affect the opportunity set that firm managers have to select from and therefore affect costs. For example, I understand that telephone distribution plant is "lumpy": It is available only in a finite number of sizes. It is, therefore, infeasible to obtain physical maximum capacity utilization from lumpy capital except in the rare instance where demand exactly matches the physical supply. For example, if the efficient number of distribution lines in an area were 80, but the smallest size of cable that provides 80 lines were 100 pair

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cable, engineers might reasonably install the 100 pair cable, resulting in 20 lines of spare capacity. This spare capacity is not the result of inefficiency nor can one expect it to be eliminated going forward. Rather, breakage is a cause of spare capacity that will result in any efficient network subject to technological constraints.

- **Service Quality Considerations.** One finds, in most industries, that customers have to wait for the product or service they want. Anyone who has ordered from a catalog understands the meaning of "back-ordered." However, back ordering is not considered an acceptable option in local exchange telecommunications service provisioning. To keep quality up, telecommunications carriers must have on hand sufficient capacity, *in advance of demand*, to meet expected demand. The costs of advance capacity are a necessary part of the "ready-to-serve" obligation and so are costs of providing service at current quality levels.

Q27. WHAT ARE YOUR CONCLUSIONS ABOUT FILL FACTORS?

A27. In the abstract world of modeling, ceteris paribus, higher utilization rates translate into lower average costs since the cost numerator is divided by a higher divisor of usage. But in the real world, spare capacity is a legitimate cost that is driven in part by technology constraints. Spare capacity can be used in lieu of other resources, and it therefore eliminates these other costs. Therefore, the firm

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should be permitted to recover those costs in its UNE prices. A model that uses hypothetical fill factors of the sort not found in the real world will result in (1) unattainably low costs and (2) a network that is not sufficiently flexible to address real-world risk and uncertainty.¹⁵

Q28. DR. ARON, PLEASE ADDRESS THE ISSUE OF STRANDED PLANT.

A28. Among the key inputs into the TELRIC cost analysis are the assumptions about the depreciation lives of the network assets. Competition and technological change can reduce the economic lives of network assets, and these impacts should be accommodated in the depreciation lives that are used in the TELRIC model. I understand that Pacific Bell uses the same depreciation lives in its forward-looking TELRIC model that the company uses for financial reporting purposes of its actual, embedded assets. I understand that Dr. Vanston has reviewed the Pacific Bell proposal and found that the proposed lives are consistent with what he calls the "projection lives," which reflect the total expected lives of existing assets or (in other of Dr. Vanston's terminology) the average age of existing assets (or classes) plus the average remaining life of that asset.

¹⁵ If one uses an unrealistically high fill factor, then one must account for other costs imposed as a result of reduced flexibility.

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The projection life is a very conservative assumption under the FCC's TELRIC terminology. The reason is that under the TELRIC-based pricing methodology, one would consider the effect of using the most up-to-date available technology. That is, one would evaluate the anticipated life of a hypothetical network that is installed today. I understand Dr. Vanston's expert opinion to be that technological change affects new and

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old assets alike. The average remaining life concept, therefore, is theoretically more consistent with the FCC's hypothetical network assumption than is the projection life concept.

To see this, consider an example. Suppose the driving force determining the economic longevity of copper loops is the anticipated displacement of copper by fiber in, say, the year 2005. (To make the example very simple, I am supposing, counterfactually, that all displacement would happen in one year; but the conceptual point is the same.) This would mean that the average remaining life on existing copper would be three years as of the year 2002. The projection lives, however, would take into account the embedded life of the existing assets. If the embedded plant has been in place for, on average, 10 years, then the projection life for this plant would be (roughly) 13 years. This is the asset life concept that is reflected in Pacific Bell's depreciation life assumptions used to develop its proposed UNE prices. Nevertheless, if a hypothetical firm were to install the network today, any copper placed in that network would be displaced in three years, not 13. Accordingly, any copper installed would have to have the opportunity to recover its costs over the three-year time period to be an economical investment. A 13-year life would neither create the correct signals for investment, nor, strictly speaking, fully reflect the FCC's hypothetical

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network assumption. Hence, the projection lives utilized by Pacific Bell to develop its proposed UNE prices actually are highly conservative, which will result, all else the same, in underestimating Pacific Bell's and TELRIC costs, as they arguably do not fully reflect the risks of stranded plant in the network associated with the FCC's hypothetical network assumption.

Q29. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A29. Yes, it does.

[SIGNATURE PAGE FOLLOWS.]

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I declare under penalty of perjury that the foregoing is true and correct.

Executed at _____, this 17th day of October 2002.

Debra J. Aron

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of the original attached Administrative Law Judge's Ruling on Joint Applicants' and SBC Pacific's Motions to Strike on all parties of record in this proceeding or their attorneys of record.

Dated May 21, 2003, at San Francisco, California.

/s/ ELIZABETH LEWIS

Elizabeth Lewis

N O T I C E

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