Unfortunately, the CALLS members participating in this proceeding do not appear to be interested in allowing parties the opportunity to examine the reasonableness of the current SLC cap -- or its scheduled increase. The ability of parties to review the ILECs' cost estimates is severely impaired because of the ILECs' collective failure to provide such basic information as the computer models, formulas, and inputs used to obtain the cost estimates.

The FCC must not allow the CALLS-proposed SLC increases to continue based upon studies for which other parties have been denied a meaningful opportunity to review. Allowing CALLS members to perpetuate the charade that the SLC is less than the economic cost of service would be a disservice to all consumers and would reinforce the suspicions that CALLS is nothing more than an illicit backroom deal that unjustly benefits CALLS members at the expense of the American public.[14] In the remaining sections of Section 3 of our submission we describe how the ILEC's cost filings do not comport with the Commission's costing standards and therefore cannot be found to be supportive of the proposed increase in the SLC.

[14] In a separate statement attached to the CALLS Order FCC Commissioner Harold Furchtgott-Roth describes the process by which the original CALLS proposal was modified as "fundamentally inconsistent with principles of neutrality and transparency that must govern agency decisionmaking." Commissioner Furchtgott-Roth points to the fact that the FCC "held a series of meetings with a select group of some – but by no means all – of the parties with interests in this proceeding" to negotiate a compromise, and that "the substance of what was discussed at these meetings was not publicly disclosed." "More dismaying" is the fact that, in return for certain modifications to the CALLS proposal, the FCC furtively agreed to resolve two issues that are unrelated to access charge reform in favor of CALLS members. "To brief the Commissioners and their staff regarding the outcome of the CALLS negotiations, the Bureau distributed briefing sheets outlining the incumbent carriers' concerns and making plain that the depreciation and special access matters had become a key part of the CALLS package. Nothing in this order, however, tells the public of this connection between this order and these other dockets." According to Furchtgott-Roth "it was entirely improper for the Commission to have permitted the unrelated matters of depreciation and special access become part of the negotiations."

FCC Commissioner Gloria Tristani pointed to the "numerous pro-consumer commitments" and their potential positive impact on consumers as a significant reason why she voted to approve the CALLS proposal. However, in a speech less than two weeks after CALLS was released she expressed concern that the long distance carriers were not honoring their commitments to pass through access charge savings to consumers because AT&T had already announced that it was raising its per-minute long distance rates. According to Commissioner Tristani, "at a minimum, this proposed increase appeared to violate the spirit of the reform package, which was touted as reducing rates for consumers." As a result she suggested "it might be advisable to put CALLS on hold until we get more satisfactory answers." See: http://www.fcc.gov/Speeches/Tristani/2000/spgt007.html

Unfortunately, consumers have not received many satisfactory answers since the CALLS Order was released. A recent Wall Street Journal article notes that the nation's three largest long distance carriers have just recently introduced their latest round of rate increases. See http://interactive.wsj.com/archive/retrieve.cgi?id=SB100993206967148728O.djm

3.2 The Cost Models Submitted by the ILECs for this Proceeding are not Forward-Looking Cost Models Based on Economic Costs and Verifiable Assumptions

While there are countless ways to construct a cost model, there are two basic principles that must be adhered to in order to properly model an efficient forward-looking telecommunications network. First, the study should be based upon economic rather than embedded costs. As stated in the Commission's CALLS order: "For this proceeding, the price cap [local exchange carriers (LECs)] have agreed to provide, and we will examine, forward-looking cost information associated with the provision of retail voice grade access to the public switched telephone network."[15]

Second, there must be full disclosure of all assumptions, algorithms, and input data.[16] The study assumptions must be reasonable and well documented so that they may be verified. If these basic conditions are not met the model cannot be relied upon to provide reasonable results. Even the most precise model can provide erroneous cost estimates if the underlying inputs are inherently flawed or cannot be verified.[17]

Unfortunately, the cost submissions provided by CALLS members in this proceeding fail to satisfy these basic conditions.[18] Rather than providing accurate forward-looking cost estimates and detailed explanations of how these figures were calculated, these cost submissions are, at best, nothing more than a laundry list of unsupported figures. As a whole, the studies reviewed by NASUCA represent a collection of questionable methodologies and entirely unsupported assumptions. Each submission is more appropriately described as a "Black Box" that raises many more questions than it answers.[19] The FCC cannot justify the current SLC cap; much less authorize any

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[15] See CALLS Order, Paragraph 83.

[16] When reviewing forward-looking economic cost studies the FCC has explicitly stated that the model must be well documented, open to inspection, and that all supporting information must be fully disclosed. See, for example, DA 98-217 at Page 3: "Please provide supporting information that includes a detailed description of the proposed cost study and all underlying data, formula, computations, and software associated with the study. The documentation should include a complete listing of algorithms and formulas used in the study and in any pre-processing modules...if the proposal contains changes to the algorithms or inputs of a model under consideration by the Commission, however, such changes must be clearly documented." These principles are also supported by a number of state regulatory decisions. See, for example, Washington Utilities and Transportation Commission Docket No.UT-960369-Eighth Supplemental Order at ¶¶24-25, Connecticut Department of Public Utility Control Docket No. 95-06-17 released December 20, 1995 at Page 77, and Public Utilities Commission of Nevada Docket No. 96-9035 at ¶¶53-54.

[17] "GIGO" or Garbage In Garbage Out is a computer programming term that best describes this situation. A program or model's results are only as good as the information used to run the model.

[18] Due to the short time schedule set for this proceeding NASUCA limited its cost study analysis to the submissions of the RBOCs - BellSouth, Qwest, SBC, and Verizon. These firms were chosen because as a group they serve the vast majority of access lines in the United States.

increases to the cap, based upon the evidence at hand. To do so would be irresponsible and an abrogation of the FCC's responsibility to ensure that rates be just and reasonable.

3.3 The Cost Models Used for this Proceeding and Determining Increases in the Subscriber Line Charge Cap Should be Based on Forward-Looking Economic Costs, and not Embedded Cost Methodologies as Proposed by the ILECs

Although the Regional Bell Operating Companies ("RBOCs") claim that their studies are forward-looking, nothing could be further from the truth. Rather these studies are embedded cost studies re-evaluated using current prices.

There are numerous examples in these submissions indicating that the models are designed to recover embedded costs. For example, Southwestern Bell Company (SBC) states "plant investments are computed for each component reflecting the mix of equipment used today."[20] SBC does not even attempt to explain why it believes its embedded plant represents the technological and design requirements of an efficient forward-looking network.[21] It is clear that SBC's studies are not forward-looking because they are based upon existing plant rather than the most efficient technology available.[22]

The FCC has been very clear that the existing plant mix should not be used in a forward-looking cost study:

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[19] Sprint relied upon the FCC's cost model. However, Sprint performed a sensitivity analysis, but did not disclose information concerning the derivation of the new inputs. Thus, NASUCA has been unable to audit the results to establish the reasonableness of the proposed changes.

[20] SBC Study, Attachment 1 at Pages 7 and 14. NASUCA cannot be certain that the remaining cost studies it has reviewed are designed to recover embedded costs because so little useful information has been disclosed. However, the limited documentation provided by BellSouth, Qwest, and Verizon suggests that this may be the case.

[21] BellSouth's Cost Calculator applies the embedded relationship between cable and structure to determine the cost of poles, conduit, and trenching. No attempt is made to determine the forward-looking cost of these structures. See BellSouth cost submission at Page 4. Verizon relies on its embedded network design. It lays out distribution and feeder plant right on top of existing plant. No effort is made to design the lowest cost network configuration, given the existing wire center locations. Verizon Cost submission, Attachment D, Page 5.QWEST asserts that it builds cable based on user-supplied inputs. However, it never provides evidence to confirm that these inputs are forward-looking. QWEST cost submission, Page 3.

