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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

ACS of Anchorage, Inc. and ACS of Fairbanks, Inc.	)	WC Docket No. 02-____
Emergency Petition for Declaratory Ruling And Other Relief Pursuant to Sections 201(b) And 252(e)(5)of the Communications Act	)	

Affidavit of Stephen A. Pratt

Stephen A. Pratt, being first duly sworn, deposes and states as follows:

1. My name is Stephen A. Pratt. Through June 30, 2002, I was employed by Alaska Communications Systems Holdings, Inc. ("ACS") as Sr. Manager, Carrier Relations and Interconnection Services. In this role, I participated in the development of interconnection arrangements pursuant to Sections 251 and 252 of the Telecommunications Act of 1996, the implementation of those agreements, and the ongoing customer service aspects of processing orders for competitive local exchange carriers ("CLECs").

2. Local service competition began in Alaska in 1997 when General Communication, Inc. ("GCI") and ATT Alascom began providing local service in competition with the Municipality of Anchorage d/b/a Anchorage Telephone Utility ("ATU"). In 1999 ACS purchased the assets of ATU and continued to provide local

service but under the ACS of Anchorage brand name. As of May 2002, ACS of Anchorage served approximately 107,000 retail access lines, 20,000 wholesale lines, and 54,000 unbundled network element loops. All of the UNE loops and approximately 7,000 of the wholesale lines were sold to GCI. Based on GCI's claim to self-provision approximately 1/4th of the access lines used to provide service to its customers,[1] it appears that GCI self-provisions approximately 20,000 lines in Anchorage. Thus, of the total 201,000-line Anchorage market in May of 2002, ACS of Anchorage served approximately 53% of the lines while CLEC competitors served 47%.

3. In the fall of 2001, GCI began providing local exchange service in competition with ACS of Fairbanks by self-provisioning 1,200 access lines to its collocated ISP affiliate and by purchasing and reselling wholesale service from ACS. GCI subsequently began leasing unbundled network element ("UNE") loops and converting wholesale services to UNE loops. As of the end of May 2002, ACS of Fairbanks was providing GCI with approximately 4,000 wholesale lines and 2,000 UNE loops. Again extrapolating from GCI's declaration that it self-provisions about 1/4th of the lines used to provide service, it appears that GCI has self-provisioned approximately 2,000 lines in Fairbanks, including the 1,200 lines initially provisioned by GCI to its collocated ISP affiliate. ACS of Fairbanks retail lines in May totaled approximately

[1] *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, Comments of General Communication, Inc. (April 5, 2002) at page 6; and see *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, Declaration of Frederick W. Hitz, III (April 5, 2002) at ¶ 5.

38,000. Thus, out of a total 46,000-line market in Fairbanks, it appears that GCI has garnered a 17% market share (8,000 lines) in the first nine months of active participation in the market.

4. Earlier this year GCI informed ACS that it intended to place orders to migrate Fairbanks wholesale service lines to either UNE-Loop (UNE-L), where ACS outside plant is cross connected to GCI's local switch in Fairbanks, or the UNE-Platform (UNE-P), where ACS provides all the elements used to provide wholesale service but at a deeply discounted price. ACS is working with GCI to implement the UNE-P portions of the contract approved by the Regulatory Commission of Alaska, and anticipates having the processes in place to accept UNE-P orders in July.

5. One aspect of GCI's customer service practice is particularly troubling for ACS. The circumstance arises when GCI wishes to provide service to a customer where facilities do not currently exist. In my capacity as Senior Manager of Carrier Relations, it has come to my attention that, as a standard practice, GCI directs potential customers in these unserved areas to first request service from ACS, but to switch to GCI once ACS has built out their facilities. This practice essentially forces ACS to build out facilities, but then to lease those same facilities at a deeply discounted state-imposed UNE rate when the customer switches to GCI. Through this practice, GCI has been able to reap the benefits of being a competitive eligible telecommunications carrier (CETC) for the

purposes of collecting universal service, while largely avoiding costly CETC carrier of last resort responsibilities.

Further Affiant Sayeth Not.

Stephen A. Pratt

Subscribed and Sworn to before me this 3rd day of July, 2002.

