

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

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In the Matter of)
)
Federal-State Joint Board on)
Universal Service)
)
Forward-Looking Mechanism)
for High Cost Support for)
Non-Rural LECs)
_____)

CC Docket No. 96-45

CC Docket No. 97-160

OPPOSITION OF AT&T CORP.
TO PETITIONS FOR RECONSIDERATION

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Pursuant to the Commission’s *Public Notice*,¹ AT&T Corp. (“AT&T”) respectfully submits this opposition to the petitions for reconsideration of the Commission’s *Tenth Report and Order*² filed by Puerto Rico Telephone Company, Inc. (“PRTC”), Roseville Telephone Company (“Roseville”), and GTE Service Corporation (“GTE”).

INTRODUCTION AND SUMMARY

PRTC and Roseville raise meritless objections to the *Tenth Report and Order*. Specifically, PRTC claims that the adopted input values arbitrarily “rebalance[]” universal service support because the model allegedly eliminates approximately \$50 million dollars of high cost support to Puerto Rico. PRTC, however, fails to identify any defect in either the model

¹ Public Notice, *Petitions for Reconsideration and Clarification of Action in Rulemaking Proceedings*, FCC Report No. 2379, 2000 WL 16443 (F.C.C. rel. Jan. 12, 2000) (“*Public Notice*”).

² *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, Tenth Report and Order, CC Docket Nos. 96-45, 97-160, 1999 WL 993682 (F.C.C. rel. Nov. 2, 1999) (“*Tenth Report and Order*”).

platform or the adopted input values that produces this allegedly arbitrary outcome. As a result, PRTC's claim that the model generates a uniquely incorrect result for Puerto Rico is baseless.

Roseville argues that the Commission should reconsider its decision to define a non-rural local exchange carrier ("LEC") as a LEC with more than 100,000 access lines in a study area. Specifically, Roseville claims that, because it serves approximately 128,000 lines, it is more similar to rural LECs than to non-rural LECs, and classifying it as a rural carrier therefore leads to arbitrary and unreasonable reductions in the amount of support it receives. Like PRTC, however, Roseville fails to identify any defect in the model that allegedly produces a uniquely incorrect result for Roseville. Furthermore, Roseville's service area is even *less* rural than is typical for a "non-rural" LEC. Accordingly, it is reasonable for Roseville to have a cost structure that is similar to those of other non-rural carriers.

GTE raises four general challenges to the *Tenth Report and Order*. None has merit. *First*, GTE claims that it was denied a fair opportunity to participate in the Commission's years-long interactive process to establish input values. In fact, GTE and the many other parties to this proceeding had an unprecedented number of opportunities – including numerous rounds of comments, public notices, formal workshops, and informal *ex parte* meetings – to comment on any and all of the inputs to be used in the Commission's universal service cost mechanism. Furthermore, over the past several years, GTE has taken advantage of these opportunities by providing the Commission with voluminous comments on practically every input value addressed in this proceeding. Nevertheless, GTE claims that it was denied an opportunity to comment on the "final" input values adopted in the *Tenth Report and Order*. Due process, however, does not require a never-ending process in which the Commission must restart the notice and comment process each time the Commission determines that selecting some mix of the parties' proposals is preferable to endorsing one party's position in its entirety.

Second, GTE suggests that the Commission should have adopted GTE's or other incumbent LECs' self-reported company-specific input values due to alleged imperfections in the adopted input values, which generally were derived from other sources. As the Commission properly found, the company-specific input values proposed by GTE and other incumbent LECs are much *less* reliable and much more susceptible to manipulation than the values adopted by the Commission. The Commission therefore did not act arbitrarily in rejecting these company-specific values in favor of values derived from more reliable, albeit imperfect, sources, such as the NRRI Study.

Third, GTE contends that, in failing to adopt a single data source or methodology for every input, the Commission acted "inconsistently." That claim is belied by the record, which shows that the Commission consistently and conscientiously determined the challenged input according to what, in the Commission's view, was the best evidence available in the record for that input. Nothing in that approach can plausibly be deemed inconsistent or arbitrary.

Fourth, GTE claims that the selected input values systematically understate costs. The falsity of that claim is exposed not only by GTE's conspicuous silence with respect to many of the input values adopted by the Commission, but also by AT&T's showing that, in several critical respects, the adopted input values significantly *overstate* forward-looking universal service costs.

GTE also raises numerous specific challenges to the Commission's *Tenth Report and Order*. As demonstrated below, the Commission already has rejected the vast majority of these criticisms, and the few new arguments raised by GTE are equally meritless.

For the foregoing reasons, described in greater detail below, the Commission should deny the petitions for reconsideration filed by PRTC, Roseville, and GTE.