[22] Providing embedded cost information is in direct conflict with the FCC's order initiating this proceeding. In DA-01-2163 the FCC explicitly stated, "the price cap [local exchange carriers (LECs)] have agreed to provide, and we will examine, ***forward-looking cost information*** associated with the provision of retail voice grade access to the public switched telephone network." (emphasis added) In failing to provide forward-looking cost information the RBOCs have assured that the FCC cannot determine that an increase to the SLC cap is justified.

> "[e]xisting incumbent LEC plant is not likely to reflect forward-looking technology or design choices. Instead, incumbent LECs' existing plant will tend to reflect choices made at a time when different technology options existed or when the relative cost of equipment to labor may have been different than it is today."[23]

What this example illustrates is that SBC was correct to assert that its "study is not designed to establish the correct loop cost, rather it is to document the cost of providing such a service."[24] Just like the other ILECs, SBC has incorrectly presented a reproduction cost study, something that has been explicitly rejected by the FCC, rather than a replacement cost study as required by FCC costing principles. That is, the ILECs have proposed a methodology that the FCC finds to be economically meaningless. Furthermore, the Commission recently argued before the Supreme Court that the reproduction methodology was "wooden and long-discredited". The Commission added that the cost of replicating an incumbent's existing facilities would produce rates "'that reflect inefficient or obsolete network design and technology.'"[25]

The FCC should not allow CALLS members to disregard its costing standards when attempting to support an increase in the SLC cap. To do so would unjustly enrich these firms at the expense of the American public.

3.4 The Cost Models Supplied by the ILECs in this Proceeding do not Provide Full Disclosure of Model Inputs and Assumptions

Reviewing a cost study designed to estimate the cost of providing an efficient telecommunications network is an arduous task even under the best of circumstances. Due to the scheduling and procedural constraints of this proceeding, the difficulty of this task is even greater.[26] However, one does not have to delve too far into the ILECs cost submissions to discover fatal flaws. None of the ILECs provided its cost model or the inputs used to run the models. This alone is reason for the FCC to completely reject these submissions and deny attempts to further inflate the SLC cap. SBC claims that it

[23] Inputs Order at ¶351 citing Platform Order, 12 FCC Rcd at 21350, Paragraph 66.

[24] SBC Study, Executive Summary, at Page 4.

[25] See: FCC Brief in Verizon Communications Inc. et al., Petitioners v. FCC, in the Supreme Court of the United States, 00-511, 00-555, 00-587, 00-590 and 00-602, April 2001, at page 28, quoting Local Competition Order at ¶684.

[26] One must also consider the magnitude of the auditing task presented by this proceeding. For example, the FCC has taken over seven months to review the cost studies submitted by Verizon in Virginia. That proceeding encompasses a single company, a single study area, and a single set of inputs. Conversely, in this proceeding parties have less than three months to complete a similar task involving more than 10 companies and 181 study areas. Verizon alone has indicated the use of three distinct cost models. Further exacerbating difficulties is the fact that the ILEC cost submissions rely on state specific inputs, each of which, rightly, must be verified.

did not provide the actual inputs used in the model because they are proprietary and competitively sensitive.[27] This excuse has no merit. Regulated firms regularly provide commercially sensitive proprietary information to regulators and other neutral parties under standard proprietary agreements.[28] There is no reason why SBC or any other firm could not have provided its cost model and inputs under such an agreement.

The ILECs' conscious decisions to withhold cost models and inputs makes it impossible for parties to validate the accuracy of these models and because of this denial of due process it would be improper for the FCC to conclude that these cost estimates accurately reflect the operations of an efficient firm.[29] The FCC cannot ignore the importance of using reasonable model inputs in this proceeding. The FCC must not allow these companies to avoid scrutiny by deliberately failing to supply interested parties with any useful information. To do so would run counter to previous decisions of the FCC and various state commissions and by itself destroy the credibility of this proceeding.

Even without revealing the actual inputs used in their studies, the RBOCs have provided a second irrefutable reason for the FCC to reject these submissions. This is because the RBOCs cost models rely upon state specific inputs.[30] The FCC has explicitly rejected the use of state specific inputs in the Universal Service Proceeding because they are administratively unmanageable and inappropriate.

> "We find that using company-specific data for federal universal service support purposes would be administratively unmanageable and inappropriate. Moreover, we find that averages, rather than company-specific data, are better predictors of the forward-looking costs that should be supported by the federal high-cost mechanism. Furthermore, we note that we are not attempting to identify any particular company's cost of providing the supported services. We are estimating the costs that an efficient provider would incur in providing the supported services."[31]

[27] SBC Study, at Page 4.

[28] See for example, DA 01-2828, the order governing the use of proprietary wire center line counts in this proceeding. In this proceeding, NASUCA received proprietary line count information pursuant to the Commission's Interim Protective Order.

[29] For example, while SBC allegedly "utilized a computer model to calculate the forward-looking cost of the loops and ports that comprise residential voice grade telephone service" it did not provide a breakdown of its cost estimates by loop and port. SBC could have easily provided this information allowing parties to compare its alleged port costs with the port rates established by the FCC in In the Matter of Federal-State Joint Board on Universal Service CC Docket No. 96-45 and Forward-Looking Mechanism for High Cost Support for Non-Rural LECs CC Docket No. 97-160. Tenth Report and Order, ("Inputs Order") released November 2, 1999.

[30] See, for example, SBC study at Attachment 1, Page 7, Verizon study at Attachment D, Page 2, and BellSouth at 4. NASUCA was unable to identify the use of such inputs by Qwest because so little information was provided in its cost submission.

[31] Inputs Order at 90. (footnotes omitted).

The FCC rejected company specific inputs because of the possibility that they could not be verified and that the inputs may be overstated.[32] To overcome these problems the inputs chosen for the universal service studies were generally derived from publicly available data sets. The conclusions drawn by the FCC in the Inputs Order are equally applicable here. The FCC must continue to rely upon cost model inputs that are both reasonable and verifiable.

Elsewhere in this document we use state specific TELRIC rates to judge the reasonableness of the ILECs' cost studies (See Table 1 in Section 3.7). Use of the state specific TELRIC prices is distinguishable from the FCC's decision in the USF docket because the state commissions have spent years evaluating the reasonableness of the inputs to the TELRIC studies. The FCC rejected ILEC sponsored, state specific inputs in the USF proceeding because it would be administratively unmanageable for the FCC to conduct a thorough review of the company-specific data.

3.5 It is Appropriate to Compare the Cost Information Provided by the ILECs with Reasonable Forward-Looking Cost Estimates

The 1996 Telecommunications Act requires that states set cost-based prices for unbundled network elements. To help the states accomplish this goal, the FCC concluded that the state commissions should set prices for UNEs following a forward-looking economic cost methodology. In the Local Competition Order the FCC described its forward-looking cost-based pricing standard in detail. The FCC concluded that the price of a network element should include the forward-looking costs that can be attributed directly to the provision of that element, including a reasonable return on investment, plus a reasonable share of the forward-looking joint and common costs.[33]

The connection between the UNE loop and port rates established by state commissions and the cost information requested in this proceeding is easy to make because there is a direct, one-to-one relationship between the facilities underlying the aforementioned UNEs and the facilities in question in this proceeding.[34] However, the RBOCs have attempted to drive a wedge between the cost of providing loops and ports as UNEs and the cost information they have provided for this docket.

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[32] In this Proceeding, Verizon claims at Page 9 of Attachment D of its cost submission that "...investments are then made state specific, where appropriate, by applying a factor to the element to gross them up..." Does this mean that state specific values are only appropriate if they are greater than average costs? Based on the scant information provided in Verizon's cost submission this question cannot be answered.

[33] Local Competition Order at 673.

[34] "The costs for residential voice grade service are derived primarily from the loop and port cost components" of Verizon's models. See Verizon Study, Attachment D, Page 1.