Notary Public for the State of Alaska
My Commission Expires: 11-3-02

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Affidavit of Timothy J. Tardiff

Timothy J. Tardiff, being first duly sworn, deposes and states as follows:

1. My name is Timothy J. Tardiff. I am a Vice President at National Economic Research Associates, 1 Main Street, Cambridge, MA 02142.

I received a B.S. degree from the California Institute of Technology in mathematics (with honors) in 1971 and a Ph.D. in Social Science from the University of California, Irvine in 1974. From 1974 to 1979, I was a member of the faculty at the University of California, Davis. I have specialized in telecommunications policy issues for over 20 years. My research has included studies of the demand for telephone services, such as local measured service and toll; analysis of the market potential for new telecommunications products and services; assessment of the growing competition for telecommunications services; and evaluation of regulatory frameworks consistent with the growing competitive trends.

I have extensive experience as a consultant and expert witness in regulatory proceedings. Most recently, I have testified in state proceedings and/or arbitrations (pursuant to the

Telecommunications Act of 1996) on local network unbundling and universal service funding in Alaska, the District of Columbia, Maryland, Maine, Vermont, New Hampshire, Rhode, Island, California, New Jersey, New York, Pennsylvania, Texas, Missouri, Oklahoma, Indiana, Massachusetts, North Carolina, South Carolina, Alabama, Virginia, Kentucky, Kansas, and Arkansas. During the past year I have had extensive experience in evaluating proposals to adapt the FCC's universal service model ("Synthesis Model") to produce costs for unbundled network elements (UNEs). Attachment 1 is a copy of my resume.

Summary

2. In developing its rules that were recently upheld by the U.S. Supreme Court[1] and in explaining these rules to the Court, the Federal Communications Commission (FCC) has clearly stated that these rules are intended to produce prices for UNEs provided by incumbent local exchange carriers (ILECs, such as ACS) that reflect the cost that the ILEC *actually incurs* when it provides these elements.[2] Establishing such prices ensures that (1) all firms have the proper incentives to invest in their networks, (2) the lowest cost firm has the opportunity to attract customers, (3) competitive local exchange carriers (CLECs) make the correct choices between leasing UNEs and self-provisioning with their own networks, and (4) firms offer prices to consumers that properly reflect the resources used in providing the services in question.

3. In its last brief to the Supreme Court in the case that upheld its total service long-run incremental cost (TELRIC) rules for pricing UNEs, the FCC again explained in definitive terms that the costs of the ILEC itself were the focus of its rules:

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1 *Verizon Communications, Inc. v. FCC*, 535 U.S. ___, slip op. (2002).

2 Federal Communications Commission, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order ("Local Competition Order"), adopted August 1, 1996 (released August 8, 1996), ¶685.

> The costs measured by TELRIC are nonetheless those of the incumbent itself. Those costs are based, moreover, on actual prices of equipment that is commercially available today—equipment that carriers are already using to upgrade and expand their network.[3]

4. ACS has asked me to comment on whether the nationwide inputs that the FCC has chosen for its universal service Synthesis Model can be used to produce UNE costs that approximate the costs that ACS actually incurs when it provides UNEs to its competitors, which both sound economics and the FCC's rules require. My basic conclusion is that because (1) unlike its clearly stated objective for TELRIC, the FCC by design never intended that its Synthesis Model measure the costs of any particular carrier and (2) the requirements of operating in Alaska are such that costs are generally higher than in the lower 48 states, those nationwide inputs do not provide a proper basis, or even a proper starting point for, determining the "the actual prices of equipment that is commercially available today" and other inputs that ACS needs to operate in Alaska.

5. In its determination of rates for UNEs for ACS's Fairbanks operation, the Regulatory Commission of Alaska used a modified version of the FCC's Synthesis Model and made selective adjustments to the nationwide default inputs. The overall effect is a modest increase in the estimated costs associated with producing UNEs—on the order of 10 percent. In contrast, ACS's inputs, which I understand reflect the costs it experiences in operating its network in Alaska, produce costs that are substantially higher—reflective of the costs it incurs in providing UNEs in its Alaska service territories.

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[3] Reply Brief for Petitioners Federal Communications Commission and the United States, *Verizon Communications, Inc. v. FCC* ("FCC Reply Brief"), p. 6. The FCC gave as an example the fact that "a state commission, in setting TELRIC prices for switching element, looked to prices of switches recently purchased by incumbent."