ARGUMENT

I. PRTC'S AND ROSEVILLE'S CHALLENGES TO THE TENTH REPORT AND ORDER ARE MERITLESS.

PRTC claims that the adopted input values arbitrarily “rebalance[]” universal service support because the model allegedly eliminates approximately \$50 million dollars of high cost support to Puerto Rico. PRTC at 12. PRTC, however, fails to identify any defect in either the model platform or the adopted input values that produces this allegedly arbitrary result; PRTC merely expresses its displeasure at the outcome. Furthermore, and contrary to PRTC’s suggestions, the calculated reduction in support is not caused by a flaw in the model, but rather by PRTC’s excessive embedded costs.³

Roseville argues that the Commission should reconsider its decision to define non-rural LECs as LECs with more than 100,000 access lines in a study area. Roseville at 2-13. Roseville, however, fails to identify any reason why the Commission’s definition will produce an incorrect model result for Roseville. Although Roseville may only serve 128,000 access lines, Roseville’s own data reveal that its average line density is approximately 1,500 lines per square mile – a figure that places it well above the average density of both non-rural carriers (150 persons per square mile) and rural carriers (13 persons per square mile).⁴ Indeed, analysis of Roseville’s distribution of lines by density zone from the November 2, 1999 version of the synthesis model shows that Roseville has 64 percent of its lines in the highest three density zones, and only 2 percent in the lowest three density zones. By contrast, the average non-rural LEC has 42 percent of its lines in the highest three zones, and 11 percent in the lowest three

³ See, e.g., Comments of Sprint at 305, *Application of GTE Holdings (Puerto Rico) for Transfers of Control of the Radio Licenses Held by the Puerto Rico Telephone Company*, No. LB-98-58 (Oct. 2, 1998).

⁴ The Rural Difference, Rural Task Force White Paper, at 2 (Jan. 2000) (available at (. . . continued)

zones. Accordingly, and contrary to Roseville's suggestion, Roseville should have the same cost structure as other non-rural carriers, and the model's results therefore should be just as accurate for Roseville as they are for other non-rural carriers.

II. GTE'S GENERAL CHALLENGES TO THE *TENTH REPORT AND ORDER* ARE MERITLESS.

GTE launches four general assaults on the *Tenth Report and Order*: (i) GTE claims that it was denied a fair opportunity to participate in the years-long interactive process to establish input values; (ii) GTE complains that some of the data sources relied upon by the Commission lack perfection; (iii) GTE contends that, in failing to adopt a single data source or methodology for every input, the Commission acted "inconsistently;" and (iv) GTE accuses the Commission of intentionally selecting input values that will "systematically understate" universal service costs. None of these claims has the slightest merit.

A. The Commission Did Not Violate GTE's Due Process Rights.

GTE's claim (at 4) that it had "no meaningful opportunity to file comments on the proposed input values before they were adopted" is absurd on its face. GTE and the many other parties to this proceeding had an unprecedented number of opportunities – including numerous rounds of comments, public notices, formal workshops, and informal *ex parte* meetings – to comment on any and all of the inputs to be used in the Commission's universal service cost mechanism. As the *Tenth Report and Order* makes clear, the Commission's 1997 *Further Notice*⁵ expressly informed GTE and others that questions related to the universal service cost mechanism would be divided into "platform design" issues and "input value" issues, and the

(continued . . .)

<http://www.wutc.wa.gov/rtf>).

⁵ *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, Further Notice of Proposed Rulemaking, 12 FCC Rcd. 18514 (. . . continued)

Common Carrier Bureau specifically “solicited comment and allowed interested parties the opportunity to participate in the development of the input values to be used in the forward-looking cost model.” *Tenth Report and Order*, ¶¶ 5-7.

The Bureau subsequently released a series of Public Notices to solicit additional information on input-related issues, and “issued data requests designed to acquire information that could be useful in determining the final input values.” *Id.* ¶ 7. And the Bureau “conducted a series of public workshops designed to elicit further comment from interested parties in selecting final input values,” and held “numerous *ex parte* meetings with interested parties throughout this proceeding.” *Id.* This comprehensive and thorough process culminated in the *Inputs Further Notice*, released on May 28, 1999, where the Commission again “sought comment on a *complete set* of input values for use in the model, such as the cost of switches, cables, and other network components,” and “provided a detailed description of the methodology that was used to arrive at the proposed values.” *Tenth Report and Order*, ¶ 10 (emphasis added).⁶

The Commission expressly declined to make significant modifications to the model between June 2, 1999 and November 2, 1999 (the release date of the *Tenth Report and Order*) “in order to allow parties [additional] opportunit[ies] to evaluate the model platform, the proposed inputs to the model, and issues related to the methodology for determining high-cost support.” *Id.* ¶ 20 n.50. GTE and others then filed two additional rounds of comments, and participated in additional workshops and *ex parte* meetings with the Bureau’s staff, before the Commission adopted the *Tenth Report and Order*. In short, one would be hard-pressed to

(continued . . .)
(1997) (“1997 *Further Notice*”).

⁶ *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, Further Notice of Proposed Rulemaking, CC Docket Nos. 96-45, 97-160, 1999 WL 343066 (F.C.C. rel. May 28, 1999) (“*Inputs Further Notice*”).

identify an agency proceeding in which interested parties, including GTE, had more notice and opportunity to comment.