For example, SBC argues that the Commission should remember that this is not a ratemaking proceeding"[35] while BellSouth argues that the cost information it has provided should not be considered with respect to UNEs, universal service, or for any purpose other than verifying the increase to the SLC cap.[36] These arguments are clearly intended to conceal the fact that when compared to reasonable cost-based rates the RBOCs' cost estimates are unreasonable and do not justify an increase to the SLC cap.

Verizon also attempts to cloud the issue by separating access charges from loop and port costs, and by implying that the cost review taking place in this proceeding is unnecessary. Verizon argues that even though "the per-line costs in these studies are higher in some cases that the Price Cap CMT per-line and lower in others...in neither case should they be used to change the scheduled increases in the SLC caps" because ..."the price cap system is not based on cost."[37] Verizon is essentially arguing that the FCC should ignore all of the cost data provided in this proceeding and simply authorize an increase to the SLC cap. This argument is utterly ridiculous; it fails to acknowledge that the sole purpose of this proceeding is to examine "forward-looking cost information...to address whether an increase in the SLC cap above $5.00 is warranted."[38]

Additionally, Verizon claims that the Court of Appeals has endorsed the FCC's previous "rejection of arguments that the Commission should have used forward-looking costs to restructure access charges."[39] However, Verizon fails to cite the latter portions of this decision where the Court of Appeals states, "the FCC accordingly has delayed conducting a forward-looking cost-study because of time constraints and the technical uncertainty involved in carrying out a reliable cost study" and that the Court was "further assured [in supporting this conclusion] by the FCC's promise to conduct a cost-study before the SLC cap is set to rise over five dollars."[40] Therefore, contrary to Verizon's argument, a full reading of the court's decision confirms the fact that the FCC is obligated to review forward-looking cost studies in this proceeding to determine if it is appropriate to approve the scheduled increase to the SLC cap.

Not only are Verizon's attempts to sever the ties between access charges and the underlying costs misleading, but Verizon also completely ignores the fact that the FCC and many state commissions rely on economic cost data to judge the reasonableness of rates in regulated environments. Furthermore, Verizon fails to acknowledge that the

[35] SBC, Executive Summary, Page 3.

[36] BellSouth Study, Page 1.

[37] Verizon Study, Page 6.

[38] CALLS Order at ¶83.

[39] Verizon Study, Page 6.

[40] Texas Office of Public Utility Counsel vs. FCC. US Court of Appeals, Fifth Circuit, Case No. 00-60434

courts have upheld the FCC's reliance upon forward-looking economic cost data to establish mechanisms to encourage economic efficiency.[41]

3.6 The States have Established UNE Rates that Provide a Reasonable Benchmark for Forward-Looking Cost Estimates

The UNE loop and port rates established by the states provide reasonable forward-looking cost estimates because they are the result of thorough proceedings governed by the FCC's rules. When outlining its forward-looking cost methodology the FCC noted:

> "that incumbent LECs have greater access to the cost information necessary to calculate the incremental cost of the unbundled elements of the network. Given this asymmetric access to cost data, we find that incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking cost that it seeks to recover in the prices of interconnection and unbundled network elements."[42]

As a result the state commissions have conducted lengthy, often multi-phased, investigations into the forward-looking cost of providing UNEs involving "extensive workshops, hearings, and other types of discovery."[43] The veracity of these proceedings has been supported by the ILECs and verified by the FCC in a number of 271 proceedings.[44] Therefore, contrary to what the ILECs have argued, it is appropriate to

[41] The Eight Circuit Court states: "The Seventh Circuit, for example, explained '[I]t is current and anticipated cost, rather than historical cost that is relevant to business decisions to enter markets . . . historical costs associated with the plant already in place are essentially irrelevant to this decision since those costs are 'sunk' and unavoidable and are unaffected by the new production decision.'" MCI Communications v. American Telegraph & Telephone Company, 708 F.2d 1081, 1116-17 (7th Cir. 1983), cert. denied, 464 U.S. 891 (1983). Here, the FCC's use of a forward-looking cost methodology was reasonable. The FCC sought comment on the use of forward-looking costs and concluded that forward-looking costs would best ensure efficient investment decisions and competitive entry. Iowa Utilities Board vs. FCC, US Court of Appeals, Eighth Circuit, Case No. 96-3321 (and consolidated cases) (emphasis added), July 21, 2000, Page 10.

[42] Local Competition First Report and Order, CC Docket No. 96-98, August 8, 1996, Paragraph 680.

[43] In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, released January 22, 2001, at Paragraph 49. ("Kansas 271").

[44] RBOCs in seven states have been granted permission to provide in region long distance service after showing that they have complied with the 14-point checklist outlined in Section 271 of the 1996 Telecommunications Act. By requesting approval of its 271 application in a given state an RBOC indicates that it believes appropriate cost based UNE rates have been established by the state regulatory board. In approving a 271 application the FCC confirms that the state commission has fulfilled its duty to conduct a thorough proceeding and has established cost based UNE rates.

judge the accuracy of their forward-looking cost estimates by comparing them to other reasonable cost estimates. The FCC has relied upon such comparisons in the past and it should continue to do so in this proceeding.[45]

3.7 The ILECs' Cost Estimates Overstate the Interstate Portion of Loop and Port Costs, and thus cannot be Used to Justify Increases in the Subscriber Line Charge

It is evident that the ILECs hope the FCC will base its decision to raise the SLC cap on cost studies that wholeheartedly deviate from the cost methodology espoused by the FCC and sound economic theory. These firms have also gone to great lengths to convince the FCC that it would be improper to compare the results of their models to UNE rates or to model runs from any other cost-based proceeding. Obviously, the ILECs would prefer to have their cost estimates judged in a vacuum because they are upwardly biased and do not provide accurate cost estimates by any reasonable measure.

The cost comparisons depicted in Table 1 and Appendix C provide overwhelming evidence that the cost estimates provided by the ILECs in this proceeding cannot be relied upon to verify the scheduled increase to the SLC cap.[46] On average, the ILEC cost estimates overstate the interstate portion of monthly loop and port costs by approximately $2.32 per month or more than 50% of the average cost of interstate access.[47] This suggests that the ILECs have overstated total (interstate and intrastate) UNE loop and port costs by an average of $8.40 per month.

Verizon's New Jersey numbers illustrate the disparity between the submissions in this proceeding and in other dockets. In this docket, the Company contends that the forward-looking cost of the loop and port is $29.31. Verizon Submission, Appendix D. In its 271 Application, the Company reports that the TELRIC cost of the UNE platform is $12.89. The UNE platform includes both the port and loop, as well as usage. Verizon characterizes the $12.89 value UNE platform as a "reasonable" TELRIC price for the unbundled network element. Application by Verizon New Jersey for Authorization to Provide In-Region Interlata Services in New Jersey, CC Docket No. 01-324, December 20, 2001, pp. 94, 98. In order to match the $29.31 value filed in this proceeding with the $12.89 that Verizon supports in its 271 application, the Company must believe that retail costs are approximately $17 per month higher than UNE costs.

[45] See for example, In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Arkansas and Missouri, CC Docket No. 01-194, released November 16, 2001, at Paragraph 52. ("Arkansas 271").

