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RECORDS AND
REPORTING

September 2, 1998

Mrs. Blanca S. Bayó
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 980696-TP

Dear Ms. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Rebuttal Testimony of Dr. Randall S. Billingsley, Dr. Robert M. Bowman, D. Daonne Caldwell, G. David Cunningham, Dr. Kevin Duffy-Deno, Georgetown Consulting Group, Peter F. Martin and Dr. William E. Taylor, which we ask that you file in the captioned matter.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

J. Phillip Carver
J. Phillip Carver (ps)

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cc: All parties of record
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**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

ORIGINAL

In Re: Determination of the Cost of
Basic Local Telecommunications
Service, pursuant to Section 364.025,
Florida Statutes

Docket No. 980696-TP

**Rebuttal Testimony of
Jamshed K. Madan, Michael D. Dirmeier
and David C. Newton on Behalf of
BellSouth Telecommunications, Inc.**

Submitted
September 2, 1998

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

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Exhibit__(GCG-2)	Values for User Adjustable Inputs: GCG Alternative Values Compared to HAI R5.0a Appendix B Default Values
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Exhibit__(GCG-11)	Sensitive Input Group IX: DLC
Exhibit__(GCG-12)	Sensitive Input Group X: Interoffice Investment
Exhibit__(GCG-13)	Sensitive Input Group XI: Switching Factors
Exhibit__(GCG-14)	Sensitive Input Group XII: Expense Factors
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Exhibit__(GCG-16)	Sensitive Input Group XIV: Depreciation
Exhibit__(GCG-17)	Universal Service Support

I.
Affiliation, Scope of Engagement
and Purpose of Testimony

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2
3
4 Q. PLEASE STATE YOUR NAMES AND BUSINESS AFFILIATIONS.

5 A. My name is Jamshed K. Madan. I am a founding Principal of Georgetown
6 Consulting Group, Inc. (GCG or Georgetown). The business address of
7 Georgetown is 456 Main Street, Ridgefield, Connecticut.

8 My name is Michael D. Dirmeier. I am a Principal of Georgetown.

9 My name is David C. Newton. I am a consulting telecommunications
10 network engineer. My business address is 75 Squires Glen, Madison, Connecticut.

11 Q. PLEASE STATE ON WHOSE BEHALF YOU OFFER THIS TESTIMONY, ITS
12 SCOPE AND ITS PURPOSE.

13 A. This testimony is offered on behalf of BellSouth Telecommunications, Inc.
14 (BellSouth). BellSouth has previously engaged Georgetown to evaluate the
15 application of Hatfield Model Release 4.0 ("HM R4.0") made by AT&T and MCI
16 in various state proceedings where the issue was prices for unbundled network
17 elements ("UNEs"). In each of those cases, Georgetown rebutted the contention of
18 AT&T and MCI that their application of HM R4.0 resulted in reasonable UNE
19 prices, showing that the inputs to HM R4.0 selected by AT&T and MCI fail to
20 reflect the conditions of the territory of BellSouth and fail to be reasonable and
21 forward-looking. In those cases, Georgetown also applied HM R4.0 utilizing
22 inputs it developed that do reflect the conditions of the territory of BellSouth, are
23 reasonable and are forward-looking. Thus, if one were to accept HM R4.0 for use
24 in developing UNE prices, Georgetown's application would be appropriate because
25 it reflects proper inputs.

1 In this case, MCI and AT&T have applied HAI Model Release 5.0a ("HAI
2 R5.0a") for purposes of determining the economic cost of providing basic local
3 telecommunications service at the wire center level. The model used in this
4 proceeding, HAI R5.0a, is different from the model (HM R4.0) used by MCI and
5 AT&T witnesses in other state proceedings. If the identical inputs are applied to
6 both HM R4.0 and HAI R5.0a the outputs would be different, with HAI R5.0a
7 producing lower cost and universal service fund requirements. Indeed, the HAI
8 and Hatfield models were originally developed for application to universal service
9 funding issues. The outputs of HAI R5.0a include not only UNE prices, but
10 universal service support outputs as well. The purpose of this testimony is to rebut
11 the contention by MCI and AT&T that their application of HAI R5.0a in this case
12 for purposes of developing the economic cost of providing basic local
13 telecommunications service at the wire center level is reasonable (hereafter, the
14 MCI and AT&T application of HAI R5.0a in this case is referred to as the
15 "MCI/AT&T HAI R5.0a Application").

16 We evaluated the reasonableness of the MCI/AT&T HAI R5.0a Application
17 by focusing on the nature and quality of the inputs selected by MCI and AT&T to
18 apply HAI R5.0a. We did not evaluate the logic and structure of HAI R5.0a,
19 except as necessary to determine the use made by HAI R5.0a of user adjustable
20 inputs ("UAIs").

21 The MCI/AT&T HAI R5.0a Application is not reasonable for use in this
22 case because the default values selected by MCI and AT&T for sensitive user
23 adjustable inputs ("SUAs") do not meet the requirement of both reflecting the
24 conditions of the territory of BellSouth Florida and being reasonable and forward-
25 looking. Georgetown has applied HAI R5.0a on the basis of values for SUAs that

1 do meet the requirement of both reflecting the conditions of the territory of
2 BellSouth-Florida and being reasonable and forward-looking. Georgetown's
3 application of HAI R5.0a is referred to hereafter as the "GCG HAI R5.0a
4 Application."

5 Attached as Appendix A and incorporated herein by reference is a Glossary
6 of Defined Terms that will assist in reading this prefiled testimony.
7

8 **II.**
9 **Statement of Qualifications**

10 Q. MR. MADAN, PLEASE STATE YOUR BACKGROUND AND EXPERIENCE.

11 A. I graduated from the Massachusetts Institute of Technology in 1966 with a
12 Bachelor of Science Degree in Electrical Engineering. I continued my graduate
13 studies at M.I.T., graduating in 1968 with a Master of Science Degree in
14 Management from the Alfred P. Sloan School of Management.
15

16 From August, 1968 through April, 1979 I was employed primarily by
17 Touche Ross & Co., an international public accounting firm. I was promoted to
18 Principal in September 1977 and held the position of National Director of
19 Regulatory Consulting. I left Touche Ross & Co. to become a founding Principal
20 of Georgetown in May, 1979.

21 I have testified extensively on public utility matters before various
22 regulatory bodies. My resume is attached to this prefiled rebuttal testimony as
23 Appendix B and incorporated herein by reference.
24
25

1 Q. MR. DIRMEIER, PLEASE STATE YOUR BACKGROUND AND EXPERIENCE.

2 A. I received a Bachelors of Science degree in Physics in 1971 from Texas A&M
3 University. In 1973 I received my Masters of Business Administration in Finance
4 from The University of Chicago. I also hold a Certificate in Management
5 Accounting.

6 From January, 1974 to June, 1976, I was employed by The Bendix
7 Corporation as a financial planning analyst. From July, 1976 to April, 1979, I held
8 the position of consultant and senior consultant in the consulting division of
9 Touche Ross & Co. In 1979 I joined Georgetown, where since 1983, I have held
10 the position of Principal.

11 I have testified on numerous occasions before various regulatory bodies.
12 My resume is attached as Appendix C and incorporated herein by reference.

13

14 Q. MR. NEWTON, PLEASE DESCRIBE YOUR BACKGROUND AND
15 EXPERIENCE.

16 A. I have spent 32 years in telecommunications network design, planning and
17 implementation. The first 27 of those years was spent in service with the Southern
18 New England Telephone Company, where during the last 10 years I served in a
19 series of management positions directing network design, planning and
20 deployment. Since 1991, I have served as a consulting telecommunications
21 network engineer, advising clients and testifying in regulatory proceedings on a
22 variety of network matters. My resume is attached as Appendix D and
23 incorporated herein by reference.

24

25

1 Q. PLEASE EXPLAIN THE DIVISION OF RESPONSIBILITY WITHIN THIS
2 PANEL TESTIMONY.

3 A. Mr. Madan has overall responsibility for the analyses made and the conclusions
4 reached in this rebuttal testimony. He serves as the principal spokesman. Mr.
5 Dirmeier is responsible for evaluating and applying various Hatfield Models,
6 specifically V2.2.2, HM R3.1, HM R4.0 and HAI R5.0a. Mr. Madan and Mr.
7 Dirmeier share responsibility for developing the alternative values for SUAs used
8 by GCG to apply HAI R5.0a. Mr. Newton is responsible for certain engineering
9 and network analyses that have assisted Mr. Madan and Mr. Dirmeier in critiquing
10 the default values advocated by MCI and AT&T and in fashioning the alternative
11 values utilized by GCG in its application of HAI R5.0a.

12

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III.
Summary of Findings

16 Q. PLEASE SUMMARIZE YOUR EVALUATION OF THE MCI/AT&T HAI R5.0a
17 APPLICATION.

18 A. The logic and validity of HAI R5.0a and the propriety of using HAI R5.0a to
19 develop universal service support analyses, are issues beyond the scope of this
20 testimony. We offer no opinion on the propriety of using HAI R5.0a whether it is
21 applied for the purpose of developing UNE prices or developing costs for use in
22 determining universal service support. We simply assume the use of HAI R5.0a
23 for purposes of our analyses. We evaluate the MCI/AT&T HAI R5.0a Application
24 for reasonableness by critiquing the default values selected by MCI and AT&T for
25 the user adjustable inputs ("UAs"), particularly sensitive user adjustable inputs

1 Q. HAVE YOU DEVELOPED ALTERNATIVE VALUES FOR SUAIs FOR USE
2 WITH HAI R5.0a?

3 A. Yes. We have developed values for the SUAIs that reflect conditions of the
4 territory of BellSouth-Florida conditions and that are properly forward-looking,
5 except for values for cost of capital and depreciation, which BST developed and
6 which we have adopted. We have used those values to apply HAI R5.0a, without
7 changing its logic.

8 The following charts show the MCI/AT&T results and the GCG results for
9 both UNE prices and universal service support levels.