The FCC's Has Not Endorsed its Synthesis Model or its Nationwide Inputs for Use in Establishing UNE Prices

6. The nationwide default inputs for network components, e.g., cables, support structures, and switches in the Synthesis Model were not designed to match Alaska-specific conditions. Rather, the FCC chose national inputs for universal service purposes, citing the administrative difficulty in validating company-specific input values. The FCC made it clear that its selection of national inputs for determining how the federal high-cost fund should be distributed carried no implications regarding how state commissions should select inputs for determining UNE prices.

> For universal service purposes, we find that using nationwide averages is appropriate. The Commission has not considered what type of input values, company-specific or nationwide, nor what specific input values, would be appropriate for any other purposes. The federal cost model was developed for the purpose of determining federal universal service support, and it may not be appropriate to use nationwide values for other purposes, such as determining prices for unbundled network elements. We caution parties from making any claims in other proceedings based upon the input values we adopt in this Order.[4]

The FCC explained further:

> While reliance on company-specific data may be appropriate in other contexts, we find that for federal universal service support purposes it would be administratively unmanageable and inappropriate... As parties in this proceeding have noted, however, selecting inputs for use in the high-cost model is a complex process. Selecting different values for each input for each of the fifty states, the District of Columbia, and Puerto Rico, or for each of the 94 non-rural study areas, would increase the Commission's administrative burden significantly.[5]

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4 Federal Communications Commission, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, Tenth Report and Order, November 2, 1999 ("*Inputs Order*"), ¶ 32. The *Inputs Order* confirmed many of the tentative decisions the FCC made earlier in 1999 in Federal Communications Commission, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, Further Notice of Proposed Rulemaking, May 28, 1999 ("*Further Notice*")

5 *Ibid.*, ¶ 92.

7. The FCC has repeated this message when it reviewed UNE rates in the context of approving applications for entry under Section 271. A very recent example of these was its approval of BellSouth's application for Georgia and Louisiana,[6] which the FCC itself noted occurred after the Supreme Court upheld its TELRIC rules.[7] In its order, the FCC repeated its caution regarding the use of nationwide inputs for other purposes (¶ 73). In addition, the FCC indicated that rather than relying on nationwide inputs and/or the specific results from its Model, state regulators are not bound by the Synthesis Model's inputs in setting rates (¶ 70). Instead, it explains that the Telecommunications Act specifies thorough independent analyses by states. For example, in rejecting the mandatory use of national cost benchmarks, the FCC stated:[8]

> We see no reason to do this as it undermines the importance of state-specific, independent analysis of rates for UNEs. The Act contemplates the states independently setting rates based on federally established guidelines. It is important to recognize both that costs may vary between states and that state commissions may reach different reasonable decisions on matters in dispute while correctly applying TELRIC principles.

The FCC's Default Inputs Will Not Produce the Costs ACS Incurs in Providing UNEs in Alaska

8. In general, the most reliable way to capture the costs an ILEC incurs when it provides UNEs is to base the measurement of inputs, such as the prices for network equipment and the costs needed to operate that equipment on what that ILEC actually does. Indeed, in selecting some of its inputs for loop facilities, I describe below how the FCC emphasized the

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6 Federal Communications Commission, Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services In Georgia and Louisiana, CC Docket No. 02-35, Memorandum Opinion and Order, May 15, 2002 ("*BellSouth Order*")

7 *Ibid.*, ¶ 22

8 *Ibid.*, ¶ 24

availability of actual contract data.[9] As I understand it, ASC provided this type of information to the RCA. Had that information been used, instead of RCA's modest adjustments to the nationwide default inputs, the investments for network equipment produced by the FCC's Synthesis Model for Fairbanks would have been generally much higher, as shown Table 1.[10]

9. Table 1 shows total investments (by category[11]) that the Synthesis Model produces with (1) the inputs ACS recommended in the Fairbanks arbitration,[12] (2) the inputs the RCA adopted in that arbitration, and (3) the FCC's nationwide defaults. Overall, while the adopted inputs increased investment by about 12 percent (from $39.7 million to $44.4 million), ACS's proposed inputs increase investment by over 80 percent. For the loop categories, the bulk of the difference between costs based on ACS's inputs and the adopted inputs are explained by (1) structure placement and pole costs, (2) manholes,[13] (3) digital loop carrier (fiber electronic costs), (4) drop terminals, and (5) drop wire. For end-office switching, while the arbitration inputs increase investment by 8 percent, ACS's actual costs are almost triple those produced by the national defaults.