[46] The State TELRIC SLC rates in Table 1 were derived from "A Survey of Unbundled Network Element Prices in the US," January 1, 2002, Billy Jack Gregg, Consumer Advocate, W.VA., http://www.cad.state.wv.us/Intro%20to%20Matrix%2002.htm

[47] In section 4.6, NASUCA has provided evidence indicating that the marketing costs associated with residential and single-line business exchange service are insignificant at approximately $0.09 per month. Therefore, the addition of marketing costs (assuming they are accurately measured by the ILECs) cannot

Appendix C also indicates that the current SLC cap of $5 allows for interstate access costs to be over-recovered in more than half of the 42 study areas in the comparison. As a result, consumers are charged more than $660 million dollars per year in excess of what the SLC is intended to recover. If the SLC cap is raised to $6, the inefficiency of CALLS will result in consumers being overcharged in excess of $1.5 billion dollars per year.[48]

What is particularly alarming about these conclusions is that the existing UNE loop and port rates established by the state commissions very likely overstate the actual forward-looking cost of providing voice grade residential and single-line business connection to the network. This is because UNE rates are based upon network configurations that assume more expensive materials for the provision of advanced services, such as additional fiber optic cables and universal digital line carrier systems, that are not necessary for basic voice services. Therefore, without such assumptions, the cost of providing a voice only network would result in lower UNE loop and port rates, further widening the gap between CALLS and efficient cost recovery.[49]

Table 1 -- Bell Operating Company CMT Revenue and Forward-Looking Cost Estimates

Holding Company	Study Area	Price Cap CMT Per Line	SLC from Carrier Cost Studies**	SLC based on TELRIC Costs	NASUCA Synthesis Model SLC Cost
Verizon	Washington DC	$ 3.81	$4.38-$6.05	$ 3.75	$ 3.07
Verizon	Maryland	$ 5.68	$5.58-$7.08	$ 4.74	$ 4.22
Verizon	Virginia	$ 6.53	$5.95-$7.55	$ 4.45	$ 4.37
Verizon	West Virginia	$ 8.21	$9.96-$12.39	$ 7.18	$ 7.33
Verizon	New Jersey	$ 6.21	$5.92-$7.33	$ 3.32	$ 3.97
Verizon	Pennsylvania	$ 6.00	$6.65-$8.45	$ 4.61	$ 4.28
Verizon	Delaware	$ 6.41	$4.83-$6.01	$ 4.29	$ 4.48
Verizon	New York/N. England	$ 6.41	$4.97-$6.24	$ 4.86	$ 4.37
SBC	SWBT-AR	$ 5.67	$ 7.33	$ 4.63	$ 5.97
SBC	SWBT-KS	$ 5.27	$ 8.39	$ 4.49	$ 4.92
SBC	SWBT-MO	$ 5.10	$ 6.66	$ 4.98	$ 4.95
SBC	SWBT-OK	$ 4.71	$ 7.86	$ 5.18	$ 5.26

be contemplated as a reasonable explanation for the ILEC cost estimates to be so high in light of the fact that the FCC estimate that the economic costs of marketing are $0.09 per month.

[48] This estimate includes the over-payments made by all customers, including residential, single-line business, and multi-line business customers.

[49] We note that the FCC has long-recognized that the cost of providing voice services is less than the cost of constructing a network for advanced telecommunications services. In the Matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, FCC 98-279, October 28, 1998, Paragraph 70.

Holding Company	Study Area	Price Cap CMT Per Line	SLC from Carrier Cost Studies**	SLC based on TELRIC Costs	NASUCA Synthesis Model SLC Cost
SBC	SWBT-TX	$ 5.37	$ 7.86	$ 4.65	$ 4.26
SBC	Pacific Bell - CA	$ 4.41	$ 5.97	$ 4.04	$ 3.61
SBC	Nevada Bell- NV	$ 6.05	$ 7.15	$ 5.28	$ 4.81
SBC	SNET-CT	$ 5.71	$ 5.71	$ 4.55	$ 4.74
SBC	Ameritech-IL	$ 4.47	$ 5.96	$ 4.02	$ 4.03
SBC	Ameritech-IN	$ 5.53	$ 6.14	$ 3.54	$ 4.59
SBC	Ameritech-MI	$ 5.32	$ 6.85	$ 3.45	$ 4.67
SBC	Ameritech-OH	$ 5.37	$ 6.01	$ 3.04	$ 4.26
SBC	Ameritech-WI	$ 5.07	$ 6.23	$ 3.96	$ 4.29
BellSouth	Alabama	$ 7.84	$ 7.52	$ 5.79	$ 6.52
BellSouth	Florida	$ 7.84	$ 6.06	$ 4.73	$ 4.26
BellSouth	Georgia	$ 7.84	$ 6.42	$ 5.10	$ 4.70
BellSouth	Kentucky	$ 7.84	$ 8.25	$ 5.08	$ 6.45
BellSouth	Louisiana	$ 7.84	$ 7.64	$ 5.63	$ 5.60
BellSouth	Mississippi	$ 7.84	$ 9.88	$ 6.45	$ 8.46
BellSouth	North Carolina	$ 7.84	$ 6.82	$ 4.99	$ 4.81
BellSouth	South Carolina	$ 7.84	$ 7.51	$ 5.37	$ 5.61
BellSouth	Tennessee	$ 7.84	$ 6.83	$ 4.74	$ 5.70
Average		$ 7.84	$ 7.01	$ 5.14	$ 5.28
QWEST	Arizona	$ 7.27	$ 6.84	$ 6.54	$ 4.16
QWEST	Colorado	$ 6.64	$ 6.16	$ 6.13	$ 4.64
QWEST	Idaho-South	$ 8.48	$ 7.80	$ 7.36	$ 5.67
QWEST	Iowa	$ 7.08	$ 6.77	$ 5.96	$ 4.73
QWEST	Minnesota	$ 6.66	$ 6.36	$ 5.35	$ 4.39
QWEST	Montana	$ 10.21	$ 9.72	$ 7.77	$ 6.45
QWEST	Nebraska	$ 7.29	$ 6.93	$ 5.33	$ 5.26
QWEST	New Mexico	$ 8.24	$ 7.74	$ 6.19	$ 5.32
QWEST	North Dakota	$ 8.45	$ 7.98	$ 5.64	$ 4.69
QWEST	Oregon	$ 7.60	$ 7.17	$ 4.76	$ 4.71
QWEST	South Dakota	$ 9.00	$ 8.59	$ 6.44	$ 5.59
QWEST	Utah	$ 5.45	$ 5.04	$ 4.99	$ 3.92
QWEST	Washington	$ 5.64	$ 5.26	$ 4.96	$ 4.26
QWEST	Wyoming	$ 10.91	$ 10.29	$ 7.53	$ 7.16

** Verizon did not file SLC costs. Instead, Verizon filed forward-looking loop and port costs. These costs were translated into SLC costs. The upper limit equals 25 percent of the filed amounts. The lower limit equals the filed costs times the ratio of SLC retail cost divided by total retail cost.

4 Important Assumptions in the Studies Submitted by the ILECs are Flawed

Despite the lack of cost models and essential model inputs NASUCA was able to identify a number of significant methodological problems, unanswered questions, and inconsistencies that further undermine the value of the ILECs' cost studies. A brief sample of these issues, categorized by subject matter, follows.[50]

4.1 Capital Cost and Depreciation Estimates are not Transparently Presented in the Cost Studies Submitted by the ILECs

The capital costs assumed within a cost study have a significant impact on the cost estimates a model produces. However, none of the studies submitted by the RBOCs gives an adequate explanation of what these rates are and how they were developed. For example, SBC states "...the studies reflect the company cost of capital, taking into account the company's expected rate of return on investments and the opportunities and risks the company experiences within its industry."[51] SBC then adopts the FCC authorized 11.25 percent rate of return for determining its forward looking cost in its cost submission.[52] These two statements imply that SBC believes that 11.25 percent is its current cost of capital.

We doubt that SBC would ever sponsor testimony supporting that opinion. For example, in Connecticut SBC argued that its cost of money was 12.19%.[53] The fact that the two statements appear in the same filing shows how incomplete the filing is, and that the FCC cannot rely on it. Moreover, in many instances, SBC describes the numbers in its documentation "are illustrative only."[54] Clearly, the only conclusion that any reader of the document can come to is that the whole document is illustrative.

On the other hand, Verizon asserts that it uses its current cost of capital, but never states what that number is or how it determined the unknown number.[55] QWEST simply

[50] Section 8.5 addresses an additional flaw of the ILEC's studies -- their failure to address how digital-line carrier technology makes a portion of the loop investment traffic-sensitive.

[51] SBC Study, Attachment 1, Page 7

[52] SBC Cost Submission, Page 5 and Attachment 4, Page 2.