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	<u>MCI/AT&T HAI R5.0a APPLICATION</u>	<u>GCG HAI 115.0a APPLICATION</u>
AVG. LOOP PRICE	\$ 9.90	\$ 20.14
SWITCHING PRICE	\$ 3.78	\$ 7.00

		<u>BENCHMARK</u> <u>\$/MO</u>	<u>MCU/AT&T</u> <u>HAI R5.0a</u> <u>APPLICATION¹</u> <u>(\$000s)</u>	<u>GCG HAI R5.0a</u> <u>APPLICATION²</u> <u>(\$000s)</u>
1	Annual Universal			
2	Service Support:			
3	1. Primary			
4	Residence	\$ 31.00	\$ 13,045	\$ 103,768
5	Lines			
6	2. Single Line			
7	Business	51.00	18	511
8	Lines			
9	3. Total		13,063	104,279
10	¹ The amounts reflected in this table corresponding to Mr. Wood's position are based on the			
11	R50a_expense_wirecenter.xls module which is part of the Wood-filed HAI R5.0a Model.			
12	On his filed CD-ROM, Mr. Wood uses a benchmark value of \$0.00 for both			
13	Primary Residence Lines and Single Line Business Lines. This results in total annual			
14	support of \$0.00 since the HAI Model's coding is such that, if the input benchmark is			
15	\$0.00, the Model reports \$0.00 of support.			
16	In addition, the Wood-filed CD-ROM contains an output file (FLBS_FIL.xls) that is			
17	different from the one that is produced when HAI 5.0a is run. Exhibit DJW-5 reflects the			
18	same values for Residence (and Business) usage per line as are reported in FLBS_FIL.xls.			
19	However, that file appears to include some logic modifications and at least one error, as			
20	compared to the output of HAI R5.0a. Nonetheless, when \$31 and \$51 are input in			
21	FLBS_FIL.xls as benchmark values for Primary Residence Lines and Single Line Business			
22	Lines, respectively, a total annual USF support of \$15,116,826 is computed.			
23	² Average of DLC systems, Exhibit (GCG-17).			

24

25

IV.
The Analyses Performed

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3 Q. PLEASE DESCRIBE THE ANALYSES MADE BY GEORGETOWN.

4 A. We examined HAI R5.0a in order to determine how UAIs affect results. We
5 identified groups of UAIs that are related by the Model's logic and we tested the
6 Model's sensitivity to changes in the values for those groups. For example, HAI
7 R5.0a utilizes several UAIs (including inputs B13, B16, B46 and B54 and B56) to
8 determine costs associated with Copper Feeder Investment. The results of HAI
9 R5.0a were considered sensitive to a group of UAIs (such as the group related to
10 Copper Feeder Investment) if a change in one or more of the default values for the
11 related UAIs changed average loop price or switching price by 1% or more.

12 For those groups of UAIs determined to be sensitive, we examined whether
13 the default values chosen for them by MCI and AT&T reflect the conditions of the
14 territory of BellSouth-Florida and reflect the cost or other conditions reasonably
15 expected to occur in the future. Where the default values for those groups of
16 UAIs failed that standard, we fashioned alternative values to meet it. We did so
17 by looking at current cost and other data specific to BellSouth-Florida, stripping it
18 of any embedded characteristics, and then fashioned the type of forward-looking
19 cost or other data value required for use by HAI R5.0a. Fourteen groups of UAIs
20 were determined to be sensitive and in need of alternative values to replace the
21 default values by MCI and AT&T.

22 The Hatfield Models we reviewed, V2.2.2, HM R3.1, HM R4.0, and HAI
23 R5.0a, each have their own UAI databases containing default values. We
24 compared the default values for certain UAIs common between Appendix 5B (the
25 UAI database associated with V2.2.2), Appendix B-3.1 (the UAI database

1 associated with HM R3.1), Appendix B-4.0 (the UAI database associated with
2 HM R4.0), and Appendix B-5.0a (the UAI database associated with HAI R5.0a).
3 We made this comparison in order to test the consistency of the default values
4 contained in successive UAI databases.

5 We applied HAI R5.0a on the basis of the alternative values that we
6 developed for the SUAIs. Thus, we applied HAI R5.0a based on its logic, but also
7 on the basis of values for the SUAIs that reflect the conditions of the territory of
8 BellSouth-Florida and that reflect cost or other conditions reasonably expected to
9 occur in the future.

10 **V.**
11 **Sensitive Inputs: Values Selected**
12 **for Certain User Adjustable**
13 **Inputs Significantly Affect Prices and**
14 **Universal Service Support**

15 Q. PLEASE DESCRIBE THE GENERAL COMPONENTS OF THE MCI/AT&T HAI
16 R5.0a FILING.

17 A. The HAI Model filing made by MCI and AT&T in these Dockets consists of two
18 components: (1) the HAI Model itself (HAI R5.0a) and (2) the databases used to
19 drive HAI R5.0a. Since we have taken as a given the application of HAI R5.0a in
20 this case, without validating or endorsing any HAI Model, the focus properly is on
21 the databases used to apply HAI R5.0a.
22
23
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1 Q. PLEASE IDENTIFY THE DATABASES USED BY THE MCI/AT&T HAI R5.0a
2 APPLICATION.

3 A. There are essentially two databases used in the MCI/AT&T HAI R5.0a
4 Application: (1) a voluminous set of cluster data⁴ related to Florida and (2) a set
5 of data values that make up a UAI database. The values for the cluster data are
6 fixed, *i.e.*, they are not intended to be user adjustable. The values for the UAIs are
7 not fixed. Indeed, they are designed to be adjusted to reflect the conditions of the
8 carrier for which prices are being developed. We focused on the data values for
9 the UAIs that make up the UAI database.

10
11 Q. PLEASE DESCRIBE THE MAKEUP OF THE UAIs.

12 A. Appendix B-5.0a to the HAI R5.0a model documentation identifies 201 UAIs.
13 These UAIs are identified in Appendix B-5.0a as B1 through B201.

14 As defined in Appendix B-5.0a, each UAI has one or more data values
15 associated with it. For example, UAI B1, NID Investment per line, has nine data
16 values associated with it. Similarly, there are two data values associated with UAI
17 B7, Terminal and Splice Investment per line.

18 In total, Appendix B-5.0a identifies about 1,075 data values associated with
19 its 201 UAIs. Those data values are the default values that HAI R5.0a uses if no
20 other data values are substituted for any specific UAI. These default values are
21 generic in nature and national in scope, and largely form the basis for MCI and
22 AT&T filings in numerous states across the nation. HAI R5.0a is designed,
23 however, so that data values for UAIs can be customized.

24 ⁴ Cluster data includes information concerning customer counts, locations and geophysical
25 characteristics of the service territory.

1 Q. ARE THE UAIs READILY OBTAINABLE VALUES, OR DOES A USER OF
2 THE HAI MODEL HAVE TO MAKE OTHER COMPUTATIONS IN ORDER
3 TO DERIVE THE INPUTS?

4 A. Most, if not all of the UAIs are themselves the result of other computations. For
5 example, the development of UAI B1, NID Investment per Line, requires
6 computation of the components of a NID and drop, including the protector and the
7 interface, to ensure that the UAI derived for use by the model is consistent with
8 the use made of it by the Model. In many instances, it is necessary to perform
9 analyses and make computations from relevant and specific information from
10 BellSouth-Florida in order to develop the proper value for the UAI. The point is
11 that the UAIs required by the HAI Model are not readily available "on-the-shelf"
12 values -- they must be carefully developed.

13 Q. PLEASE DESCRIBE THE SENSITIVITY ANALYSES YOU PERFORMED.

14 A. As noted earlier in this testimony (see Part IV), the logic of HAI R5.0a treats
15 certain UAIs as related. We identified the groups of related UAIs, and we ran
16 HAI R5.0a to determine the degree to which changes in the default values
17 associated with those groups caused the output of HAI R5.0a to vary in a
18 meaningful way. Specifically, we looked at the default values for a group of
19 related UAIs, adjusted the values for those related UAIs up or down and, holding
20 constant the default values for all other UAIs, ran HAI R5.0a to determine whether
21 its results were sensitive to the change in those default values. We defined
22 sensitive to mean that the change in the data values for the related UAIs within a
23 group caused the output of HAI R5.0a, namely, average loop price and aggregate
24 switching price, to change by 1% or more. We focused on those groups of related
25 UAIs that both appeared sensitive and for which one or more of the default values

1 for the group appeared questionable. Thus, the groups of related UAI's that we
2 have identified as sensitive (*i.e.*, that are SUAI's) are ones that (1) have one or
3 more questionable default values and (2) change average loop or aggregate
4 switching price 1% or more when alternative values are substituted for the
5 questionable default values.

6
7 Q. WHAT RESULTS DO YOUR SENSITIVITY ANALYSES SHOW?

8 A. Our sensitivity analyses show that 17 groups of related UAI's, encompassing about
9 70 out of 201 specific UAI's, are sensitive. The remaining UAI's do not
10 individually or as a group significantly affect the end result of applying HAI
11 R5.0a. Attached as Exhibit __ (GCG-1), and incorporated herein by reference, is a
12 list identifying the 14 groups of related UAI's that are sensitive, *i.e.*, that identifies
13 14 groups of SUAI's.

14
15 Q. HAVE YOU TESTED TO ENSURE THAT THE INSENSITIVE INPUTS,
16 TAKEN TOGETHER, PRODUCE NO SIGNIFICANT CHANGE IN THE
17 OUTPUT OF HAI R5.0a?

18 A. Yes. We changed each default value of the insensitive UAI's in a direction that
19 decreases loop and switching price. We adjusted them in a magnitude that cannot
20 necessarily be deemed to be within a range that is reasonable. Moreover, we ran
21 all of these changes together in combination. On a combined basis, the total loop
22 and switching price decreased by less than \$1.

1 Q. WHAT CONCLUSION DO YOU DRAW BASED ON THE SENSITIVITY
2 ANALYSES THAT YOU PERFORMED?

3 A. The default values selected for the 14 groups of SUAs have a significant effect on
4 the results derived by applying HAI R5.0a. Therefore, it is essential that the data
5 values selected for use with those SUAs reflect the conditions of the territory of
6 BellSouth-Florida and reflect cost and other conditions reasonably expected to
7 occur in the future. Otherwise, the Commission will not have developed loop and
8 switching prices and universal service support levels that are specific to the
9 territory of BellSouth-Florida and reasonable for use in this case.