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9 Albeit as of now dated and for companies operating outside of Alaska.

10 Tables 1 and 2 appear in Attachment 2.

11 The categories for loop investment are organized consistent with the FCC's method of selecting the nationwide inputs, which is described in more detail below.

12 The ACS inputs are those proposed in its final offer, thus reflecting the effects of the arbitration process. As such, they do not include the full set of ACS's inputs as measured and documented in the data submitted in the arbitration. The full set of inputs produces somewhat higher investments in loop equipment, primarily due to the fact that ACS's own cable prices are higher than the nationwide defaults—upon which parties settled for purposes of the arbitration. Because of additional problems with the Synthesis Model itself as a basis for measuring UNE costs, none of these results should be viewed as ACS's actual forward-looking costs.

13 The difference in manhole investment is the result of ACS's inputs including both a higher proportion of underground structure (and therefore more manholes) and higher unit costs.

10. In addition to investment levels, the nationwide inputs include financial parameters (e.g., depreciation rates and cost-of-capital) that convert investment levels into annual capital costs as well as inputs that generate operating cost levels. Table 2 lists the impact of the alternative inputs on the total annual costs of producing UNEs for Fairbanks.[14] The table illustrates the following:

- Because the arbitration resulted in somewhat higher financial parameters than the national default inputs, the arbitration inputs result in annual capital costs that are approximately 15 percent higher than those produced by the defaults, while total investment is 12 percent higher.
- The arbitration resulted in the use of nationwide expense-to-investment ratios, which are lower than ACS's ratios. This results in lower annual direct expenses because a smaller ratio is applied to a lower estimate of required investment.
- The FCC's Synthesis Model assigns general support costs (e.g., buildings, motor vehicles, and the like) in proportion to the sum of annual capital and direct expenses, which produces much lower costs when the national defaults and/or the arbitration inputs are used instead of ACS's inputs.
- The RCA based its assignment of common expenses (e.g., corporate overheads and network operations expenses) on a national average per line, while ACS based its costs in this category on what it actually incurs in operating its networks in Alaska.

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[14] Again, the purpose of the table is to illustrate the sensitivity of UNE costs to alternative inputs, and not to produce the correct costs for ACS.

In the following subsections, I describe how the FCC selected inputs in the categories listed in Tables 1 and 2 and explain why they are not a proper basis for determining the costs ACS incurs when it provides UNEs in Alaska.

Loops

11. The FCC's loop inputs include the following:

- The unit costs of copper (24 and 26 gauge) and fiber cables
- The unit costs of support structures (e.g., telephone poles and buried placement)
- Unit costs for serving area interfaces (the point where feeder and distribution cables meet)
- Unit costs for the electronic equipment (digital line carrier or DLC) used for fiber-fed loops
- Unit costs for the terminal, drop wire, and network interface device (NID) at the customer's end of the loop
- Fill factors (the percentage of total capacity that is providing service to customers)
- Placement percentages (the fraction of lines with aerial, buried, or underground structure)
- The percentage of support structures that are shared by other carriers (e.g., joint ownership of poles by telephone and electric utilities)

Close examination of the FCC inputs demonstrates that literally none of them are based on prices that ILECs pay today for equipment (because they are from sources no more recent than 1997

and are for the most part reported in 1997 dollars). Further, the FCC's *Inputs Order* offers actual cost support for unit cost inputs that account for only a fraction of total loops costs.

12. Perhaps the most fundamental problem in using nationwide inputs is that Alaska has much higher labor rates (as well as materials costs) than the average in the lower 48 states. For example, in 1997 (the reference year for the FCC's outside plant inputs), Alaska's construction labor rates were the highest in the country and almost 2.5 times as high as the lowest-cost state and over 45 percent higher than the national average.[15] Further, because the FCC's inputs generally combine labor and material costs into a single value (with little information provided to separately identify the labor and materials components), there appears to be no way to properly adjust the inputs to reflect labor cost differences with Alaska.