[53] Connecticut Department of Public Utilities, Application of the Southern New England Telephone Company for Approval of Cost Studies for Unbundled Network Elements, Docket No. 00-01-02, May 2, 2000, Transcript page 591.

[54] SBC Study at Page 4. Even though SBC claims that the figures it supplied are for illustrative purposes only, they nevertheless generate great concern because they are upwardly biased. For example at Attachment 2, Page 8 of its cost submission SBC shows a cost for a 48 pair aerial fiber cable of $9.10 installed while the FCC estimates the cost to be only $2.37 installed. See Inputs Order at Attachment A, Excel file "f99304a1" at tab "FIBRCABL".

[55] Verizon Cost Submission, Attachment D, Page 1.

states that its cost of capital is 11.7 percent without any explanation of how it arrived at that number.[56]

This same problem exists throughout the RBOCs' submissions with regard to depreciation. Depreciation lives and net salvage percentages have a significant impact on forward-looking cost estimates. NASUCA was unable to judge the reasonableness of the rates proposed by the RBOCs because these values were not provided with their cost submissions. Nor was there any documentation explaining how these enigmatic figures may have been derived. Without these inputs or adequate descriptions of their basis, the FCC cannot conclude that they are reasonable. Alternatively, as both current and previous cost submissions have shown it is very likely that these RBOC proposed values are unreasonable. For example, Verizon claims that its "cost studies utilize GAAP [Generally Accepted Accounting Practices] depreciation lives"[57] even though the FCC has already explicitly rejected this proposal in its Inputs Order, stating:

> "the projected-life values currently used by LECs for financial reporting purposes are inappropriate for use in the model. In addition, the commenters proposing these values have not explained why the values used for financial reporting purposes would also reflect economic depreciation. The depreciation values used in the LECs' financial reporting are intended to protect investors by preferring a conservative understatement of net assets, partially achieving this goal by erring on the side of over-depreciation. These preferences are not compatible with the accurate estimation of the cost of providing services that are supported by the federal high-cost mechanism."[58]

Moreover, the FCC also found that the firms supporting this proposal:

> "offer no specific evidence that this displacement [of their property] will occur at greater rates than the forward-looking Commission-authorized depreciation lives take into account. The record is particularly silent regarding the displacement of technologies associated with the provision of services supported by the federal high-cost mechanism. We do not believe that the LEC industry data survey's projected lives have been adequately supported by the record in this proceeding to justify their adoption."[59]

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[56] QWEST Cost Submission, Page 5.

[57] Verizon Study Attachment D, Page 1.

[58] Inputs Order at ¶429.

[59] Inputs Order at ¶428.

The conclusions reached in the Inputs Order are equally applicable here. The universal service cost model is used to determine the cost of providing basic voice services, not advanced telecommunications services. In this proceeding, the Commission has set out to identify the cost of providing retail voice grade access to the public switched telephone network.[60] Therefore, for the same reasons provided by the FCC in the Inputs Order it is impossible for the FCC to conclude that any of the ILECs' inputs properly reflect the cost of providing voice grade access to the public switched network.

4.2 Shared and Common Costs are not Properly Allocated in the Cost Studies Submitted by the ILECs

According to SBC, it calculated shared and common costs including such costs as uncollectibles, call completion, and customer services.[61] What is not explained is why uncollectibles are not assigned directly to the service from which they are generated or why call completion, a traffic-sensitive cost, is included in a study that purports to identify non-traffic-sensitive costs.[62] SBC also does not explain how it accounted for the fact that the costs associated with customer services like connection and disconnection are already recovered in retail non-recurring rates. Economic efficiency is hardly enhanced by double-recovering connection and disconnection costs through the Subscriber Line Charge.

One must ask if shared and common costs were allocated to the interstate jurisdiction, and, if so, how? This question must be asked because SBC has included an assessment of state regulatory fees in its loop cost estimates.[63] This inflates loop cost estimates and is not appropriate. The FCC's rules require regulatory fees to be booked to Account 7240 – "Operating Other Taxes" and, per Sec. 36.412(c), they should then be assigned jurisdictionally based on how they are assessed. SBC has included in its cost studies an expense that is already allocated to the state jurisdiction; hence the company is attempting to use the SLC to double recover this expense.

The cost submission of Sprint also illustrates the need for the FCC to take a closer look at the development of the model inputs proposed in this proceeding. Sprint incorrectly assigned 100% of common costs to the loop. Unsurprisingly, Sprint has not explained why it feels it is appropriate to recover 100% of the firm's common costs through the Subscriber Line Charge. Nevertheless, even if Sprint had provided an explanation, this

[60] CALLS Order, Paragraph 83.

[61] SBC Study, Executive Summary, at Page 5.

[62] Verizon also lumps "all retail costs for marketing, customer service and support, and billing expenses" into its loop cost calculations. See Verizon study Attachment D, Page 1. However, Verizon does not explain why it is appropriate to consider, for example, the marketing cost associated with caller number identification, but not the revenue of this high margin service. Should the SLC cap be increased to subsidize the marketing of vertical services?

[63] SBC Study, Attachment 2, at Page 33.

practice is still improper and contrary to previous decisions of the FCC because it over-allocates common costs to loop facilities.[64]

4.3 No Information is Provided Regarding Outside Plant Assumptions in the Cost Studies Submitted by the ILECs

The ILECs did not provide any meaningful information regarding outside plant inputs in their submissions. SBC did indicate that it used proxy information because the company did not have the time necessary to gather comprehensive state specific data within the time constraints of this proceeding.[65] SBC claims that proxy information was selected from states with "similar characteristics" but there is no explanation of why, for example, it considers cost information for outside plant in Missouri to be representative of costs in Connecticut, Illinois, Michigan, Nevada, Ohio, and Wisconsin.[66]

The cursory information provided by SBC indicates that there are significant flaws in its studies that overstate the cost of providing voice access. For example, SBC claims that its loop study employs a weighted average of two possible drop cable configurations - a single pair and two pair configuration.[67] Not only does SBC fail to supply this figure or its derivation, but also the assumption that a customer premises would be connected by a drop containing only a single twisted pair is ludicrous and results in an overstatement of costs.[68]

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[64] "We conclude that a second reasonable allocation method would allocate only a relatively small share of common costs to certain critical network elements, such as the local loop and collocation, that are most difficult for entrants to replicate promptly (i.e., bottleneck facilities). Allocation of common costs on this basis ensures that the prices of network elements that are least likely to be subject to competition are not artificially inflated by a large allocation of common costs." See: In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers CC Docket No. 95-185. First Report and Order, released August 8, 1996 at ¶ 696.

[65] SBC Study, Attachment 1, Page 7.

[66] It is interesting to note that SBC attributes the use of proxy information to the abbreviated time schedule set for this proceeding. This is particularly interesting because as a sponsor of the CALLS proposal the company should have been aware that it would be required to submit a detailed forward-looking cost study in this proceeding as far back as May 31, 2000 when the CALLS Order was issued. SBC could also have requested that the FCC extend the time schedule of this proceeding and postpone the scheduled SLC cap increase so that more appropriate cost submissions could be prepared. SBC chose to do neither.

[67] SBC Study, Attachment 1, Page 9.

[68] This assumption overstates costs because most of the cost of providing drops to customers is associated with labor and cable sheath. For example, assume that the typical residence has 1.2 pairs in service, and it costs $0.80 per foot to place a drop cable and $0.01 per pair foot in materials. It follows from SBC's assumption that it costs $0.81 per pair foot to provide a given percentage of drops. Alternatively, when it is assumed that every drop contains at least two pairs of cable the cost per pair foot is only $0.68 [($0.80+2*$0.01)/1.2].

In its submission, SBC claims that its loop cost calculations include cable support structures and a mix of distribution cables that varies by geographic zone, but neither the actual percentages nor the methodology behind such values are provided.[69] SBC also estimates the distance length of distribution cables. However, neither this distance nor its derivation is provided.