GTE finds error in an alleged absence of opportunity to comment on the “final” input values adopted in the *Tenth Report and Order*. GTE at 5. But due process does not require the Commission to restart the notice and comment process whenever the Commission determines that selecting some mix of the parties’ proposals is preferable to endorsing one party’s position in its entirety. If that were the case, the notice and comment process would never end, and every final order would be reduced to yet another notice of proposed rulemaking. The only relevant inquiry is whether the commenters had notice that the contested issues were “on the table.” *American Medical Ass’n v. United States*, 887 F.2d 760, 768 (7th Cir. 1989). There can be no serious claim that the Commission failed to place the issue of appropriate input values “on the table.” GTE had every opportunity to state its views on that issue and to comment on the views of others, and GTE took full advantage of those opportunities. Indeed, as demonstrated below, the vast majority of criticisms contained in GTE’s current petition for reconsideration simply rehash misguided arguments that GTE repeatedly made to the Commission *prior* to the release of the *Tenth Report and Order*.

Nor can GTE credibly feign surprise that the Commission combined components of the parties’ various proposals rather than endorsing a single set of proposals “as is.” GTE at 2. The Commission expressly informed interested parties that a possible outcome “would be development of a hybrid or synthesis model that combines selected components of different models with additional components and algorithms drawn from other sources.” *Platform Order*,

¶ 17.⁷ To be sure, the Commission has made refinements to the model and inputs throughout the course of this proceeding. But that is as it should be: “the task of establishing a model to estimate forward-looking costs is a dynamic process that will need to be reviewed and adjusted periodically.” *Id.* ¶ 13.

In any event, GTE plainly has had an opportunity to comment even on the final, specific input values adopted in the *Tenth Report and Order*. Those values (and the model platform) have been available at the Commission’s website since October, 1999, and GTE has exercised its opportunity to comment on those values via its current petition for reconsideration. *See* 47 C.F.R. § 1.106.⁸

B. Where The Commission Relied On The Best Available Data, It Cannot Be Faulted For Failing To Achieve GTE’s View Of Perfection.

GTE’s petition for reconsideration describes numerous ways in which particular data upon which the Commission relied may be imprecise. *See, e.g.*, GTE at 8-21. Even if GTE’s specific criticisms had substance, its attempt to set perfection as the relevant standard is entirely misguided. First, it is unlikely that all other parties will agree with GTE as to what data constitute “perfect” data. Second, the Commission’s task here was not to choose between perfect data and imperfect data; but rather to make the most of several imperfect submissions – *i.e.*, to determine the input values that are the most reliable and accurate based on the best evidence

⁷ *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, Fifth Report and Order, 13 FCC Rcd. 21323 (1998) (“*Platform Order*”).

⁸ GTE specifically complains that it never had an opportunity to comment on the Commission’s use of two HAI inputs that affect tandem common equipment investments. GTE at 6-7. Those inputs, however, have been used in the interoffice module of the synthesis model for over a year, and in the HAI model for even longer. Furthermore, even though GTE unquestionably has an opportunity to comment on these values in its current petition for reconsideration, GTE has failed to present any evidence that the adopted values are unreasonable. *Id.*

available in the record. The Commission attempted to do that here by assessing such factors as the credibility of the evidence, the extent to which it was made public, and the availability of superior alternatives.

GTE's criticisms of the Commission's methodology ring particularly hollow in light of GTE's generally proposed alternative: blind acceptance of GTE's self-reported company-specific input values. *See, e.g., Tenth Report and Order*, ¶ 92. As AT&T has shown – and as the Commission has found – the use of such company-specific input values not only is impracticable, many of these values are much *less* reliable (and much more susceptible to manipulation) than the values adopted by the Commission. *See, e.g., id.* ¶¶ 31, 90-92, 105-114, 116, 150, 152. The Commission therefore did not act arbitrarily in rejecting these company-specific values in favor of values derived from more reliable sources, such as the NRRI Study. The relevant question is not whether the adopted values are flawless, but whether the proposed alternatives are better. Here, GTE has failed to show that its proposed alternatives are more reliable or accurate than those it challenges, and thus has failed to provide a reasonable basis on which the Commission could alter its prior determinations.

C. The Commission Did Not Act “Inconsistently” In Basing Each Input Value On The Best Available Evidence Supplied To Support That Input.

GTE alleges that the Commission “has failed to apply consistent reasoning when adopting the inputs.” GTE at 21. That claim is belied by the record. The “evidence” that GTE relies on to demonstrate the Commission's allegedly inconsistent reasoning in fact reveals that the Commission conscientiously determined each challenged input value according to what, in the Commission's view, was the best evidence available in the record for that input.

For example, GTE finds inconsistency between the Commission's rejection of the incumbent LECs' proprietary structure and cable cost proposals and the Commission's adoption of input values based on the RUS data. GTE at 22. The *Tenth Report and Order* fully answers

this claim. The Commission rejected the use of the incumbent LECs' proprietary data for numerous reasons, including the facts that: (i) "[u]nder the new federal universal service support mechanism, support is based on the estimated costs that an efficient carrier would incur to provide the supported services, rather than on the specific carrier's book costs," *Tenth Report and Order*, ¶ 31; (ii) the use of such data "would be administratively unworkable," *id.*; (iii) "averages, rather than company-specific data, are better predictors of the forward-looking costs that should be supported by the federal high-cost mechanism," *id.* ¶ 90; (iv) "the cable cost and structure cost data received in response to the structure and cable cost survey, in the *ex parte* filings, and in the comments are not verifiable," *id.* ¶ 107; (v) "the structure and cable costs reported in the survey by some parties differ significantly from those reported by the same parties in the *ex parte* filings," *id.* ¶ 107; (vi) "the cable installation costs submitted by the incumbent LECs appear to be high . . . because the loading factors employed in calculating these costs appear to be overstated," *id.* ¶ 108; and (vii) "respondents included costs that should have been excluded under the definitions employed in the survey," *id.* ¶ 110.