10 Q. YOU HAVE PREVIOUSLY INDICATED THAT THE MCI/AT&T HAI R5.0a
11 APPLICATION PRODUCES AN AVERAGE LOOP PRICE OF \$9.90,
12 AGGREGATE SWITCHING PRICE OF \$3.78 AND TOTAL PRICE OF \$13.68,
13 WHILE THE GCG HAI R5.0a APPLICATION PRODUCES AN AVERAGE
14 LOOP PRICE OF \$20.14, AGGREGATE SWITCHING PRICE OF \$7.00 AND
15 TOTAL PRICE OF \$27.14. YOU HAVE ALSO INDICATED THAT YOUR
16 SENSITIVITY ANALYSES IDENTIFY 14 GROUPS OF SUAs. CAN YOU
17 INDICATE HOW THE DIFFERENCE BETWEEN THE AT&T HAI R5.0a
18 APPLICATION (\$13.68 TOTAL) AND THE GCG HAI R5.0a APPLICATION
19 (\$27.14 TOTAL) IS ACCOUNTED FOR BY THE 14 GROUPS OF SUAs?

20 A. Yes. The chart on the following page shows how the 14 groups of SUAs account
21 for the relative differences in average loop and aggregate switching prices between
22 the MCI/AT&T result (\$13.68 total) and the GCG result (\$27.14 total). The
23 reconciliation is not exact, *i.e.*, it does not add up exactly to GCG's HAI R5.0a
24 Application result of \$27.14, because the relative differences shown in the chart
25 below for each of the 14 SUAs groups are calculated on a stand-alone basis by

1 making 14 separate model runs. The most precise application of HAI R5.0a is to
 2 utilize alternative values for all 14 of the SUAIs all at the same time in one HAI
 3 R5.0a run, so that each alternative value affects the other interactively. Of course,
 4 GCG has done exactly that in order to establish its results from the GCG HAI
 5 R5.0a Application (\$27.14 total). However, such a methodology does not show
 6 the relative effects of each of the 14 SUAI groups.

	<u>Loop</u>	<u>Agg. Switching</u>	<u>Total</u>
8 MCI/AT&T HAI R5.0a Application	\$ 9.90	\$ 3.78	\$ 12.68
9 HAI R5.0a Default-Florida Result	\$ 17.57	\$ 3.97	\$ 14.54
10 1. NID & Drop	\$ 1.27	\$ (0.05)	\$ 1.22
11 2. Terminal & Splice	(0.82)	0.04	(0.78)
12 3. Distribution Investment	1.50	(0.06)	1.44
13 4. Copper Feeder Investment	0.49	(0.11)	0.38
14 5. Fiber Feeder Investment	(0.21)	0.01	(0.20)
15 6. Structure Placement	0.42	0.01	0.43
16 7. Structure Sharing	1.96	(0.06)	1.90
17 8. Copper & Fiber Fill Factors	0.10	0.00	0.10
18 9. DLC	1.25	(0.04)	1.21
19 10. Interoffice Investment	(0.06)	(0.05)	(0.11)
20 11. Switching Factors	(0.08)	0.99	0.91
21 12. Expense Factors	2.33	1.41	3.74
22 13. Cost of Capital	1.52	0.56	2.08
23 14. Depreciation Lives	0.59	0.35	0.94
24 Cumulative Effect 1-14 (Sum)	\$ 10.26	\$ 3.00	\$ 13.26
25 GCG HAI R5.0a Application	\$ 20.14	\$ 7.00	\$ 27.14

1 Q. CAN YOU INDICATE THE DIFFERENCE IN THE UNIVERSAL SERVICE
 2 SUPPORT LEVELS RESULTING FROM THE MCI/AT&T APPLICATION AND
 3 THE GCG APPLICATION OF HAI R5.0a?

4 A. Yes. The chart below shows how the 14 groups of SUAs fashioned by GCG
 5 affects the universal service support levels computed by HAI R5.0a. This chart
 6 shows the aggregate results only and does not show the individual effect of each
 7 individual group of SUAs.

		<u>BENCHMARK</u> S/MO	<u>MCI/AT&T</u> <u>HAI R5.0a</u> <u>APPLICATION</u> (\$000s)	<u>GCG HAI R5.0a</u> <u>APPLICATION</u> ² (\$000s)
Annual Universal Service Support:				
7	1. Primary Residence Lines	\$ 31.00	\$ 13,045	\$ 103,768
8	2. Single Line Business Lines	51.00	18	511
9	3. Total		13,063	104,279
10	1 The amounts reflected in this table corresponding to Mr. Wood's position are based on the 11 R50a_expense_wirecenter.xls module which is part of the Wood-filed HAI R5.0a Model. 12 On his filed CD-ROM, Mr. Wood uses a benchmark value of \$0.00 for both 13 Primary Residence Lines and Single Line Business Lines. This results in total annual 14 support of \$0.00 since the HAI Model's coding is such that, if the input benchmarks are 15 \$0.00, the Model reports \$0.00 of support. 16 In addition, the Wood-filed CD-ROM contains an output file (FLBS_FIL.xls) that is 17 different from the one that is produced when HAI 5.0a is run. Exhibit DJW-5 reflects the 18 same values for Residence [and Business] usage per line as are reported in FLBS_FIL.xls. 19 However, that file appears to include some logic modifications and at least one error, as 20 compared to the output of HAI R5.0a. Nonetheless, when \$31 and \$51 are input in 21 FLBS_FIL.xls as benchmark values for Primary Residence Lines and Single Line Business 22 Lines, respectively, a total annual USF support of \$15,116,826 is computed. 23 2 Average of DLC systems, Exhibit (GCG-17).			

24
 25

1 Q. DO MCI AND AT&T APPEAR TO AGREE THAT IT IS VALUABLE AND
2 APPROPRIATE TO SUBJECT THE HAI MODEL AND ITS DATABASE TO
3 SENSITIVITY ANALYSES?

4 A. Yes. In his prefiled testimony in Georgia Public Service Commission Docket
5 No. 7061-U, Mr. Wood extolled the virtues of HM R3.1, remarking that its
6 openness and availability allow BellSouth

7 to gain an understanding of how the Hatfield Model works, to review
8 all inputs and assumptions; and to determine which inputs and
9 assumptions have a significant effect on the Model outputs. (Wood
10 testimony, Georgia Public Service Commission Docket No. 7061-U,
11 p.4, l.20 to p.5, l.2)

12 In an earlier Georgia Public Service Commission Docket, in which Mr.
13 Wood testified on behalf of AT&T in its Georgia arbitration case with BellSouth,
14 Mr. Wood stated that

15 [b]ecause the Hatfield Model is publicly available and its inputs can
16 be varied by the user, it is possible to directly evaluate the Hatfield
17 Model for accuracy and to ascertain the sensitivity of the Hatfield
18 Model to changes in various inputs. (Wood testimony, Georgia Public
19 Service Commission Docket No. 6801-U, Tr. p.812, l.5 to l.10.)

20 As we have on other occasions, we agree with Mr. Wood that sensitivity
21 analyses of the HAI Model, particularly analyses directed to the default values for
22 the UAIs in the UAI database, are a valuable exercise.

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VI.

Inappropriate Results: MCI and AT&T Select Values
for the Sensitive User Adjustable Inputs That Do Not
Reflect BellSouth-Florida Conditions or Conditions
Reasonably Expected to Occur in the Future

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6 Q. IN YOUR OPINION, ARE THE RESULTS OF THE MCI/AT&T HAI R5.0a
7 APPLICATION APPROPRIATE FOR USE IN THIS CASE?

8 A. No. Those results are not appropriate because the cost and other data values MCI
9 and AT&T have selected as default values for the SUAs do not reflect the
10 conditions of the territory of BellSouth-Florida conditions and are not reasonably
11 reflective of forward-looking cost and other conditions. These failures cause the
12 AT&T HAI R5.0a Application to be inappropriate for use in this case.

13 Q. PLEASE EXPLAIN WHY THE COST AND OTHER DATA VALUES
14 SELECTED BY MCI AND AT&T AS DEFAULT VALUES FOR THE SUAs
15 ARE NOT APPROPRIATE.

16 A. HAI R5.0a is designed to be applied on the basis of cost and other data values for
17 UAs that (1) reflect the conditions of the territory of BellSouth-Florida and
18 (2) reflect conditions that reasonably can be expected to occur in the future. It
19 shou'd be applied on that basis. In the Georgia Public Service Commission cost
20 docket, Mr. Wood observed that

21 a fundamental issue with any cost study is the integrity of the
22 assumptions, calculations and input values used to develop the
23 ultimate outputs. (Wood testimony, Georgia Public Service
24 Commission Docket No. 7061-U, p. 7, l.10 to l.11.)

25 We agree.

1 Q. DO THE COST AND OTHER DATA VALUES THAT MCI AND AT&T HAVE
2 SELECTED FOR THE SUAIs MEET THE STANDARD YOU HAVE
3 DESCRIBED?

4 A. No. We have reviewed the cost and other data values that MCI and AT&T have
5 used as default values for the SUAIs. Those values do not meet the standard we
6 have described.

7 Attached to this testimony are 14 exhibits, one for each of the 14 SUAI
8 groups that we have identified in Exhibit__(GCG-1). These 14 exhibits,
9 designated Exhibit__(GCG-3) through Exhibit__(GCG-16), are incorporated into
10 this testimony. A portion of each of the Exhibits shows that, for the SUAI group
11 in question, the cost and other data values used by AT&T as default values for the
12 SUAIs fail the standard we have described.

13 **VII.**

14 **A Comparison: Default Values for User**
15 **Adjustable Inputs Common to**
16 **Different HAI Model Databases**

17 Q. HAVE YOU PERFORMED OTHER ANALYSES THAT SUGGEST THAT THE
18 DEFAULT VALUES IN APPENDIX B-5.0a FOR SUAIs MAY NOT BE
19 REASONABLE?

20 A. Yes. MCI and AT&T sometimes points to the fact, as they did during a Hatfield
21 Model workshop held in Georgia, that successive versions of the Model have
22 produced consistently close average loop prices. The contention appears to be that
23 the Model therefore should be considered "validated."

24 It appears to us that the consistently close average loop prices are more
25 likely due to significant (downward) changes that have been made in UAI

1 databases associated with successive versions of the Model. In other words, later
2 results appear consistent with earlier results because of (downward) changes in the
3 UAI databases for later versions of the Model, not because successive versions of
4 the Model would otherwise produce similar results.