SBC assumes that Universal Digital Loop Carrier ("UDLC") will be used 75% of the time while Integrated Digital Loop Carrier ("IDLC") is only used 25% of the time.[70] Although the company agrees that IDLC is more efficient,[71] and has previously used IDLC in cost submissions to the FCC,[72] SBC does not explain why forward-looking IDLC systems are not used exclusively throughout its allegedly forward-looking model as required by the FCC.[73] IDLC is the appropriate technology for the products being studied because there is no need to send the loops through an expensive UDLC channel bank.

SBC claims that fiber cable size is generally determined by the study area but limits the cable sizes to 24, 48, or 216 fibers per cable. SBC does not explain why it is efficient to limit cable sizes to these possibilities when the FCC acknowledges that an efficient solution to sizing fiber cable recognizes nine different fiber cable sizes.[74]

4.4 Information on Fill Factors is not Provided in the Cost Studies Submitted by the ILECs

Fill factors are used to increase per line costs of various facilities to recover the cost of unused network capacity that results from breakage, customer churn, and near term growth in demand. All else being accurate, if fill factors are assumed to be unreasonably low, a model will provide estimates of an inefficient network and costs will be overstated. This is because a relatively small number of lines in service will be

[69] SBC Study, Attachment 1, Page 10.

[70] Verizon makes this same mistake because its model assumes that electronics are necessary at both ends of a fiber loop (UDLC) rather than the fiber being terminated directly to the switch with IDLC. See Verizon Attachment D at Page 4.

[71] SBC Study, Attachment 1, Pages 10 and 16.

[72] "The DLC placements in the BCPM uses Integrated Digital Loop Carrier technology. This technology eliminates many of the costs associated with standard or "universal" systems." "Benchmark Cost Proxy Model: Model Methodology," Pacific Bell, Sprint, and U S West, January 30, 1997, Page 24.

[73] In modeling a forward-looking network the FCC required the use of GR-303 capable hardware on IDLC systems. See: In the Matter of Federal-State Joint Board on Universal Service CC Docket No. 96-45 and Forward-Looking Mechanism for High Cost Support for Non-Rural LECs CC Docket No. 97-160. Tenth Report and Order, released November 2, 1999. At footnote 593. This conclusion is also supported by the New Jersey Board of Public Utilities which stated that "that the use of 100 % IDLC is an appropriate and realistic forward-looking assumption." Docket No.TO00060356 at Page 6.

[74] See Inputs Order, Attachment A, Excel file "f99304a1" at tab "FIBRCABL".

responsible to recover the cost of an inefficient level of excess capacity. Since the RBOCs failed to provide the fill factors used in their cost studies, it is impossible to determine if the RBOCs' application of fill rates result in accurate or overstated loop cost estimates. SBC did, however, indicate that it used actual or embedded fill rates in its study.[75] This in itself presents a credible reason to reject this study because the FCC explicitly rejected SBC's use of actual fill in a recent 271 proceeding because it failed to consider forward-looking fill or that the fill factor would increase over time.[76]

4.5 Other Inconsistencies and Unstated Assumptions in the Cost Models also Call into Question the Efficacy of the Models used by the ILECs

In addition to the many fundamental problems identified in the cost submissions there are contradictions that call into question the efficacy of the models. For example, SBC claims that when feeder lengths exceed 12k feet, fiber feeder and DLC systems were modeled because they are the most efficient loop design.[77] However, SBC later claims that copper feeder is assumed for all loops whose length is less than 15k feet.[78]

Verizon does not explain why it is appropriate for its Link Cost Model to assume 100% fiber feeder, but this same assumption is inappropriate to use in the Loop Cost Analysis Model. Apparently Verizon cannot decide which network configuration is efficient and forward-looking.

There are a number of other issues that the RBOC cost submissions failed to discuss and/or provoked serious questions that must be considered.

- Loop length is a significant driver of overall loop costs. Therefore, how a model determines customer location will have a significant impact on cost estimates. While this is generally a heavily discussed issue in other cost proceedings, the RBOCs have completely ignored this topic in their submissions.[79]

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[75] SBC Study, Attachment 2, Pages 27-28, 30-31. Verizon also claims to have used actual state specific fill factors in its studies. Verizon Study, Attachment D, Page 2.

[76] In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, released January 22, 2001, at Paragraphs 79-81 ("Kansas 271").

[77] SBC Study, Attachment 1, Page 10.

[78] Id.

[79] See, for example, Verizon study Attachment D, at Page 9. It is interesting to note that SBC did offer a halfhearted explanation of how it estimated loop lengths in its study. However, its explanation is insufficient and faulty. SBC asserts that its model correctly estimates the length of the average loop in part because "the larger the population of loops the greater the chance that a random sample will be representative." This is incorrect. The representative quality of a random sample depends upon the size of the sample, and the variance of the underlying population, not the size of the population.

- The RBOCs have not explained how they accounted for the fact that structures like conduit and poles are shared. A portion of support structure costs must be assigned to reflect the fact that other firms, such as cable television, and electric, gas, and water utilities, often co-own these facilities.[80] Additionally, these studies must reflect the fact that a portion of "Telco assigned" support structure is also used to provide interoffice and dedicated transport. Without accounting for sharing among multiple firms and multiple services loop costs will be inflated. Absent any discussion the FCC can only conclude that 100% of structure costs were assigned to the local loop by the ILECs. This assignment is inappropriate.

- The RBOCs have failed to present any information regarding how OSS transition costs are handled. Since this discussion is conveniently absent, NASUCA is concerned that a portion of these costs are being assigned to the loop and proposed to be recovered by the SLC.

- The local loop provides telecommunications firms with the ability to provide a customer with local and long distance voice communications and advanced telecommunications services like xDSL. Conspicuously absent from the RBOCs cost submissions is any discussion of how the provision of xDSL affects the way in which the cost of the loop should be allocated. In state proceedings, SBC and Qwest have argued that 50% of the cost of a loop used for data and voice should be allocated to DSL service (See Section 7.1 for a summary of the ILECs' position that the loop is a shared cost).

4.6 Forward-Looking Marketing Expenses are Not Incorporated into the ILEC Cost Studies

Marketing expenses are incurred to promote particular product lines, retain or attract customers, and to enhance the general reputation of the carrier. It is generally acknowledged that telephone marketing expenses are incurred to promote vertical and enhanced services and to manage the special needs of business customers. Seldom, if ever, has there been an advertisement to encourage a customer to purchase your genuine telephone subscriber line service. Due to the requirement to advertise the availability of service, the Synthesis Model includes a limited marketing expense as part of the forward-looking cost of universal service.[81] Since there are no other forward-looking marketing costs associated with the SLC, this marketing expense should be the maximum expense included in a forward-looking cost study.

[80] Inputs Order, Paragraph 241.

[81] 47 U.S.C. Section 214(e)(1)(B), see also Inputs Order Paragraph 405.

The Synthesis Model sets the marketing expense value at $0.09 per month per line. This estimate includes marketing expenses for multi-line business customers, and thus, over estimates the forward-looking cost of residential and single-line business service. It excludes the marketing cost associated with vertical and new services, and thus, approximates the marketing cost associated with providing voice grade service.[82]

Because the ILEC forward-looking filed cost studies generally do not identify marketing expenses as a separate item, it is not clear how those studies treated this expense. The QWEST study, however, argues that marketing expense is not a forward-looking cost of access service. It notes that these "costs were not specifically associated with marketing the services in the baskets to which they had been previously allocated, but instead were a residual of the Part 32 accounting and Part 36 separations processes."[83] QWEST argues that "it would be inappropriate to compute a cap on the SLC using a forward looking estimate of marketing expenses associated with the services in the CMT basket."[84] QWEST provides the embedded cost of marketing, which averages $0.41 per line per month for its study areas.[85] Verizon also provides the embedded cost of marketing, which averages $0.54 per line per month for its Bell Operating Company study areas.[86] The Commission should rely on its own forward-looking marketing expense estimate rather than embedded cost data submitted by the ILECs.