By contrast, the Commission determined that the RUS data underlying the NRRRI Study are "a reasonably reliable source of absolute cable costs and structure costs, and more reliable and verifiable than the company-specific data [the Commission] reviewed." *Id.* ¶ 116. This determination was based on the fact that (i) "the RUS data reflect actual costs derived from contracts between LECs and vendors," *id.*; (ii) "the RUS data reflect the costs from 171 contracts covering 57 companies operating in 27 states," and these companies "operate in areas that have different terrain, weather, and density characteristics," *id.* ¶ 117; and (iii) "the RUS data reflect costs for additions to existing plant or new construction," and the use of such costs is "consistent with the objective of the model to identify the cost today of building an entire network using current technology," *id.* ¶ 118. Further, the Commission made adjustments to the RUS data and

the related regression methodology when, in the Commission's view, such adjustments were warranted by the evidence, *see, e.g., id.* ¶¶ 134-38. In short, the Commission carefully considered two imperfect alternatives for developing cable and structure costs, and reasonably selected the method which, in the Commission's experienced opinion, was most likely to produce reliable estimates of forward-looking universal service costs. The only arbitrary outcome would have been for the Commission to blindly adopt the incumbent LECs' self-reported and unverifiable company-specific data – *i.e.*, the very approach proposed by GTE.

GTE's claim that the Commission's rejection of company-specific data is "inconsistent" with the Commission's decision to use a Bell Atlantic submission to the Maine Commission to derive the buying power adjustment used in the model is likewise meritless. As the Commission explained, it had no choice but to rely on the Bell Atlantic submission as the best evidence available in the record because "GTE and other parties challenging the use of Bell Atlantic's data have not provided any alternative data for measuring the level of market power, despite their general agreement that such market power exists." *Tenth Report and Order*, ¶ 153. The Commission recognized that, "[u]nder these circumstances, [the Commission could not] give credence to the unsupported claims that the Bell Atlantic data is not representative." *Id.*

D. The Approved Input Values Do Not Systematically Understate Costs.

GTE claims that "the Commission's selected inputs systematically understate costs." GTE at 24. That claim is belied not only by GTE's conspicuous silence with respect to many of the input values adopted by the Commission, but also by AT&T's showing that, in several critical respects, including customer location data, distribution plant mix, digital line carrier costs, and structure and cable costs, the adopted input values significantly *overstate* forward-looking universal service costs. *See* AT&T Petition for Reconsideration (Jan. 3, 2000).

III. GTE'S SPECIFIC CHALLENGES TO THE *TENTH REPORT AND ORDER* ARE MERITLESS.

A. Cable And Structure Costs.

The Commission has already rejected each of the cable and structure cost arguments GTE raises in its petition for reconsideration, *see Tenth Report and Order*, ¶¶ 83-240, and GTE provides no basis for the Commission to alter its previous conclusions. Indeed, GTE's challenges to the Commission's use of the NRRI Study largely reduce to the simple claim that the NRRI Study suffers from certain flaws, and that the Commission therefore should reject the Study in favor of the company-specific values proposed by GTE and the other the incumbent LECs. *See, e.g.*, GTE at 14-15. Whatever the flaws in the NRRI Study, however, it is vastly superior to the incumbent LECs' self-reported company-specific input proposals. *See, e.g., Tenth Report and Order*, ¶¶ 31, 90-92, 105-114, 116, 150, 152. *See also supra*.

1. *High Cost Contracts.* GTE (at 9) complains again that "high cost contracts are [improperly] removed from the NRRI data." *See Tenth Report and Order*, ¶ 119 (rejecting this claim). In fact, Gabel and Kennedy properly omitted data reflecting certain contracts because "estimates produced using the data were inconsistent with the values of such estimates suggested by a priori reasoning or evidence." *Id.* For example, Gabel and Kennedy excluded certain observations from the buried copper and structure regression analysis because "buried copper cable and structure estimates obtained from this analysis would otherwise be higher in low density areas than in higher density areas," and "such a result is contrary to the information contained in the more than 1000 observations reflected in the data from which Gabel and Kennedy developed their buried copper cable and structure regression equation." *Id.* Based on this record, the Commission properly concluded "that the removal of certain high cost observations was reasonable." *Id.* Nothing in that determination can plausibly be deemed arbitrary and capricious.