5 Q. PLEASE EXPLAIN YOUR OBSERVATION.

6 A. The chart below shows the results of an analysis we performed. The version of
7 the Hatfield Model known as V2.2.2 has a UAI database associated with it,
8 Appendix 5B. HM R3.1 also has a UAI database associated with it, Appendix
9 B-3.1, as does HM R4.0 and HAI R5.0a, namely, Appendix B-4.0 and Appendix
10 B-5.0a. Each succeeding Model, applied on the basis of its associated UAI
11 database, does, indeed, modestly change the average loop price and annual
12 universal support levels produced by the prior Model. However, it appears that the
13 reason that results from later versions of the Model do not show even greater
14 changes, namely increases, from results from earlier versions of the Model is
15 because of adjustments (mostly downward) in each subsequent UAI database.

16 That conclusion is suggested to us by the results we obtained when we ran
17 HM R3.1 on the basis of the UAI database associated with an earlier versions of
18 the Model, namely, V2.2.2. And, that conclusion was confirmed when we later
19 ran HM R4.0 and HAI R5.0a using the UAI database associated with HM R3.1
20 and then with the UAI database associated with V2.2.2. Specifically, we isolated
21 those UAIs common between the V2.2.2 UAI database (Appendix 5B) and the
22 HM R3.1 UAI database (Appendix B-3.1), and then ran HM R3.1 using the V2.2.2
23 UAI values for those common UAIs. We next isolated those inputs common
24 between the HM R3.1 UAI database (Appendix B-3.1) and the HM R4.0 UAI
25 database (Appendix B-4.0), and then ran HM R4.0 using the HM R3.1 UAI values

1 for those common UAIs. We ran HM R4.0 using the Appendix 5B UAIs common
 2 between V2.2.2 and HM R4.0. Finally, we followed the same procedure for HAI
 3 R5.0a using inputs from prior Hatfield Model Releases. We found the results to
 4 be revealing, as shown by the following chart.

Data Base	Hatfield Model Version			
	2.2	3.1	4.0	5.0a
	(Universal Service Support (\$ millions)) ¹			
2.2	\$ 7.3	\$ 24.1	\$ 45.2	\$ 24.8
3.1		16.4	38.1	25.5
4.0			27.1	11.4
5.0a				11.3

¹ Using the default inputs derived by AT&T for each model and a benchmark support level of \$31 per primary residence line and \$51 per single business line per month.

14 Q. WHAT IS THE SIGNIFICANCE OF WHAT YOU HAVE OBSERVED?

15 A. As the chart shows, had the values for UAIs common between V2.2.2 and
 16 HM R3.1 remained the same, the universal service support would have risen by
 17 \$16.8 million (from \$7.3 million to \$24.1 million). Instead, as a result of changing
 18 the UAI database, HM R3.1 (using its new UAI database) produces a \$9.1 million
 19 increase in universal support (from \$7.3 million to \$16.4 million). In addition, if
 20 the values for UAIs common between HM R3.1, HM R4.0, and HAI R5.0a had
 21 remained the same, the average universal service support would have risen by \$9.1
 22 million (from \$16.4 million to \$38.1 million to \$25.5 million, respectively).
 23 Instead, as a result of changing the UAI database, HAI R5.0a (using its new UAI
 24 database) lowers the universal service support by \$5.1 million (from \$16.4 million
 25 to \$27.1 million to \$11.3 million, respectively). And, finally, if the values for

1 UAs common between V2.2.2 and HAI R5.0a had remained the same, the
2 universal service support would have risen by \$17.5 million (from \$7.3 million to
3 \$24.8 million). Note that these values are based on the default monthly benchmark
4 support levels of \$31 for Primary Residence Lines and \$51 for Single Line
5 Business Lines.

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7
8 **VIII.**

9 **Reasonable Results: GCG Applies HAI R5.0a Based on**
10 **Values for Sensitive User Adjustable Inputs**
11 **that Reflect BellSouth-Florida Conditions and Conditions**
12 **Reasonably Expected to Occur in the Future**

13
14 Q. PLEASE EXPLAIN THE GCG HAI R5.0a APPLICATION IN THIS CASE.

15 A. We have applied HAI R5.0a on the basis of alternative values for the SUAs that
16 we developed. We developed values that reflect cost and other conditions of the
17 territory of BellSouth-Florida and that reflect cost and other conditions that
18 reasonably can be expected to occur in the future.

19 Q. WHAT VALUES FOR THE SUAs HAVE YOU USED?

20 A. Attached as Exhibit __ (GCG-2), and incorporated herein by reference, is a print-out
21 of all the values for the UAs, sensitive and insensitive, that we used to apply HAI
22 R5.0a.

23 Q. WHAT RESULTS DOES THE GCG HAI R5.0a APPLICATION PRODUCE?

24 A. The following chart compares the results from the GCG HAI R5.0a Application
25 and the MCI/AT&T HAI R5.0a Application.

	MCI/AT&T HAI R5.0a <u>Application</u>	GCG HAI R5.0a <u>Application</u>
1 2	Average Loop Price Per Line Per Month	\$ 9.90 \$ 20.14
3 4	Switching Price Per Line Per Month ¹	\$ 3.78 \$ 7.00
5 6	Total Charge Per Line Per Month	\$ 13.68 \$ 27.14
7 8 9 10	Annual Universal Service Support for Primary Residence & Single Line Business Customers Lines ²	\$ 13,063,000 \$ 104,279,000
11 12 13 14 15 16 17 18	¹ Page 2 of the HAI Model R5.0a documentation indicates that the model computes costs for fourteen (14) UNEs. The model also provides a summary of the UNE rates for loop and total cost, both expressed in terms of cost per line per month. The difference between the total cost of all UNEs and the total loop cost is presented in this table as "Switching Price per Line per Month." We emphasize that this is an aggregate number reflecting multiple UNEs. There is no single switching UNE priced at the indicated rate per line per month.	
19 20	² Using a benchmark support level of \$31 per primary residence line and \$51 per single business line per month.	

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IX.
The GCG HAI R5.0a Application Results
in Prices that Are Specific to the
Conditions of BellSouth-Florida,
Forward-Looking and Reasonable

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6 Q. DOES THE GCG HAI R5.0a APPLICATION RESULT IN LOOP AND
7 SWITCHING PRICES AND UNIVERSAL SERVICE SUPPORT LEVELS THAT
8 ARE FORWARD-LOOKING?

9 A. Yes, with the provision that we have not validated the computations within the
10 model.

11 Q. PLEASE EXPLAIN WHY THE GCG HAI R5.0a APPLICATION RESULTS IN
12 LOOP AND SWITCHING PRICES AND UNIVERSAL SERVICE SUPPORT
13 LEVELS THAT ARE FORWARD-LOOKING.

14 A. There are three features to the GCG HAI R5.0a Application that ensure that its
15 results are forward-looking. One, the structure and logic of HAI R5.0a purport to
16 reflect a telecommunications network of the future, *i.e.*, a most efficient network
17 built from scratch, using forward-looking technology, assuming only
18 BellSouth-Florida's existing wire centers. The GCG HAI R5.0a Application leaves
19 that feature of the model untouched. Therefore, if the Commission determines that
20 the logic and structure of HAI R5.0a properly reflect the technology of a
21 forward-looking network, the GCG HAI R5.0a Application shares equally in that
22 characteristic.

23 Two, HAI R5.0a assumes quantities of materials corresponding to its
24 hypothetical network design. The GCG HAI R5.0a Application leaves those
25 quantities unchanged.

1 Three, HAI R5.0a calls for cost and other data values associated with its
2 UAI database that reflect conditions that reasonably can be expected to occur in
3 the future. The GCG HAI R5.0a Application fashions values for the SUAIs that
4 reflect the conditions of the territory of BellSouth-Florida and that are reasonable
5 and forward-looking. Those values are based on current BellSouth-Florida data
6 that have been carefully developed to ensure that no embedded cost or other
7 embedded characteristics are captured. The GCG alternative values reflect current
8 conditions in BellSouth-Florida's territory, but also conditions reasonably expected
9 to occur in the future.

10 Q. CAN YOU ILLUSTRATE THE STATEMENT THAT YOU MADE
11 REGARDING THE GCG HAI R5.0a APPLICATION BEING BASED ON THE
12 CONDITIONS OF THE TERRITORY OF BELLSOUTH-FLORIDA AND
13 RESULTING IN REASONABLE FORWARD-LOOKING PRICES?

14 A. Yes, As an example, we will focus on UAI B10 to illustrate these points.
15 Specifically, we compare MCI and AT&T's default values for UAI B10 to the
16 alternative values GCG has crafted for UAI B10. The comparison reveals (1) that
17 the GCG alternative values reflect the conditions of the territory of
18 BellSouth-Florida, while the default values used by AT&T do not, and (2) that the
19 GCG alternative values reflect conditions reasonably expected to occur in the
20 future, while the default values used by MCI and AT&T do not.

21 UAI B10 is one of the eleven UAIs in the SUAI group for Distribution
22 Investment (see Exhibit __ (GCG-5)). UAI B10 is Copper Distribution Cable,
23 \$/foot, defined by HAI R5.0a (Appendix B-5.0a) as the cost per foot of copper
24 distribution cable, as a function of cable size, including the costs of engineering,
25 installation and delivery, plus the cost of the cable.

1 The chart below compares values for UAI B10 developed by MCI/AT&T
2 and GCG. "Default" reflects MCI/AT&T values and "BST-FL Specific" reflects
3 GCG values.

4

UAI B10: Copper Distribution Cable, \$/Foot ¹		
Cable Size	Default	BST-FL Specific ²
6	\$ 0.63	\$1.14
12	0.76	1.28
25	1.19	1.60
50	1.63	2.22
100	2.50	3.39
200	4.25	5.86
400	6.00	10.43
600	7.75	15.24
900	10.00	21.29
1200	12.00	27.64
1800	16.00	40.90
2400	20.00	52.23

18 ¹ For comparable line sizes, UAI B56, copper feeder cable cost, would reflect
19 the same values as those listed in this chart.