4.7 Only Allowed Marketing Expenses should be Incorporated into SLC Rates

Marketing expenses are assigned to the interstate jurisdiction through the separation process. Marketing expenses were assigned to price cap baskets on the basis of the relative investment. Because a high percentage of interstate investment is assigned to the common line, the common line basket was responsible for the recovery of a high percentage of the marketing expenses. The FCC, however, has recognized the marketing expenses are not directly related to the provision of access services. The FCC noted that the ILECs do not advertise their access products to the IXCs. To align recovery with cost causation, the FCC removed these expenses from the traffic-sensitive baskets and transferred them into a new marketing basket. Cost recovery responsibility was primarily assigned to the multi-line business PICC, and through a cascading formula, remaining allowed revenues were recovered on a per minute basis. The SLC for primary residential customers and single-line business customers was excluded from this formula.

[82] Inputs Order, Paragraphs 403-407.

[83] QWEST cost filing at 7

[84] Id., at 7.

[85] Id., Attachment 1.

[86] Verizon Cost Filing, Attachment C

Next, the FCC merged marketing expenses with other common line allowed revenue when it established the CMT revenue. By so doing, all common line rate elements are required to participate in the recovery of the marketing expense. Relying on evidence that incumbent price cap LECs incurred marketing costs related to residential and single-line business customers, the FCC allowed recovery of the marketing expenses to be collected through the primary residential and single-line business SLC. The evidence to support residential and single-line business marketing expenses, however, was incomplete and sparse, relying on two *ex parte* presentations. The Ameritech *ex parte* presentation claimed that the company spent $20 million on advertising to residential and single-line business customers.[87] While not insignificant, the $20 million value pales in comparison to the entire Ameritech marketing expense of $488 million.[88] It certainly should not be used by the FCC or others to support a finding that residential customer should bear equal responsibility for the recovery of marketing expenses. The United States Telephone Association (USTA) *ex parte* asserts that it did a study and that study reports that there is advertising for residential customers.[89] USTA never filed the study, and never provided any details of the study.

Throughout this process of transferring the recovery of the marketing expenses to the common line rate elements, the FCC failed to recognize that the price cap ILECs do not advertise to their end-user for the purchase of end-user access. Thus, just as the ILECs do not advertise to IXCs and thereby should not recover marketing expense from the IXCs, neither should the end-users be required to pay for the marketing expenses. Of course, using this reasoning, the ILECs face the dilemma that there is an expense for which there is no explicit recovery mechanism.

Alternatively, the FCC could acknowledge that the marketing expenses assigned to the interstate jurisdiction are designed to attract and retain customers. Without the customers, the ILEC would not collect any switched access or end-user revenue. Therefore it is necessary to assign a portion of the marketing expense to all access baskets. In addition, because most of the marketing expense that is customer and not product specific is directed toward the retention of business customers, the overwhelming majority of the marketing expense should be recovered through multi-line business rate elements.

Finally, the marketing expenses allocated to the CMT revenues included only those expenses that were formerly assigned to the common line basket, the traffic-sensitive baskets, and the switched services within the trunking basket.[90] The FCC found that

[87] Letter from Anthony M. Alessi, Director, Federal Relations, Ameritech, to William F. Caton, Acting Secretary, Federal Communications Commission, September, 11, 1997, CC Docket No. 96-262.

[88] Armis 43-04, 1996.

[89] Letter from Frank G. Kennedy, Director, Legal and Regulatory Affairs, United States Telephone Association, to William F. Caton, Acting Secretary, Federal Communications Commission, September 29, 1997, CC Docket No. 96-262.

[90] Section 69.156.

special access and interexchange services are marketed to end-users and therefore, rates for those services should continue to recover marketing expenses.[91]

The Verizon cost filing, however, adds all interstate marketing cost to the costs that are to be recovered through SLCs. The cost filing shows the development of these costs. It sums the base factor portion (BFP) expenses less marketing expenses for the year 2000, and total interstate marketing costs.[92]

Table 2 compares the Verizon cost filing to the ARMIS 43-01 and 43-04 filings for the Verizon Bell operating company study areas for the year 2000. The difference between the ARMIS 43-01 common line expenses and the cost filing common line expenses are listed in column C. This difference is equal to the ARMIS 43-04 common line marketing expense listed in column F. The marketing expense as reported in the cost filing, listed in column D, is equal to 43-04 interstate marketing expense listed in column E.

The interstate marketing expense is equal to not only the common line and traffic-sensitive marketing expenses, but also includes the special access and interexchange marketing expenses. The special access and interexchange marketing expenses should be recovered from special access and interexchange customers and should not be assigned to CMT revenue for recovery through SLCs. At this time it is not clear if this mistake is only in the current filing or permeates Verizon's and other carriers' tariffs. We urge the FCC to investigate this issue and, if necessary, to reduce the CMT revenues and SLC charges accordingly.

[91] Access Reform Order, Paragraph 323.

[92] Verizon Cost filing, Attachment C.

Table 2 -- Comparison of Verizon Cost Filing to the ARMIS 43-01 and 43-04 Filings for the Year 2000

Verizon Study BOC Study Areas	Total Common Expenses	BFP Expenses less Market	BFP Market	Marketing Addition	Interstate Marketing	Common Line Marketing	Traffic-sensitive Marketing	Special Access Marketing	IX Marketing
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Washington DC	34,744	32,865	1,879	8,288	8,288	1,879	1,945	4,464	-
Maryland	180,212	172,173	8,039	18,561	18,561	8,039	3,107	7,416	
Virginia	191,401	176,260	15,141	30,330	30,330	15,141	5,187	10,000	2
West Virginia	55,561	53,131	2,430	4,349	4,349	2,430	875	1,033	11
Delaware	33,140	31,676	1,464	2,791	2,791	1,464	379	947	2
Pennsylvania	325,970	309,776	16,194	32,225	32,225	16,194	3,516	12,504	11
New Jersey	340,858	323,578	17,280	37,599	37,599	17,280	6,024	14,273	22
New York/ New England	986,626	941,775	44,851	124,365	124,365	44,851	17,897	61,557	59
Source	Armis 43-01	Verizon Filing	Calculated	Verizon Filing	Armis 43-04	Armis 43-04	Armis 43-04	Armis 43-04	Armis 43-04

5 The Model Used for NASUCA's Analysis is a Public, Forward-Looking, Economic Cost Model which Estimates Costs Based on the Most Efficient Technology Available – It is Therefore a Useful Tool for Assessing the Proposed Increases in the Subscriber Line Charge

We have provided a number of reasons why the ILECs' cost studies should not be used to judge the economic basis for increasing the Subscriber Line Charge. In this section we provide forward-looking economic cost data that was derived from the Commission's Synthesis Model.

The Synthesis Model used by NASUCA meets the requirements that the FCC has established for reviewing any increases to residential and single-line business SLC caps. The model is a forward-looking economic cost model, and it is designed to supply the cost of voice grade access to the public switched network.[93] In addition, the model is in the public domain, is being applied uniformly to all states, and estimates cost based on the most efficient technology available.

The entire model can be downloaded from the FCC's web page,[94] and any individual can run the model. The source code for the model is also provided in a file folder as part of the package that is downloaded from the web page. The source code allows individuals and parties to examine every equation, and verified every action the model undertakes in estimating the forward-looking cost of service. Every input value has been released into the public domain.[95] It is therefore possible to discuss the reasonableness of these values without having to enter into a proprietary agreement. Only two sets of values are covered by proprietary agreements -- the customer location data set, also known as the PNR data, and the wire center line counts. Individuals and parties have been able to obtain the use of the PNR data for use in FCC proceedings for a long time.[96] Recently, the FCC has allowed parties to obtain the use of line count data for use in this cost proceeding.[97]

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[93] The Commission has exercised caution about using the Synthesis Model for estimating the cost of unbundled network elements. It should not hesitate to use the model in the immediate proceeding because, as with the universal service proceeding, the model would be used to identify the cost of providing retail voice grade access to the public switched telephone network.