2. *Huber Regression.* GTE (at 9-10) next reasserts its claim that the Huber regression technique should not have been applied to the Gabel and Kennedy analysis. *See Tenth Report and Order*, ¶¶ 139-145 (rejecting this claim). As the Commission held, however, use of the Huber methodology is necessary to “mitigate the influence of outliers in the RUS data.” *Id.* ¶ 139. There was wide agreement among the commenters “that there are significant variances in the RUS structure and cable cost data” and that application of the Huber methodology “minimizes th[e] risk” that these outliers would “overestimate or underestimate the cost of building a local telephone network.” *Id.* ¶¶ 140-41.

Further, contrary to GTE’s implication, the Commission did not blindly apply the Huber methodology. Rather, the Commission expressly determined that “the estimates resulting from application of the Huber methodology reflect most of the information represented in nearly all of the cable and structure cost observations in the RUS data,” and that the “small minority” of excluded observations “have extremely high and extremely low values that do not represent typical costs.” *Id.* ¶ 145. These Commission findings are squarely based on the record evidence before the Commission, and nothing in GTE’s petition for reconsideration demonstrates that they are unreasonable.⁹

3. *Buying Power Adjustment.* GTE (at 11) repeats its allegation that the Commission “improperly adopted [the] buying power adjustment[] to reduce the NRRI Study cable costs.” *See Tenth Report and Order*, ¶¶ 146-163 (rejecting this claim). Specifically, GTE

⁹ GTE claims that the Commission incorrectly concluded that the Huber adjustments “symmetrically” treat observations that have high or low values. GTE at 9-10. Even if this claim identified any significant error – and it does not – it does nothing to weaken the numerous other bases that support the Commission’s decision to apply the Huber methodology. *Tenth Report and Order*, ¶¶ 139-145, ¶ 155 (“this assignment of weights to these observations has little impact on the level of material costs reflected in the cable cost estimates derived by using [the Huber] methodology”).

argues that the Commission's buying power adjustments are defective because "there is no evidence that the RUS material costs are necessarily comparable to non-rural [incumbent LEC] costs." GTE at 11. To the contrary, and as the Commission expressly found, "Gabel and Kennedy determined that Bell Atlantic's material costs for aerial copper cable are approximately 15.2 percent less than these costs for the RUS companies based on data entered into the record in a proceeding before the Maine Public Utilities Commission (the 'Maine Commission')." *Tenth Report and Order*, ¶ 146. Similarly, Gabel and Kennedy determined that "Bell Atlantic's material costs for aerial fiber cable are approximately 33.8 percent less than these costs for the RUS companies," and "that Bell Atlantic's material costs for underground copper cable are approximately 16.3 percent less than these costs for the RUS companies and 27.8 percent less for underground fiber cable." *Id.* ¶ 146; *see also id.* ¶ 152. Based on this record evidence, the Commission reasonably concluded that "a downward adjustment to the RUS cable estimates is necessary to obtain representative cable cost estimates for non-rural LECs," *id.* ¶ 150, especially in light of the fact that "GTE and other parties challenging the use of Bell Atlantic's data have not provided any alternative data for measuring the level of market power, despite their general agreement that such market power exists," *id.* ¶ 153.

4. *Alleged "Geographic Mismatch."* GTE (at 11) again argues that the Commission "ignore[d] the geographic mismatch in the RUS data that precludes a cost causative relationship." *See Tenth Report and Order*, ¶ 125 (rejecting this claim). The reality is that GTE failed to "provide[] any evidence showing that the alleged mismatch introduces an upward or downward bias on the cost estimates obtained from the regression equations." *Id.* The Commission further found that "the t-statistics for the coefficients of the variables that measure rock and soil type generally indicate that these geological variables provide a statistically significant explanation of variations in RUS companies' structure costs." *Id.*

GTE claims that these findings are “irrelevant” because, regardless of the direction of the bias, the use of the RUS data will result in “unreliable” structure costs. GTE at Zhang Aff., ¶¶ 14-15. As demonstrated above, however, the issue is not whether the Commission’s structure costs are perfectly reliable – which no statistical estimates ever are – but whether GTE has provided a superior alternative. It has not, and, given GTE’s concession that “the cost of placing structure depends on the geological conditions where placing occurs,” *id.*, the Commission reasonably used what it determined to be the best evidence available to it – the RUS data – to estimate these structure costs.

5. *“Ordinal” Values.* GTE (at 12) also repeats its claim that the NRRI Study “uses improper averages of ‘ordinal’ variables relating to soil type, rock hardness and water.” *See Tenth Report and Order*, ¶ 124 (rejecting this claim). As the Commission held, these variables “do not reflect an incorrect averaging of ordinal data,” but instead “are based on averages of data obtained from the HAI database,” and “jointly provide a statistically significant explanation of the variation in structure costs.” *Id.* The Commission properly recognized that HAI uses these values as cardinal, not ordinal values, and that “no commenter has demonstrated the degree of, or even the direction of, any [alleged] bias in the cost estimates” as a result of the use of these variables. *Id.* The Commission therefore adopted these variables as the most reasonable estimate of structure costs available in the record, *id.*, and nothing in GTE’s petition for reconsideration provides a basis for changing that conclusion.