20 ² BST-FL-specific values include terminal and splicing, whereas Default
21 values do not. Accordingly, as noted in Exhibit __ (GCG-4), the
22 BST-FL-specific value for cost of terminal splicing, UAI B7, is \$0.

23 For UAI B10, GCG obtained the cost per foot of copper distribution cable
24 that reflects the current cost of such cable to BellSouth-Florida, including the
25 current cost to BellSouth-Florida to engineer, install and deliver that type of cable.

1 On the other hand, the default values selected by MCI and AT&T are claimed to
2 be based on the "opinion" of outside plant engineers. In discovery, in proceedings
3 in other states, BST has asked MCI and AT&T to (1) provide all the back up
4 papers demonstrating the support for the default values associated with UAI B10
5 and (2) explain in detail (with supporting papers) the analyses MCI and AT&T
6 made, and the results therefrom, to ensure that the default values associated with
7 UAI B10 are actually reflective of the conditions in those states. MCI and AT&T
8 have not supplied answers, much less support for answers, to those inquiries.

9 A failure to provide answers to this type of discovery is particularly
10 troubling in light of the changes in the UAI database for HM R3.1 and HAI R5.0a
11 for UAI B10. The following chart shows the change made by MCI and AT&T
12 from one UAI database to the next, with the explanation that for certain cable sizes
13 a less course cable gauge was used. No backup documentation or workpapers
14 were provided.

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Changes in UAI Databases For UAI B10 HM R3.1 to HAI R5.0a		
<u>Cable Size</u>	<u>HM R3.1 Default</u>	<u>HM R4.0 and HAI R5.0a Default</u>
6	\$ 0.63	\$ 0.63
12	0.76	0.76
25	1.19	1.19
50	1.63	1.63
100	2.50	2.50
200	4.25	4.25
400	7.75	6.00*
600	11.25	7.75*
900	16.50	10.00*
1200	21.75	12.00*
1800	32.25	16.00*
2400	42.75	20.00*

* Highlights changed values caused by a change in the gauge of cable assumed for these cable sizes.

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The alternative values crafted by GCG for UAI B10 are not only based on cost data that reflects the current conditions of the territory of BellSouth-Florida, they also reflect costs that can be expected to occur in the future. There is every indication that the current cost of copper distribution cable, including the cost to deliver, engineer and install it, is actually a conservative measure of the cost of copper distribution cable in the future. It is not reasonable to expect that the installed cost of copper distribution cable will go down.

1 Q. PLEASE EXPLAIN HOW YOU DEVELOPED THE COST FOR COPPER
2 DISTRIBUTION CABLE TO ENSURE THAT IT IS FORWARD-LOOKING
3 AND NOT REFLECTIVE OF EMBEDDED COSTS.

4 A. Copper distribution cable that has been installed over a number of years is
5 recorded on BellSouth-Florida's books as an investment. Therefore, were it
6 necessary to obtain the embedded investment dollar figure per foot of copper
7 distribution cable, this would be obtained by dividing the total investment in
8 copper distribution cable recorded on BellSouth-Florida's books by the total length
9 of copper distribution cable that has been installed over the years. Since HAI
10 R5.0a requires a forward-looking and not an embedded cost per foot of copper
11 distribution cable, we applied a different procedure to obtain the forward-looking
12 cost. GCG began its analysis by considering 26 gauge copper distribution cable
13 and obtained costs associated with the activity of installing this size of cable in
14 1997. This information is contained in the 1997 books and records of
15 BellSouth-Florida in the specific field recording code associated with the
16 installation of 26 gauge copper distribution cable. This data provided the 1997
17 costs associated with the installation of 26 gauge copper distribution cable and the
18 length of cable that was installed for that year. We then derived the current (1997)
19 cost per foot for installation of copper distribution cable for each of the cable sizes.
20 This is precisely the information that is required for UAI B10 in order to make it
21 BellSouth-Florida specific, forward-looking and not reflective of embedded costs.

22 Q. WHAT POINT DO YOU MAKE BASED ON YOUR EXAMPLE OF UAI B10?

23 A. The alternative values for UAI B10 developed by GCG are based on conditions in
24 the territory of BellSouth-Florida and are reasonable as forward-looking costs. The
25 basis for the default values for UAI B10 used by MCI and AT&T is unknown, but

1 they most certainly are not specific to the conditions of the territory of
2 BellSouth-Florida. Moreover, MCI and AT&T provides no explanation of how
3 their default values are properly reflective of reasonable forward-looking
4 conditions.

5 Q. ARE THE TYPES OF SHORTCOMINGS IN THE MCI/AT&T DEFAULT
6 VALUES FOR UAI B10 THAT YOU HAVE DESCRIBED IN THIS
7 TESTIMONY ALSO FOUND WITH RESPECT TO THE DEFAULT VALUES
8 MCI AND AT&T HAS CRAFTED FOR OTHER SUAIs?

9 A. Yes. Although, as you would expect, the exact deficiencies in the MCI/AT&T
10 default values related to UAI B10 are not the precise deficiencies found in the case
11 of other SUAIs, the same type and magnitude of deficiencies is found in the case
12 of virtually every other SUAI. Attached to this testimony are Exhibit ___(GCG-3)
13 through Exhibit ___(GCG-16), which address each of the 14 SUAI groups and
14 identify some of the deficiencies in the MCI/AT&T default values associated with
15 those SUAI groups.

16 X.

17 **Conclusion: If the HAI Model is Used, It Should**
18 **Be Applied on the Basis of the Alternative Values for**
19 **The Sensitive User Adjustable Inputs Developed by GCG**

20 Q. PLEASE STATE THE CONCLUSION YOU REACH.

21 A. If this Commission determines that it wishes to establish universal service support
22 levels for BellSouth-Florida on the basis of applying HAI R5.0a, it should do so
23 on the basis of values for the SUAIs that properly reflect the conditions of the
24 territory of BellSouth-Florida. In other words, the cost and other data used to
25 fashion values for the SUAIs should reflect the conditions of the territory of

1 BellSouth-Florida. In addition, the values for the SUAs should reflect cost and
2 other conditions that are reasonably expected to occur in the future, *i.e.*, that are
3 both forward-looking and reasonable. Only in that circumstance will the
4 application of HAI R5.0a produce cost for purposes of determining universal
5 service support that are both forward-looking and reasonable for application in this
6 case.

7 The values for the SUAs fashioned by Georgetown meet this standard.
8 The values used by MCI and AT&T for the SUAs do not. If the Commission
9 utilizes HAI R5.0a, it should use the values for the SUAs fashioned by
10 Georgetown.

11 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

12 A. Yes, it does.

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**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**In Re: Determination of the Cost of Basic
Local Telecommunications Service, pursuant
to Section 364.025, Florida Statutes**

Docket No. 980696-TP

**Appendices To
Rebuttal Testimony of
Jamshed K. Madan, Michael D. Dirmeier
and David C. Newton on Behalf of
BellSouth Telecommunications, Inc.**

**Submitted
September 2, 1998**

APPENDIX A

GLOSSARY OF DEFINED TERMS

APPENDIX A

Glossary of Defined Terms

<u>HM R3.1</u>	Release 3.1 of the Hatfield Model.
<u>Appendix B-3.1</u>	An attachment to the HM R3.1 model documentations which identifies 181 UAIs and the approximately 700 default values associated with them for use with HM R3.1.
<u>V2.2.2</u>	Version 2.2.2 of the Hatfield Model.
<u>Appendix 5B</u>	An attachment to the V2.2.2 Hatfield Model documentation, which identifies the user adjustable inputs and the default values associated with them for use with V2.2.2.
<u>HM R4.0</u>	Preliminary Release 4.0 of the Hatfield Model, a CD for which was filed in these Dockets by MCI and AT&T.
<u>Appendix B-4.0</u>	An attachment to the HM R4.0 model documentation, which identifies 184 UAIs and the approximately 700 default values associated with them for use with HM R4.0.
<u>HM R5.0a</u>	Release 5.0a of the Hatfield Model.
<u>Appendix B-5.0a</u>	An attachment to the HM R5.0a model documentation, which identifies 201 UAIs and the approximately 1075 default values associated with them for use with HM R5.0a.
<u>UAIs</u> <u>(user adjustable</u> <u>inputs)</u>	The inputs and their default values identified in Appendix B-5.0a (HM R5.0a), Appendix B-4.0 (HM R4.0), Appendix B-3.1 (HM R3.1), and Appendix 5B (V2.2.2). The UAIs are designed to accept ILEC-specific data values in replacement of their associated default values.
<u>default values</u>	The data values for UAIs identified in Appendix B-5.0a (HM R5.0a), Appendix B-4.0 (HM R4.0), Appendix B-3.1 (HM R3.1), and Appendix 5B (V2.2.2) which automatically are used in applying the Hatfield Model, unless alternative data values are substituted for the default values.
<u>SUAIs</u> <u>(sensitive user</u> <u>adjustable inputs)</u>	Refers to a group of UAIs that are related by virtue of the logic of the Hatfield Model and for which changes in their default values, as a group, cause a material change in the unbundled network element prices that are produced by the Hatfield Model.

APPENDIX B

STATEMENT OF QUALIFICATIONS

**JAMSHED K. MADAN
PRINCIPAL,
GEORGETOWN CONSULTING GROUP, INC.**

APPENDIX B

Statement of Qualifications

Jamshed K. Madan
Principal, Georgetown Consulting Group, Inc.

Education

M.S. in Management, 1968, Alfred P. Sloan School of Management,
Massachusetts Institute of Technology

B.S. in Electrical Engineering, 1966, Massachusetts Institute of Technology

Employment

May 1979 to present	Principal, Georgetown Consulting Group, Inc
May 1976 to April 1979	Principal and National Director of Regulatory Consulting, Touche Ross & Company
September 1975 to April 1976	General Manager, Corporate Development, Public Service Electric & Gas
August 1968 to August 1975	Touche Ross & Company

Utility Regulatory Experience

Mr. Madan has provided expert testimony in over 150 proceedings, covering various utility regulatory matters, in cases involving telecommunications, electric, gas, water, sewer and transit utilities. The jurisdictions in which Mr. Madan has appeared include: Alabama, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Guam, Guyana SA, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, New York, Ohio, Pennsylvania, U.S. NRC, U.S. Virgin Islands, Virginia. A list of the proceedings in which Mr. Madan has testified and/or filed testimony is attached. In addition to participation in those regulatory proceedings, Mr. Madan has lead projects that included operations reviews, financial feasibility studies, economic studies, marketing studies, cash flow analyses, cost reduction studies and system planning studies.