13. The most influential input category in total loop investment are the unit costs of placing feeder and distribution cable in underground and buried structures. Table 1 shows that these inputs account for 35 percent of the total loop investments the Model (with default inputs) produces for ACS-Fairbanks. It turns out that for the most part, rather than measuring what any particular companies paid to place structures, the FCC instead relied on inputs selected by eight state commissions.[16] Even if these costs from the handful of states describe the costs faced by

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15 Martin D. Kiley and Marques Allyn, eds. *1997 National Construction Estimator 45th Edition*, Craftsman Book Company, pp. 12-15. This source has been proposed as an index of regional labor cost differences in outside plant installation. The 45 percent difference between Alaskan labor rates and those included in the 1997 national defaults implied by this index may not completely account for ACS's higher rates for two reasons. First, installation labor rates have increased since 1997. Second, ACS's labor rates may be higher than average rates in Alaska, e.g., due to union contracts and the like. For example, the federal Bureau of Labor Statistics reported an average wage rate of $20.55 for telecommunications line installers and repairers in 2000. ACS informs me that its wage rate for comparable workers was over $30.

16 *Inputs Order*, ¶ 220. The eight states are Indiana, Kentucky, Minnesota, Montana, Nebraska, New Mexico, North Carolina, and South Carolina. The FCC did base the unit costs for areas with line densities under 100 per square mile on RUS contracts of small independent local exchange

actual ILECs, the states themselves are hardly representative of Alaska. Indeed, the labor cost data I described earlier show that on a line-weighed basis, Alaska's labor costs are 70 percent higher.

14. The next largest category is copper and fiber cable for feeder and distribution, which accounts for about 30 percent of total loop investment. Here, the FCC relied on RUS contract data for 24 gauge copper cable and for fiber cable.[17] The unit costs for 26-guage cable were based on the ratios of 26-guage to 24-guage costs available from data submitted by a number of local exchange companies. Again, even if these data were accurate at the time they were collected (no later than 1997) for the companies in question, because these costs combine labor and material, they understate the cost an Alaska carrier would incur to purchase and install cable today.

15. DLC equipment, which accounts for 16 percent of the Synthesis Model's loop investment, is the next largest category.[18] These costs were based on actual cost data provided by large and medium sized LECs. Again, differences in labor costs as well as other differences in operating a network in Alaska (e.g., harsher weather conditions) makes the simple use of such inputs problematic.

16. The only other unit cost input categories for which FCC supplied any support were poles (5 percent) and serving area interface (SAI) equipment (less than one percent of total

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carriers. However, according to the Synthesis Model, ACS has fewer than three percent of its lines in Anchorage and Fairbanks in such low-density areas.

17 The FCC downwardly adjusted these data to account for the purportedly greater buying power larger carriers enjoy. In addition, the costs were increased to account for splicing and LEC engineering.

18 DLC accounts for a larger share of total loop investment when the arbitration and ACS's inputs are used, in large part because the RCA changed the threshold for determining when fiber-fed loops are used from 18,000 feet to 12,000 feet, thus producing more fiber-fed loops and more DLC investment.

loop investment). For poles, the FCC relied on the same RUS contract data that was the source for cable costs and low-density structure costs. For SAIs, rather than relying on records of the actual prices any company paid for this equipment, the FCC instead employed the type of "engineering judgment" it routinely dismissed as being an unreliable source for other inputs.[19]

17. For all other input categories (conduit, manholes, terminal, drop wire, and NID), there is absolutely no discussion in the FCC's *Inputs Order* as to the source and rationale for particular values. Therefore, it is impossible to tell whether these inputs should pertain to any particular LEC, let alone to carriers operating in Alaska.