[94] http://www.fcc.gov/ccb/apd/hcpm/

[95] In the Matter of the Federal-State Joint Board, CC Docket No. 96-45, Ninth Report and Order and Eighteenth Order on Reconsideration, FCC 99-306, rel. November 2, 1999 (Inputs Order).

[96] Federal-State Joint Board, CC Docket No. 96-45, Interim Protective Order, 15 FCCRcd 10183 (Common Carrier Bureau 2000).

[97] In the Matter of the Cost Review Proceeding for Residential and Single-Line Business Subscriber Line Charge (SLC) Caps, CC Docket No. 96-262, Order, Released December 6, 2001. This order allows parties to use the line count data to produce loop cost studies and evaluate the cost studies of other parties in this proceeding. We urge the Commission to release these data into the public domain. Withholding these data reduces the possibility of having a reasonable and fair debate regarding the

The model platform and inputs have not been altered to provide an advantage for any specific state or carrier. Each carrier's cost is estimated using the same equations, formulas, and input values. For example, the cost of a 100 pair 24-gauge cable is the same for all carriers. This uniformity will allow the FCC to set SLC caps impartially and without prejudice to any carrier. Alternatively, if the FCC were to adopt the proprietary model of one carrier, it would not know if there were any particular equations or inputs in it that would bias the results in that carrier's favor.

Adopting one standard does not mean that inputs do not vary due to local conditions. The model contains variables that change given changes in population density, soil, and other terrain characteristics. Rather it implies that these variances will be the same for all carriers. The differences in cost due to different levels of population density will have the same affect on every carrier.

The model uses efficient and available equipment to provide service. Digital switching equipment is placed in the wire centers. Fiber optic systems and electronic equipment are used to connect wire centers, and, where appropriate, are placed in feeder networks. Customers are located within the census block where they live and work. Because of data limitations, customers are not located at exact geo-coded locations. Instead, their locations are spread uniformly along the roads within a census block. Once the customers are located, a minimum spanning tree algorithm connects them to the wire center. This algorithm constructs the lowest cost network configuration available.

5.1 The NASUCA Model Covers 80 Study Areas, and the Underlying Assumptions are Robust Concerning Costs and the Engineering Design of the Loop

The analysis of forward-looking cost will focus on the results generated by the Synthesis Model for 80 study areas. To be included, the study area must be a price cap carrier and a non-rural study area. An excluded study area would be, for example, Sprint Florida, which is a price cap rural study area and NorthState, which is non-price cap non-rural study area. Appendix A provides a list of study areas included in the analysis.

Cost by UNE zone can be derived for 76 of these carriers. The other four carriers develop zones on a sub-wire center basis.[98] For example, the business district of wire center A and the business district of wire center B are combined to form zone 1, and the rural area of wire center A and the rural area of wire center B are combined to form zone 2. Because the Synthesis Model is run on a wire center basis, it is not possible to

model's ability to estimate the forward-looking cost of service and hinders the ability of the Commission to make rational decisions regarding the level of SLC caps.

[98] These study areas are QWEST Wyoming, Montana, Arizona, and Colorado.

develop zone cost for these four study areas.[99] For all other carriers, the UNE zone is a combination of wire centers, and the zone cost is the weighted average cost of the wire centers within that zone.

There are 181 price cap study areas that are eligible to receive interstate access support and are governed by the SLC rules adopted in the CALLS order.[100] These study areas serve approximately 173 million switched access lines. The 80 modeled study areas serve 165 million lines or approximately 95% of the price cap regulated lines.[101]

The Synthesis Model generates total monthly forward-looking cost per line by wire center for each study area. The wire center costs can be aggregated into UNE zone costs. Zone cost results, identified by carrier, are provided in the proprietary Appendix B. Summaries of these results will be discussed within the public section of these comments.

The cost associated with the SLC includes the non-traffic-sensitive portion of the loop and switch. The loop is the facility that connects each customer to a wire center. It includes the network interface device, copper and fiber cables, poles, and conduits. The non-traffic-sensitive switch cost, or the line port, includes the main distribution and the line card. Moreover, because the SLC is an interstate rate, SLC associated costs are only the interstate jurisdictional portion of the loop and line port costs.

The Synthesis Model does not directly calculate SLC costs. Instead, the model generates unseparated costs for each wire center. The model identifies costs related to loop, line port, end office usage, signaling, transport, and billing. To transform model outputs into SLC related costs, it is first necessary to allocate per-line common costs among the various cost baskets. Second, it is necessary to separate the costs by jurisdiction.

Per line common costs are identified in the Synthesis Model as common support services expenses. They include corporate operations expenses, customer service expenses, and plant non-specific expenses. These are expenses that are reported in ARMIS accounts 6510, 6530, 6610, 6620, 6710 and 6720. The model estimate of these costs is $7.32 per line per month.[102] The model assigns all per line charges to the network interface device (NID), and through this assignment includes all per line charges in the loop basket. This practice creates biased results. The reported loop costs are too high, while the reported switch and transport costs are too low. The

[99] The Synthesis Model can also be run by density level. However, due to a lack of data, one to one mapping of density levels into UNE zones for the four study areas is not possible at this time.

[100] USAC Quarterly Administrative Filing, 2nd QTR 2001, Appendix HC 8 http://www.fcc.gov/ccb/universal_service/quarter.htm#2001

[101] Id., Appendices HC1 and HC8.

[102] For a discussion of these estimates, see the Inputs Order, Paragraphs 382-407.

existence of this bias does not affect the universal service results because the universal service program relies on the total wire center results. The too high loop result is offset by the too low switch and transport results. However, when cost of loop and port functions are reviewed separately, this bias cannot be ignored.

To correct for this bias in our analysis, per line common costs are allocated among the loop, switch, and transport baskets on the basis of relative investment in these functions. The relative investment in these baskets was determined for each study area. Multiplying the per line common cost by the relative investment determines the per line common cost for each basket. In addition, because the model assigns 30 percent of switch investment to line port and 70 percent to end office usage, we assign only 30 per cent of the switch per line costs to the line port. Allocation of these costs according to relative investment mimics the allocation of corporate operations expense in the universal service algorithm and the Part 69 allocation of marketing prior to the re-assignment of marketing expenses.[103]

The relevant separations factors are the gross allocator for loop plant and the dial equipment minutes (DEM) factor for the switch port.[104] The interstate gross allocator is 25 percent for all study areas. The interstate DEM factor varies by study area. The national average interstate DEM is approximately 15 percent and for the 80 carriers analyzed the interstate DEM factor varies from 7.57 to 27.43 percent.[105] The product of multiplying the sum of the loop plus the loop allocated per line common costs by the gross allocator is the interstate loop cost. The product of multiplying the sum of the port and the port allocated per line common costs by the DEM factor is the interstate port cost. It is this interstate wire center loop and line port cost, adjusted to properly reflect reasonable per line costs, that is the building block for determining zone and study area forward-looking economic costs that should be recovered by the SLC and will be referred to as the SLC economic cost.

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[103] Letter from John Ricker, NECA, to Magalie Roman Salas, FCC, dated October 1, 2001, tab 3, Loop Cost and Expense Adjustment Algorithms and 47 C.F.R. Section 69.403.

[104] The rule adopted in the CALLS order applies a 25 percent factor to both loop and port to determine the Zone Average Revenue per line-(Part 61.3(zz)). It is our understanding that the 25 percent factor applied in that rule was adopted for administrative convenience, and does not affect the separation factors or the study area costs.

[105] For trends in the national average see The Universal Service Monitoring Report, CC Docket No. 98-202, Prepared by the Federal and State Staff for the Federal-State Joint Board on Universal Service in CC Docket No. 96-45, Table 8.3 Dial Equipment Minutes. The study area specific factor is available in Armis, 43-04, row 1213.