Regulatory Participation of
Jamshed K. Madan
(Through November, 1997)

1. New Jersey, Hackensack Water Company, Docket No. 744-315, August, 1974.
2. New Jersey, Elizabethtown Gas Company, Docket No. 727-624.
3. U.S. Virgin Islands, Manassah Bus Lines, Docket No. 150.
4. New Jersey, Elizabethtown Water Company, Docket No. 727-606.
5. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 193.
6. New Jersey, Jersey Central Power & Light Company, Docket No. 743-184, October, 1974.
7. Vermont, New England Telephone and Telegraph Company, Docket No. 3806, November, 1974.
8. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 254.
9. New Jersey, New Jersey Bell Telephone Company, Docket No. 747-522, April, 1975.
10. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 121, September, 1975.
11. New Jersey, New Jersey Bell Telephone Company, Docket No. 7512-1251, May, 1976.
12. Pennsylvania, Philadelphia Electric Company, R.I.D. No. 295, June, 1976.
13. Maryland, Baltimore Gas & Electric Company, Case No. 6985, October, 1976.
14. New Jersey, Atlantic City Electric Company, Docket Nos. 706-641 and 772-113, April, 1977.
15. Pennsylvania, Bell Telephone Company of Pennsylvania, Docket No. 367, July, 1977.
16. Pennsylvania, Pennsylvania Electric Company, R.I.D. No. 392, August, 1977.
17. Connecticut, Southern New England Telephone Company, Docket No. 770526, October, 1977.
18. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 126, November, 1977.
19. Pennsylvania, Metropolitan Edison Company, R.I.D. No. 434, November, 1977.
20. New Jersey, New Jersey Bell Telephone Company, Docket No. 7711-1136, July, 1978.
21. Pennsylvania, Pennsylvania Electric Company, R.I.D. No. 599, September, 1978.
22. New York, Long Island Lighting Company, Case Nos. 27374 and 27375, October, 1978.

- 23 Pennsylvania, Metropolitan Edison Company, R.I.D. No. 626, November, 1978.
- 24 New Jersey, Jersey Central Power & Light Company, Docket No. 7610-1021, December, 1978.
- 25 Ohio, Columbus and Southern Ohio Electric Company, Docket No. 78-1439-EL-AEM, January, 1979.
- 26 New York, New York Telephone Company, Case No. 27469, May, 1979.
- 27 New Mexico, Mountain Bell Telephone Company, Docket No. , September, 1979.
- 28 New Jersey, Public Service Electric & Gas Company, Docket No. 794-310, October, 1979.
- 29 Maryland, Potomac Electric Company, Case No. 7384, February, 1980.
- 30 Delaware, Delmarva Power & Light Company, Docket No. 41-/9, March, 1980.
- 31 Colorado, Mountain States Bell Telephone Company, Docket No. 1400 April, 1980.
- 32 Delaware, Delmarva Power & Light Company, Complaint Docket No. 279-80, June, 1980.
- 33 New York, New York Telephone Company, Case No. 27100, July, 1980.
- 34 New Jersey, New Jersey Bell Telephone Company, Docket No. 802-135, July, 1980.
- 35 U S Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 108, August, 1980.
- 36 Connecticut, Southern New England Telephone Company, Docket No. 800418, August, 1980.
- 37 Ohio, Ohio Bell Telephone Company, Case No. 79-1184-TP-AIR, September, 1980.
- 38 Maryland, Delmarva Power & Light Company, Case No. 7427, September, 1980.
- 39 Maryland, C&P Telephone Company, Case No. 7467, October, 1980.
- 40 Colorado, Public Service Company of Colorado, Docket No. 1425, October, 1980.
- 41 Alabama, Continental Telephone Company of the South, Docket No. 17968, November, 1980.
- 42 New York, Long Island Lighting Company, Case No. 27774, November, 1980.
- 43 U S Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 180, November, 1980.
- 44 Delaware, Delmarva Power & Light Company, Docket No. 80-39, December, 1980.
- 45 Alabama, South Central Bell, Case Nos. 10875 & 10876, June 1981.
- 46 U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 229, June 1981.
- 47 Minnesota, Northwestern Bell Telephone Company, Docket No. P-421/GR80-911, June, 1981.

- 48 Delaware, Delmarva Power & Light Company, Docket No. 81-23, July, 1981.
- 49 Colorado, Public Service Company of Colorado, Docket No. 1525, September, 1981.
- 50 New Jersey, Public Service Electric & Gas Company, Docket No. 812-76, September, 1981.
- 51 New Jersey, New Jersey Bell Telephone Company, Docket No. 815-458, December, 1981.
- 52 Ohio, Cleveland Electric Illuminating Company, Case No. 81-146-EL-AIR, December, 1981.
- 53 Maryland, C&P Telephone Company, Case No. 7591, December, 1981.
- 54 Massachusetts, Boston Edison Company, Docket No. DPU-906, January, 1982.
- 55 Pennsylvania, Bell Telephone Company of Pennsylvania, Docket No. R-811819, May, 1982.
- 56 Colorado, Mountain States Bell Telephone Company, Docket No. 1575, September, 1982.
- 57 Maryland, C&P Telephone Company, Case No. 7661, November, 1982.
- 58 Delaware, Diamond State Telephone Company, Docket No. 82-32, February, 1983.
- 59 New York, Long Island Lighting Company, Case No. 28252, February, 1983.
- 60 New Jersey, Public Service Electric & Gas Company, Docket No. 831-25, February, 1983.
- 61 Georgia, Southern Bell Telephone Company, Docket No. 3393-U, June, 1983.
- 62 New Jersey, New Jersey Bell Telephone Company, Docket Nos. 8211-1030 and 8210-880 Phase II, November, 1983.
- 63 Arkansas, Southwestern Bell Telephone Company, Docket No. 83-045-U, September, 1983.
- 64 New Jersey, New Jersey Bell Telephone Company, Docket No. 8311-554, February, 1984.
- 65 Colorado, Public Service Company of Colorado, Docket No. 1640, February, 1984.
- 66 U.S. Nuclear Regulatory Commission, Long Island Lighting Company, Low Power Proceeding, Docket No. 50-322-OL-4, 1984.
- 67 Colorado, Mountain States Bell Telephone Company, Docket No. 1655, April, 1984.
- 68 Georgia, Southern Bell Telephone Company, Docket No. 3465-U, August, 1984.
- 69 U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 275, November, 1984.
- 70 New Jersey, New Jersey Bell Telephone Company, Docket No. 848-856, December, 1984.
- 71 New Jersey, Public Service Electric & Gas Company, Docket No. 837-620, April, 1985.

- 72 New Jersey, AT&T Communications of New Jersey, Docket Nos. 8311-1035 and 8311-1064, May, 1985.
- 73 Maryland, C&P Telephone Company, Case No. 7851, April, 1985.
- 74 Arkansas, Arkansas Power & Light Company, Docket No. 84-249-U, June, 1985.
- 75 Georgia, Southern Bell Telephone Company, Docket No. 3518-U, July, 1985.
- 76 Colorado, Mountain States Bell Telephone Company, Docket No. 1700, March, 1986.
- 77 New Jersey, Public Service Electric & Gas Company, Docket No. 8512-1163, May, 1986.
- 78 Maryland, C&P Telephone Company Generic Case EA/NR, Case No. 7901, April, 1986.
- 79 Delaware, Diamond State Telephone Company, Docket No. 86-20, September, 1986.
- 80 Colorado, Mountain States Telephone and Telegraph Company, Application 37730, September, 1986.
- 81 New Jersey, Public Service Electric and Gas Company, BPU Docket No. ER85121163, November, 1986.
- 82 Delaware, Diamond State Telephone Company, Regulation Docket No. 10, January, 1987.
- 83 Georgia, Georgia Power Company, Docket No. 3549-U, March, 1987.
- 84 Delaware, Diamond State Telephone Company, Docket No. 86-20, April, 1987.
- 85 U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 301, April, 1987.
- 86 New Jersey, New Jersey Bell Telephone Company, Docket No. TO8610-1115, April, 1987.
- 87 Georgia, Georgia Power Company, Docket No. 3673-U, August, 1987.
- 88 U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 277, September, 1987.
- 89 U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 314, October, 1987.
- 90 New Jersey, AT&T Communications of New Jersey, Docket No. TR8704-361, November, 1987.
- 91 New Jersey, Public Service Electric & Gas Company - Gas Operations, Docket No. ER8512-1163, February, 1988.
- 92 New Jersey, Public Service Electric & Gas Company - Electric Operations, Docket No. ER8512-1163, February, 1988.
- 93 New Jersey, New Jersey Bell Telephone Company, Docket No. T-87050398, March, 1988.
- 94 New Jersey, Peach Bottom, Docket No. ER8802-0324, Oral Testimony, March, 1988.

95. District of Columbia, District of Columbia Natural Gas Company, Formal Case No 870, May, 1988.
96. Delaware, Diamond State Telephone Company, Docket No. 86-20, Phase II, June, 1988
97. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 316, June, 1988.
98. Guam, Guam Power Authority, Docket No. 88-001, July, 1988.
99. New Mexico, Public Service Company of New Mexico, Case No. 2146, October, 1988.
100. California, In the Matter of Alternative Regulatory Frameworks for Local Exchange Carriers, Case No. I.87-11-033, January 1989.
101. California, In the Matter of Alternative Regulatory Frameworks for Local Exchange Carriers, Case No. A.88-08-031, April, 1989.
102. Guam, Guam Power Authority, Docket No. 88-002, May 1989.
103. Colorado, Mountain States Telephone & Telegraph Company, I&S Docket No. 1400, May, 1989
104. New Jersey, Public Service Electric & Gas Company, Docket No. ER8512163, May, 1989.
105. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No 322, August, 1989.
106. Georgia, Georgia Power Company, Docket No. 3840-U, August, 1989.
107. New Mexico, Public Service Company of New Mexico, Case No. 2262, October, 1989
108. New Jersey, Public Service Electric & Gas Company, Docket Nos. ER85121163 and GR89060622, October, 1989.
109. Guam, Guam Power Authority, Docket No. 89-002C, January 1990.
110. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 322, January, 1990.
111. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 344, March, 1990.
112. Georgia, Southern Bell Telephone Company, Docket No. 3905-U, May, 1990.
113. Georgia, Southern Bell Telephone Company, Docket No. 3905-U (Surrebuttal and incentive regulation), June, 1990 and August, 1990.
114. Guam, Guam Power Authority, Docket No. 89-002, August 1990.
115. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 334, October, 1990.
116. Colorado, US WEST Communications Inc., Docket No. 90S-544T, January, 1991.