18. In addition to the unit cost inputs, there are three other categories of loop inputs: (1) fill factors, (2) placement percentages, and (3) structure sharing. Unlike the unit costs inputs, for which the FCC generally favored hard information on actual purchases for at least some companies, for the most part it relied on "engineering judgment" for these categories. With respect to the first, the FCC simply adopted the engineering judgment of one or more sponsors of earlier models (HAI or BCPM) and in the process considered and rejected fill factors that

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[19] For example, the FCC opined on such engineering matters as how fast an installer could splice cables. (*Input Order,* ¶s 253-268) Examples of the FCC dismissing engineering judgment for other inputs include:

> Both the HAI and BCPM model sponsors provide default input values for copper cable costs that are based on the opinions of their respective experts, but without data that would enable us to substantiate those opinions. (*Further Notice*, ¶ 69)
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> Both the HAI and BCPM model sponsors provide default input values for fiber cable costs that are based on the opinions of their respective experts, but without data that would enable us to substantiate those opinions. (*Further Notice*, ¶ 87)
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> Both the HAI and BCPM model sponsors provide default input values for structure costs that are based on the opinions of their respective experts, but without data that would enable us to substantiate those opinions. (*Further Notice*, ¶ 105)
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> Both the HAI and BCPM model sponsors provide default input values for DLC costs that are based on the opinions of their respective experts, but without data that would enable us to substantiate those opinions. (*Further Notice*, ¶ 143)

comported with standard industry practices for providing adequate amounts of spare capacity. While the objectives of a national high-cost funding program may arguably provide a rationale from such a stark departure from standard practices, assuming unrealistically low amounts of spare capacity is incompatible with the FCC's stated objective of measuring an ILEC's actual costs.[20]

19. With respect to placement percentages, the fact that both the historical and forward-looking practices of where to place the different structure types has varied considerably across companies (e.g., carriers in the northeast where soil conditions are difficult use very little buried cable, while carriers in other parts of the country place the majority of their wires in buried facilities)[21] and across different parts of an individual company's service territory indicates that one-size-fits-all nationwide percentages may be poor indicators of a particular ILEC's placement opportunities and, therefore, the cost they will incur in deploying support structures for loop facilities.

20. The final category of loop inputs is the structure sharing percentages—the proportion of facilities such as poles and underground facilities that are used by other firms. For universal service purposes, the FCC has established nationwide inputs that by design assume a greater degree of sharing than ILECs, on average, currently experience. These assumptions are based on "predictive judgment" (¶ 245) about "the structure sharing opportunities available to a carrier operating in the most efficient manner." (¶ 247) To the extent that (1) these judgments are speculations about why current sharing practices are not "efficient" and how much more

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[20] Indeed, the *Local Competition Order*, ¶ 682, defines fill factors as "estimates of the proportion of a facility that will be 'filled' with network usage." Of course, those proportions will reflect the engineering practices an ILEC follows and not some engineering judgment on putatively more efficient practices.

[21] The FCC has noted this variation in *Further Notice*, ¶ 123.

sharing is possible and (2) such efficiencies, even if realistic, will take some time to occur, costs based on such predictive judgments will not be those an ILEC will incur, and as a result, fail to fulfill the purpose the FCC has established for TELRIC.

Switching

21. The FCC's universal service switching costs differ in two fundamental ways from its description of proper TELRIC switching costs in its filings with the Supreme Court. First, rather than being based on an examination of a particular incumbent's recent switch purchases,[22] the FCC instead used data—none more recent than 1996[23]—from samples of large ILECs in 20 states (none of them Alaska) and a smaller sample of rural companies. Second, in contrast to its explanation to the Supreme Court that the TELRIC rules do not preclude recognition of the fact that carriers buy switching equipment using a combination of "new" equipment (typically purchased at deep discounts) and "add-on" equipment (for which discounts are less generous),[24] its Synthesis Model is based on new equipment prices only.[25]

22. In its decision that approved BellSouth's application to offer long-distance service in Georgia and Louisiana, the FCC explicitly recognized that while its Synthesis Model was based on new equipment prices only,[26] it nonetheless approved switching rates that assumed a mix of new and add-on equipment. In the process, it noted that the state commissions had examined facts specific to each state.