6. *Pole Costs.* GTE’s claim (at 11, 13-14) that the Commission used “an unrepresentative data set to estimate pole costs” remains baseless. *See Tenth Report and Order*, ¶ 123 (rejecting this claim). Specifically, while the Commission recognized that the RUS sample size of 19 pole cost observations “fails to satisfy the general rule of thumb” for obtaining reliable estimates for the intercept and slope coefficients in a regression equation, the Commission

nonetheless concluded “that the estimates produced are reasonable.” *Id.* This finding was based on the fact that the average material price reported in the NRRRI Study for a 40-foot, class four pole was “close to [the Commission’s] calculations of the unweighted average material cost for a 40-foot, class four pole” and the “weighted average material cost, by line count . . . based on data submitted in response to the 1997 Data Request.” *Id.* Moreover, the Commission noted that “GTE d[id] not provide any evidence that suggests that a sample size of 19 poles for developing aerial structure costs produces biased estimates as GTE seems to allege.” *Id.*

GTE nevertheless asserts that these input values should be rejected “if they are the result of unreliable estimates, even though the exact bias may not be known.” GTE at 14. Contrary to GTE’s assertions, however, the Commission was entitled to make its determinations on the basis of the best evidence available to it. Even if that evidence is less than perfect, GTE has no legitimate complaint unless GTE can point to an alternative approach that is more reliable and accurate than that adopted by the Commission. GTE has failed to make such a showing here.¹⁰

7. *Buried Cable And Structure Separation.* GTE claims (at 14) that the Commission erred in deriving the equations for 24-gauge cable and structure from the NRRRI Study regression equations. *See Tenth Report and Order*, ¶¶ 126-31 (rejecting this claim). The Commission properly held that it was necessary to split the modified 24-gauge buried cable and structure regression equations into two separate equations, one for 24-gauge buried cable, and one for buried structure costs, because “the model requires a separate input for labor and material costs for cable and a separate input for labor and material costs for structure.” *Id.* ¶ 126. “The RUS data and buried cable and structure regression equations developed from these data, reflect labor

¹⁰ Although GTE’s proposed pole count modification has little merit, the Commission reasonably determined that this proposal should be addressed in future platform model proceedings. *Tenth Report and Order*, ¶ 222 n.465.

and material costs for buried cable and structure combined.” *Id.*

GTE’s criticism “ignore[s] the fact that reliable, alternative data for buried cable costs and buried structure costs is not available on the record.” *Id.* ¶ 127. “Given that the model requires a separate input reflecting labor and material costs for both copper and fiber cable and a separate input reflecting labor and material costs for structure” and that “the only reliable data on the record does not separate such costs between cable and structure,” the Commission reasonably determined that it was “necessary to split the regression equation.” *Id.* Furthermore, and as the Commission explained at length in the *Tenth Report and Order*, “the steps [the Commission] took to derive [the resulting] equations were not arbitrary.” *Id.* ¶¶ 128-31.

8. *Structure Costs For Density Zones 1 And 2.* GTE (at 14-15) claims yet again that it is unreasonable to use the NRRI study as a starting point for aerial structure costs and for underground and buried structure costs in density zones 1 and 2. *See Tenth Report and Order*, ¶¶ 218-24 (rejecting this claim). The Commission rejected the HAI and BCPM sponsors’ default input values for structure costs because, in the Commission’s view, “they were based upon the opinions of their respective experts and lacked supporting data that allowed [the Commission] to substantiate the[] values.” *Id.* ¶ 211. The Commission further held that the NRRI study data were the most reliable data in the record for estimating the costs of aerial structure and underground and buried structure in density zones 1 and 2. *Id.* ¶ 218. BellSouth agreed that “the values [the Commission] adopt[ed] for aerial structures are ‘fairly representative of BellSouth’s values,’” and Cincinnati Bell conceded that the Commission’s input values for underground structure “never vary from Cincinnati Bell’s actual costs by more than 15 percent.” *Id.* ¶ 222. “[G]iven this divergence of positions, the support in the record for some of [the] proposed values, and lack of back-up data to support the arguments opposing [the Commission’s] proposals,” the Commission reasonably determined that, “on balance, the structure cost estimates

. . . adopt[ed] for aerial, underground, and buried structure for density zones 1 and 2 are reasonable.” *Id.*

Furthermore, as explained above, there is nothing “inconsistent” in the Commission’s decision to use state commission data to derive structure costs for density zones 3 through 9 and to use the NRRI Study to derive structure costs for density zones 1 and 2. To the contrary, this zone-specific treatment merely reflects efforts to determine each input value according to the best evidence available in the record.¹¹

B. Digital Lines.

GTE argues that the synthesis model improperly accounts for the deployment of digital lines in distribution plant. GTE at 16. Specifically, GTE alleges that because the model does not allow cost recovery for the use of HDSL electronics, the model should not be designed to account for the pair cost reduction that results from deploying a portion of distribution plant to serve 4-wire digital DS1 circuits. *Id.* Contrary to GTE’s assertions, the Commission’s treatment of this issue was entirely consistent with fundamental forward-looking cost estimation principles. HDSL is not within the definition of service for which universal service support is provided, and thus it would be inappropriate to include electronics and other costs attributable solely to HDSL in the universal service cost estimation model. *See Platform Order*, ¶ 70 (the costs attributable to non-basic telephone services are not entitled to universal service support and should not be included in a forward-looking cost study). Loops, however, will be used to provide services within the universal service definition, and, if efficient overall network design contemplates the deployment of digital lines, then the cost model should reflect the pair cost reduction associated