117. New Jersey, United Telephone Company of New Jersey, Docket Nos. TR9007-0726J, February, 1991.
118. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 345, April, 1991.
119. U.S. Virgin Islands, Virgin Islands Telephone Corporation, Docket No. 334, On Remand. July, 1991.
120. Georgia, Georgia Power Company, Docket No. 4007-U, August, 1991.
121. Colorado, US WEST Communications Inc., Docket No. 90A-655T, September 1991.
122. Georgia, GTE - South, Docket No. 4003-U, December 1991.
123. Georgia, Southern Bell Telephone Company, Docket No. 3587-U (Cross Subsidy issues), January 1992.
124. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 355, May 1992.
125. New Jersey, Public Service Electric & Gas Company, Docket Nos. ER91111698J, May 1992.
126. Guam, Guam Power Authority, Docket No. 92-001, August 1992.
127. New Jersey, New Jersey Bell Telephone Company, Docket Nos. TO92030358, (Alternative Form of Regulation), September 1992.
128. Guam, Guam Power Authority, Docket No. 92-009, November 1992.
129. Guam, Guam Power Authority, Docket No. 92-001, Supplemental, November 1992.
130. Georgia, Southern Bell Telephone Company, Docket No. 4232-U, January 1993.
131. U.S. Virgin Islands, Rules & Regulations re: Customer Owned Coin-Operated Telephones, Docket Nos. 285 and 319, February 1993.
132. U.S. Virgin Islands, SASA Complaint re: Customer Owned Coin-Operated Telephones, Docket No. 356, February 1993.
133. Georgia, Southern Bell Telephone Company, Docket No. 3905-U, March 1993.
134. U.S. Virgin Islands, Vitran Bus Service, Docket No. 357, April 1993.
135. Colorado, Public Service Company of Colorado, Docket No. 93S-001EG, May 1993.
136. New Jersey, New Jersey Natural Gas Company - Incentive Rate Regulation, Docket No. GR93050154, December 1993.
137. Guam, Guam Telephone Authority, Docket No. 93-011, December 1993.

138. U.S. Virgin Islands, Virgin Islands Telephone Corporation - Cellular Telephone Service, Docket No. 332, January 1994.
139. Guam, Guam Municipal Golf, Docket No. 93-009, February 1994.
140. U.S. Virgin Islands, Virgin Islands Water & Power Authority, Docket No. 378, March 1994
141. Virginia, Virginia Cable Television Association, Case No. PUC930036, March 1994.
142. Virginia, Virginia Cable Television Association, Rebuttal, Case No. PUC930036, March 1994.
143. Guam, Guam Telephone Authority Rate Case Phase II, re: Called ID, etc., Docket No. 93-011, Late 1994.
144. Guyana, Guyana Rate Case, 1995.
145. Virgin Islands, Virgin Islands Water and Power Authority Rate Case, Docket No. 378, 1995
146. Virgin Islands, Virgin Islands Water and Power Authority Water Rate Case, Docket No. 481, 1995.
147. Guam, Guam Power Authority Rate Case, Docket No. 95-001, Late 1995
148. Guam, Guam Power Authority, Customer Service Agreement, Docket No. 89-002, 1995/1996.
149. Virgin Islands, Virgin Islands Water and Power Authority Rate Case Emergency, Docket No. 500, Early 1996.
150. Virgin Islands, Virgin Islands Telephone Company, VITELCO Private Line, Docket No. 486, March 1996.
151. Guam, Guam Power Authority Rate Case, Phase I Stipulation, Docket No. 96-004, May 1996
152. Virgin Islands, Virgin Islands Water and Power Authority Rate Case Final, Docket No. 500, Mid 1996.
153. New Jersey, Donnelley, August 1996.
154. Guam, Guam Telephone Authority Rate Case Stipulation, Re Access charges, Private Line, Inside Wire, Docket No. 96-007, August 1996.
155. Guam, Guam Power Authority Rate Case, Phase II Testimony, Docket No. 96-004, Decemb:- 1996.
156. Georgia, BellSouth Telecommunications, Inc., Docket No. 7601-U. August 1997. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.

APPENDIX C

STATEMENT OF QUALIFICATIONS

WILLIAM H. BERKELEY

PRINCIPAL

GEORGETOWN CONSULTING GROUP, INC.

APPENDIX C

Statement of Qualifications

Michael D. Dirmeier
Principal, Georgetown Consulting Group, Inc.

Education

M.B.A. in Finance, 1973, University of Chicago

B.S. in Physics, 1971, Texas A&M University

Certificate of Management Accounting

Employment

May 1979 to present
July 1976 to April 1979

Principal, Georgetown Consulting Group, Inc.
Consultant and Senior Consultant,
Consulting Division, Touche Ross & Company
Financial Planning Analyst, The Bendix Corporation

January 1974 to June 1976

Utility Regulatory Experience

Mr. Dirmeier has provided expert testimony in over 90 proceedings involving telecommunications, electric and water utilities. The jurisdictions in which Mr. Dirmeier has appeared include: Arkansas, Colorado, Delaware, District of Columbia, Florida, Georgia, Maryland, Mississippi, New Mexico, New Jersey, New York, Nuclear Regulatory Commission, Oklahoma, Pennsylvania, South Carolina, U.S. Virgin Islands, Virginia. A list of the proceedings in which Mr. Dirmeier has testified and/or filed testimony is attached. Mr. Dirmeier has extensive experience in the application of computer models to the analysis of utility issues.

Regulatory Participation of
Michael D. Dirmeier
(Through March 1998)

1. New Jersey, West Kensington Water Co., Docket No. 7710-1026, June 1978. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.
2. U.S. Virgin Islands, Virgin Islands Telephone Company, Docket No. 180, 1978. Depreciation rates. Sponsored by Staff of Public Service Commission.
3. New Jersey, Middlesex Water Company, Docket No. 793-269, August 1979. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.
4. South Carolina, PURPA ratemaking standard, April 1980. Sponsored by Public Advocate.
5. New York, New York Telephone Company, Docket No. 27710, July 1980. Accounting issues. Sponsored by Public Advocate.
6. New Jersey, Hackensack Water Company, Docket No. 804-275, September 1980. Emergency proceeding. Sponsored by Department of the Public Advocate.
7. New York, Long Island Lighting Company, Docket No. 27774, November 1980. Accounting issues. Sponsored by Suffolk County.
8. Pennsylvania, Metropolitan Edison Company, Docket No. R-80051196, December 1980. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
9. Pennsylvania, Pennsylvania Electric Company, Docket No. R-80051197, December 1980. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
10. New Jersey, South Jersey Gas Company, Docket No. 808-517, February 1981. Treatment of over-earnings arising from experimental tariff. Sponsored by Department of the Public Advocate.
11. New Jersey, Hackensack Water Company, Docket No. 815-447, June 1981. Emergency rate proceeding. Sponsored by Department of the Public Advocate.
12. New Jersey, New Jersey Bell Telephone Co., Docket No. 815-458, October 1981. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.
13. Pennsylvania, Metropolitan Edison Company, Docket No. R-80011601, November 1981. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
14. Pennsylvania, Pennsylvania Electric Company, Docket No. R-80011602, November 1981. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
15. New Jersey, Hackensack Water Company, Docket No. 815-447, March 1982. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.

- 16 Pennsylvania, Bell Telephone Company of Pennsylvania, RID 1819, April 1982. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
- 17 New Jersey, Atlantic City Electric Company, Docket No. 822-116, July 1982. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.
- 18 New Jersey, New Jersey Natural Gas Company, Docket No. 815-459, July 1982. Sponsored by Department of the Public Advocate.
- 19 Maryland, Potomac Electric Power Company, Case No. 7662, November 1982. Accounting and revenue requirements. Sponsored by Staff of Public Service Commission.
- 20 Pennsylvania, Duquesne Light Company, Docket No. R-21945, March 1982. Excess costs incurred due to nuclear outage. Sponsored by Office of the Public Advocate.
- 21 Colorado, Mountain Bell Telephone Company, I&S 1575, September 1982. Depreciation methodology. Sponsored by coalition of municipalities.
- 22 New York, Long Island Lighting Company, PSC Case No. 28252, February 1983. Shoreham phase-in. Sponsored by Suffolk County.
- 23 Pennsylvania, Metropolitan Edison Company, Docket No. R-822249, May 1983. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
- 24 Pennsylvania, Pennsylvania Electric Company, Docket No. R-822250, May 1983. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
- 25 Pennsylvania, Bell Telephone Company of Pennsylvania, Docket R-811819, August 1983. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
- 26 Mississippi, South Central Bell Telephone Company, Docket No. U-4415, January 1984. Accounting and revenue requirements, divestiture proceeding. Sponsored by Attorney General.
- 27 Colorado, Public Service Company of Colorado, I&S 1640, February 1984. Accounting and revenue requirements. Sponsored by Office of the Public Advocate.
- 28 New Jersey, Atlantic City Electric Company, Docket No. 822-116, August 1983. Levelization of long-term purchase power contract. Sponsored by Department of the Public Advocate.
- 29 Florida, Southern Bell Telephone Company, Docket No. 820263-TP, August 1984. Accounting and revenue requirements, divestiture proceeding. Sponsored by Public Advocate.
- 30 U.S. Nuclear Regulatory Commission, Long Island Lighting Company, Shoreham Nuclear Power Station, Docket No. 50-322-OL-4, 1984. Financial requirements for low power license. Sponsored by Suffolk County.
- 31 Arkansas, Arkansas Power & Light Company, Docket No. 84-249-U, June 1985. Financial nature of system agreements and construction of Grand Gulf Nuclear Plant. Sponsored by Staff of Public Service Commission.