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22 FCC Reply Brief, p. 6

23 *Inputs Order*, ¶ 299. The FCC's model adjusts these data to produce switch costs that are designed to represent costs that prevailed in 1999. (see ¶ 296 and ¶s 311-314)

24 FCC Reply Brief, p. 9, fn. 7.

25 *Inputs Order*, ¶ 315

26 *BellSouth Order*, ¶ 83

23. In addition to the fact that the Synthesis Model's switch costs were based on only new switches, purchased at deep discounts and excluded investments for add-ons to existing switches, which must be obtained at less generous discounts, the FCC's inputs have two additional problems. First, the actual costs that ACS pays for switches reflects the discount it receives from vendors, and not whatever discounts happened to be reflected in the historical data used by the FCC. Second, and more fundamental, the FCC apparently made no attempt to validate whether using the switching inputs produces investments that reasonably approximate what ILECs actually pay for digital switching. In fact, data provided in the FCC's own *Inputs Order* suggest that the switching inputs provide unrealistically low investment levels. Appendix D of that document shows that the current cost of digital switching is about 90 percent of original book investment, i.e., ILECs would have to pay about 10 percent less than they actually paid to replace their digital switching capability. In contrast, the FCC's switching cost inputs imply that such replacement would cost less than one-third of original book investment. That is, the current investment costs of installing digital switching capacity exceeds the results produced by the FCC's switching cost calculation, when used with its national default inputs, by a factor of about 2.7 (0.9/0.33), which is close to the ratio (2.9) of the switching investments produced by the ACS inputs and the FCC's defaults, respectively, shown in Table 1.

Other Elements

24. The Synthesis Model uses components that the FCC adapted from the HAI Release 5.0a Model. These components cannot produce reasonable UNE costs for two reasons. First, the FCC made it clear that because the loop was the primary determinant of cost differences for universal service purposes, precision in the estimates of the other components

was less important.[27] The situation here is analogous to obtaining estimates for the value of a house. If the purpose is to explain differences in value for different areas of a city, it would not be crucial to have a precise estimate of the price of the nails used to construct the houses. However, if the purpose was to pay a fair price for the nails, a good estimate of this component would become much more important.

25. Second, even more important is the fact that these components have fundamental calculation errors, and thus produce incorrect cost estimates for end-office switching, tandem switching, and interoffice facilities. In fact, these errors have been noted by Verizon witnesses in recent filings in New York, New Jersey, Massachusetts, Virginia, and Maryland; AT&T and Worldcom have responded by submitting several new versions of the switching and interoffice module, which fundamentally change how the tandem and interoffice costs are calculated as well as several cost inputs.[28] These corrections have not been made to the FCC's Synthesis Model.

Expenses

26. The Synthesis Model does not provide correct estimates of ACS's operating expenses, primarily because it bases these estimates on national averages for larger ILECs operating in the lower 48 states. Among other things, these averages will not capture Alaska's higher labor rates. In the case of operating expenses associated with specific plant accounts (e.g., aerial cable), the FCC calculates current expense to current investment ratios, so that it appears to have made a conceptually proper forward-looking adjustment to historical ratios.

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27 Federal Communications Commission, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, Fifth Report and Order, October 28, 1998, ¶ 75.

28 In addition, apart from end-office switching, the FCC's *Inputs Order* describes only one input—trunk port investment (¶ 377). There is no discussion of the numerous other inputs (e.g., the costs for interoffice facility electronic equipment), which were carried forward from the HAI component adopted by the FCC.

However, there are two practical problems that make the use of the FCC's expense ratios problematic. First, the FCC used aggregated data for local exchange carriers—none of them from Alaska—freely admitting that it wanted a national average for universal service purposes. Second, the FCC used *actual* price data, supplied by local exchange carriers to convert book costs to current costs. In contrast, it used nationwide estimates of input costs to calculate the value of current investment in the model. Thus, there is no guarantee that expense factors properly align with the equipment price inputs.[29]

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[29] To illustrate the issue, suppose that a company spends $12 per year to maintain poles with an average book value of $300. If the current cost of a pole is $500, then the forward-looking expense factor would be 0.024 (12/500). However, if the input price for a pole used in a model were only $400, application of the factor would underestimate the required annual maintenance. In general, (1) a mismatch between current prices used to calculate forward-looking factors and the input prices used in a model invalidate the former and (2) changing input prices requires a parallel adjustment to corresponding expense factors.

Further Affiant Sayeth Not.

Dated: July 22, 2002

Timothy J. Tardiff

Timothy J. Tardiff

Subscribed and sworn to before me on this 22 day of July, 2002.

Notary Public
My Commission expires: Sept 24, 2004