¹¹ In one respect, the Commission did err. As shown in AT&T’s petition for reconsideration (at 10-11), the adopted input values overstate structure costs by improperly including manhole costs for underground distribution plant.

with aggregating the pairs used to provide digital lines with the pairs used to provide analog voice grade lines. Accordingly, the model's failure to account for HDSL-specific costs in the calculation of universal costs is entirely proper, and GTE's proposed solution for this nonexistent "flaw" – to reduce the copper loop length to 12,000 feet – therefore is completely unnecessary.¹²

C. Switch Fill Factors.

GTE (at 16) alleges that "the Commission's administrative switch fill factor of 94% is wrong because it represents an arbitrary compromise" between the BCPM and HAI proposals. Contrary to GTE's representations, the Commission did not adopt a switch fill factor of 94% because that value represented a compromise between the proposed HAI and BCPM values. Rather, the Commission adopted a value of 94% because (i) that value "has been adopted in several state universal service proceedings and is supported by the Georgetown Consulting Group, a consultant of BellSouth;" (ii) the BCPM default value of 88 percent was necessarily understated because it "included 'allowances for growth over an engineering time horizon of several years;" and (iii) the Commission's analysis of U S WEST's data "indicated that, after eliminating the observations with unreasonably low fill factors, the majority of U S WEST switches had fill factors ranging from 88 percent to 98 percent." *Id.* ¶ 332 & n.709 (internal citation omitted). Nothing in these findings can credibly be deemed arbitrary and capricious.

D. Expenses.

GTE raises several challenges to the Commission's proposed methodology for calculating expenses. Although the Commission's methodology may suffer from some imperfections, AT&T believes that the Commission's input values for expenses are reasonable.

¹² If GTE had suggested that the absence of electronics costs causes the synthesis model to fail to provide complete estimates of HDSL line costs, then GTE would have been correct. But, as described above, that is not the purpose of the synthesis model.

Indeed, as AT&T has previously demonstrated, the Commission's proposed values are consistent, on net, with those proposed by BellSouth and with the BCPM national default inputs. AT&T/MCI WorldCom August 6, 1999 Reply Comments at 37-38.

In any event, GTE's specific challenges to the Commission's expense methodology are unpersuasive. For example, GTE challenges the Commission's use of nationwide expense-to-investment ratios, claiming that an understatement of costs *could* result "if the high cost areas have a higher expense-to-investment ratio" than do the low cost areas. GTE at 17 (emphasis added). GTE, however, fails to present any evidence that this is, in fact, the case. *Id.* As a result, GTE's opposition to the Commission's use of national expense-to-investment ratios is completely baseless. Furthermore, AT&T's own analysis reveals that the low cost areas generally have *higher* expense-to-investment ratios than do high cost areas.¹³

Similarly, GTE challenges the Commission's methodology for removing "one-time" expenses, which include the costs of one-time events such as mergers or acquisitions. GTE at 19. GTE does not dispute the existence of such expenses, but instead claims that "[t]he only way to get data on such one-time expenses would be to obtain them from individual companies." *Id.* The Commission expressly rejected this argument in the *Tenth Report and Order*, finding that "using the estimated average of one-time costs over the five preceding years (1993-1997) to adjust 1998 data is a reasonable method to determine the impact of costs related to mergers and acquisitions and work force restructuring." *Tenth Report and Order*, ¶ 400. Further, whatever GTE's view of the perfect data source, the reality is that the Commission "received no additional information on publicly available data sources or other reasonable methods to estimate these

¹³ An analysis of 1998 ARMIS data for Tier 1 companies shows that for four out of the five outside plant categories, the lowest cost companies display the highest expense-to-investment ratios. For the fifth category, there was no significant relation.

one-time and non-recurring costs,” and thus reasonably adopted the most reliable methodology for estimating one-time expense that was available in the record. *Id.*; *see also id.* ¶ 399 (“Although some LEC commenters may agree that we should adjust our estimates to exclude one-time and non-recurring expenses, they provide no data or methodology to accomplish this, other than suggesting that we should get this information from the companies.”).

Finally, GTE alleges that the adopted input values improperly exclude relevant marketing expenses. GTE at 19-21. Specifically, GTE claims that the Commission should not have used 1998 line data with 1992 expenses because “[t]he ratio of primary residence to total residence and single business to total business lines is surely lower in 1998 than in 1992.” GTE at 20, Roy Aff., ¶ 20. If these ratios have declined since 1992, that fact only establishes that a greater share of marketing costs are now associated with optional services (*e.g.*, secondary lines) not covered by the universal service mechanism. Thus, the adopted input values most likely overstate the marketing cost for universal service due to inclusion of marketing/customer services costs associated with these optional services.

E. Structure Sharing.

GTE (at 21) claims that the only way for the Commission to estimate reasonable structure sharing percentages is to adopt the company-specific values proposed by the incumbent LECs. The Commission expressly rejected this argument in the *Tenth Report and Order*, finding that the incumbent LECs’ proposed values were “overly conservative,” and that the forward-looking input values to be used in the model “must estimate the structure sharing opportunities available to a carrier operating in the most-efficient manner,” not the “historical practice of the carrier.” *Tenth Report and Order*, ¶ 247. The Commission therefore held that it had to use its “predictive judgment” to determine the structure sharing opportunities that would be available to an efficient carrier. *Id.* ¶ 245. The Commission then proceeded to develop values that (i) are consistent with

those proposed by incumbent LEC SBC; (ii) are consistent with those developed by the Washington Utilities and Transportation Commission; and (ii) fall within the range of default values originally proposed by the HAI and BCPM sponsors. *Id.* ¶ 249. GTE does not and cannot show that these well-supported determinations were in any way arbitrary or unreasonable.

F. Channel Equivalent Line Counts.

GTE argues that the Commission “rejected arbitrarily” U S WEST’s contention that “pair counts are a better predictor of costs than channel equivalents.” GTE at 24. In the *Tenth Report and Order*, however, the Commission carefully considered U S WEST’s proposal to count special lines as physical pairs, and rejected that proposal for legitimate reasons. *Tenth Report and Order*, ¶¶ 392-93. *First*, the Commission determined that, under U S WEST’s suggested alternative, a residential customer with two lines would cause the same amount of overhead expenses as a special access customer with one DS1 line. *Id.* ¶ 393. The Commission properly found that such a result would be unreasonable because more overhead expenses would be devoted to winning and keeping the DS1 customer with one line than the residential customer with two lines. *Id.* *Second*, the Commission found that “more overhead expenses are related to customers using higher capacity services than those using lower capacity services.” *Id.* In light of these determinations, which GTE does not challenge, the Commission’s decision to reject U S WEST’s proposed approach can hardly be deemed arbitrary.

G. Distribution Fill Factors.

GTE’s request (at 24-25) that the Commission base distribution fill factors on ultimate demand rather than current demand is simply a rehash of arguments that GTE made in its comments and that the Commission properly rejected. Specifically, the Commission held that “correctly forecasting ultimate demand is a speculative exercise,” and that, “[g]iven this uncertainty, . . . basing the fill factors on current demand rather than ultimate demand is more

reasonable because it is less likely to result in excess capacity, which would increase the model's cost estimates to levels higher than an efficient firm's costs and could potentially result in excessive universal service support payments." *Tenth Report and Order*, ¶ 200. The Commission further held that, "contrary to GTE's inference, current demand as [the Commission] define[s] it includes an amount of excess capacity to accommodate short-term growth," and that GTE "has not provided any evidence that demonstrates that the level of excess capacity to accommodate short-term growth is unreasonable." *Id.* ¶ 201. The Commission also specifically rejected GTE's unsupported claim that unless fill factors are sized down to allow for "ultimate demand" there will be serious service delays and consumers will suffer. *Id.*

As AT&T has shown, the Commission's determinations were more than reasonable. AT&T/MCI WorldCom August 6, 1999 Reply Comments at 19-21. GTE has provided no support for its dire predictions, and its proposed fill factors are flatly inconsistent with the competitive market standard required by the Commission's forward-looking, economic cost standard. *Id.* Competitive market forces would never allow a carrier to maintain the 10-20 years of idle capacity that is the historical practice of some incumbent LECs, and the incumbent LECs' own economists have recognized that existing capacity levels are above efficient levels. *Id.* Furthermore, sizing currently-modeled plant to ultimate demand is inappropriate because today's ratepayers should not have to bear the additional costs of serving tomorrow's customers.

H. Line-To-Trunk Ratios.

GTE argues that the Commission was inconsistent in adopting a 6:1 line-to-trunk ratio for the local switching portion of the network while simultaneously adopting a 10:1 or 14:1 line-to-trunk ratio for the tandem and interoffice portions of the network. GTE at 25, Murphy Aff., ¶¶ 30-31. GTE is misinformed. The FCC's model, as adopted, does not reflect any particular line-to-trunk ratio (including 6:1) at the local switch. Instead, the model uses an entirely

different data source for this implicit ratio – embedded investment data – which, accordingly to Ameritech, likely reflects a 12:1 line-to-trunk ratio. Thus, the ratio implicit in the synthesis model's local switch costs is entirely consistent with the 10:1 to 14:1 ratio explicitly engineered by the model for interoffice facilities. Furthermore, GTE points to no traffic engineering principles that would lead one to conclude that the service quality from a network engineered in this manner is inadequate.

CONCLUSION

For the foregoing reasons, the Commission should deny the petitions for reconsideration filed by PRTC, Roseville, and GTE.

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February 7, 2000

CERTIFICATE OF SERVICE

I, Rudolph M. Kammerer, do hereby certify that on this 7th day of February, 2000, a copy of the foregoing "Opposition Of AT&T Corp. To Petitions for Reconsideration" was served via U.S. first class mail, postage prepaid, to the parties listed on the attached Service List.

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