32. New Jersey, Hackensack Water Company, Docket No. WR8506-663, October 1985. Accounting and revenue requirements. Sponsored by Department of the Public Advocate.
33. New Mexico, Public Service Company of New Mexico, Case No. 1916, July 1985. Accounting and revenue requirements. Sponsored by Attorney General.
34. New Mexico, Public Service Company of New Mexico, Case No. 2011, March 1986. Inventory treatment of sale/leaseback of investment in nuclear unit. Sponsored by Attorney General.
35. Colorado, Mountain States Telephone and Telegraph Company, I&S No. 1700, March 1986. Selected accounting issues in base rate proceeding. Sponsored by Colorado Municipal League.
36. New Mexico, Public Service Company of New Mexico, Case No. 2019, April 1986. Utility holding company. Sponsored by Attorney General.
37. New Jersey, Public Service Electric and Gas Company, BPU Docket No. ER85121163, April 1986. Working capital issues in base rate proceeding. Sponsored by Department of the Public Advocate.
38. New Mexico, Public Service Company of New Mexico, Case No. 1916, June 1986 rehearing. Accounting issues. Sponsored by Attorney General.
39. New Mexico, Gas Company of New Mexico, Case No. 1971, May 1986. Gas purchase clause. Sponsored by Attorney General.
40. New Mexico, El Paso Electric Company, Case No. 2032, June 1986. Sale/leaseback of investment in nuclear unit. Sponsored by Attorney General.
41. Pennsylvania, Metropolitan Edison Company, Docket No. R-860384, 1986. Base rate proceeding. Sponsored by Office of the Public Advocate.
42. Pennsylvania, Pennsylvania Electric Company, Docket No. R-860413, 1986. Base rate proceeding. Sponsored by Office of the Public Advocate.
43. New Mexico, Public Service Company of New Mexico, Case No. 2067, December 1986. Company's annual October inventory filing. Sponsored by Attorney General.
44. New Jersey, Elizabethtown Water Company, OAL Doc. at Nos. PUC 5353-86, 5351-86, 5354-86 and 5352-86 (consolidated), January 1987. Deposit requirements for water main extensions. Sponsored by developer intervenors.
45. Delaware, Intrastate Competition, PSC Regulation Docket No. 10. Ongoing. Sponsored by Staff of Public Service Commission.
46. District of Columbia, Potomac Electric Power Company, Formal Case No. 852, February 1987. Tax Reform Act of 1986. Sponsored by Office of People's Counsel.
47. District of Columbia, C&P Telephone Company, Formal Case No. 854, April 1987. Tax Reform Act of 1986. Sponsored by Office of People's Counsel.

48. New Mexico, Public Service Company of New Mexico, Case No. 2096, July 1987. Company's annual January inventory filing. Sponsored by Attorney General.
49. Georgia, Georgia Power Company, Docket No. 3673-U, August 1987. Base rate proceeding. Panel witness responsible for computations of write-off and phase-in plan. Sponsored by Staff of the Public Service Commission.
50. New Jersey, South Jersey Gas Company, BPU Docket Nos. GR8704-329 & GR8608-902, September 1987. Base rate proceeding. Sponsored by Department of the Public Advocate.
51. District of Columbia, Potomac Electric Power Company, Formal Case No. 852-II, November 1987. Tax Reform Act of 1986. Sponsored by Office of People's Counsel.
52. District of Columbia, C&P Telephone Company, Formal Case No. 854-II, November 1987. Tax Reform Act of 1986. Sponsored by Office of People's Counsel.
53. New Mexico, Public Service Company of New Mexico, Case No. 2159, December 1987. Company's annual October inventory filing. Sponsored by Attorney General.
54. New Jersey, Atlantic City Electric Company, Docket No. ER8504434 (Benefits of TRA), January 1988. Company's TRA filing. Sponsored by Department of the Public Advocate.
55. New Mexico, Public Service Company of New Mexico, Case No. 2146, November 1988. Treatment of Excess Capacity. Sponsored by Attorney General.
56. New Jersey, Public Service Electric & Gas Company, BPU Docket No. ER85121163, June 1989. Treatment of proposed 20-year purchase of capacity from AEP-Rockport II. Sponsored by Department of the Public Advocate.
57. Georgia, Georgia Power Company, Docket No. 3840-U, August 1989. Base rate proceeding. Panel witness responsible for computations concerning phase-in and decommissioning expense. Sponsored by Staff of the Public Service Commission.
58. New Mexico, Public Service Company of New Mexico, Case No. 2262, November 1989. Base case. Sponsored by Attorney General.
59. Vermont, Central Vermont Public Service Company, Docket No. 5372, February 1990. Base case. Sponsored by Department of Public Service.
60. Pennsylvania, Pennsylvania Gas and Water Co. and North East Water Company, Docket No. A-210018, P-900453 and R-901726, October & November 1990. Application to purchase utility, petition for accounting methodologies and accounting position in base rate proceeding. Sponsored by Office of Consumer Advocate.
61. New Jersey, Hackensack Water Company, Docket No. WR90080792J, January 1991. Accounting in a base rate proceeding. Sponsored by Department of the Public Advocate.
62. New Mexico, US WEST, Inc., Case No. 90-255-TC, March 1991. Commission inquiry concerning local calling area for Albuquerque metro area. Sponsored by Attorney General.

63. New Jersey, Atlantic City Electric Company, Docket No. ER90091090J, March 1991. Working capital in a base rate proceeding. Sponsored by Department of the Public Advocate.
64. New Mexico, Plains Electric Generation and Transmission Cooperative, Inc., Case No. 2363, April 1991. Base rate proceeding of an electric cooperative. Sponsored by Attorney General.
65. District of Columbia, C&P Telephone Company, Formal Case No. 850, October 1991. Productivity in PSC's investigation concerning the reasonableness of C&P's rates. Sponsored by Office of People's Counsel.
66. New Mexico, Public Service Company of New Mexico, Case No. 2326, July 1991. Investigation into diversification and divestiture transactions undertaken by PNM. Sponsored by Attorney General.
67. Georgia, Georgia Power Company, Docket No. 4007-U, August 1991. Base rate proceeding. Panel witness responsible for computations and selected rate case issues. Sponsored by Staff of the Public Service Commission.
68. New Jersey, Jersey Central Power & Light Company, Docket No. EM91010067, October 1991. Regulatory treatment and prudence of proposed multi-part agreement to purchase 50% of plant being restored to service, purchase capacity under long-term power sale agreement and participate in construction of a long-distance 500 kV transmission line. Sponsored by Department of the Public Advocate.
69. New Mexico, Public Service Company of New Mexico, Case No. 2408, January 1992. PNM request to sell 50MW of San Juan 4 to the City of Anaheim, CA. Sponsored by Attorney General.
70. Oklahoma, Oklahoma Gas & Electric Company, Cause Nos. PUD 898 & 1055, April 1992. Revenue requirement testimony in a "show cause" proceeding. Sponsored by Attorney General.
71. New Mexico, Public Service Company of New Mexico, Case No. 2429, April 1992. Regulatory treatment of transactions intended to complete the exit from diversification. Sponsored by Attorney General.
72. New Jersey, Public Service Electric & Gas Company, BPU Docket No. EE91081428, April 1992. Regulatory treatment of prematurely retired plant. Sponsored by Department of the Public Advocate.
73. New Mexico, Public Service Company of New Mexico, Case No. 2444, May 1992. Request of the Company to purchase back a portion of previously sold / leased-back nuclear unit. Sponsored by Attorney General.
74. New Mexico, U S WEST, Inc., Case No. 92-90-TC, June 1992. Application of US WEST seeking approval of Customer Local Area Signaling Services (CLASS) Tariffs. Sponsored by Attorney General.
75. New Jersey, Public Service Electric & Gas Company, BPU Docket No. EE91111698J, July 1992. Depreciation, nuclear decommissioning and regulatory treatment of prematurely retired plant. Sponsored by Department of the Public Advocate.

76. New Mexico, Public Service Company of New Mexico, Case No. 2469, October 1992. Financing case - Request of the Company to refinance variable rate debt and replace with variable rate debt. Sponsored by Attorney General.
77. New Jersey, New Jersey Bell Telephone Co., Docket No. TO92030358, October 1992. Request of the Company to replace existing Rate Stability Plan with indexed price increases with sharing in prescribed earnings plans. Economics of "Opportunity New Jersey" infrastructure development proposals. Sponsored by Department of the Public Advocates.
78. District of Columbia, C&P Telephone Company, Formal Case No. 814, Phase III, November 1992. Testimony concerning the Company's application for alternative form of regulation. Sponsored by Office of People's Counsel.
79. New Mexico, U. S. West, Inc., Docket No. 92-227-TC, December 1992. Testimony regarding accounting issues and revenue requirements in base rate proceeding. Sponsored by Attorney General.
80. District of Columbia, C&P Telephone Company, Formal Case No. 926, July, 1993. Testimony concerning cost containment, management compensation, productivity, Other Postretirement Benefits (SFAS 106), salaries and wages, Other Postemployment Benefits (SFAS 112) and accounting for income taxes (SFAS 109). Sponsored by Office of People's Counsel.
81. Georgia, Georgia Power Company, Docket No. 4152-U, August 1993. Testimony concerning appropriate accounting and ratemaking treatment of Clean Air Act Allowances. Sponsored by Staff of the Public Service Commission.
82. New Mexico, U.S. West, Inc., Case No. 93-218-TC, October 1993. Testimony concerning application of utility to expand the local calling area for the Albuquerque metropolitan area. Sponsored by Attorney General.
83. District of Columbia, Potomac Electric Power Company, Formal Case No. 929, October 1993. Testimony in base rate proceeding, addressing issues of Electric Rate Adjustment Mechanism, DSM Surcharge, inclusion of purchased power capacity costs in automatic adjustment clauses. Sponsored by Office of People's Counsel.
84. New York, Consolidated Edison Company, Case Nos. 93-G-0996 and 93-S-0997, April 1994. Testimony concerning appropriate application of productivity in base rate proceeding for gas and steam rates. Sponsored by Utility Workers Union of America, AFL-CIO, Local 1-2.
85. New Jersey, Atlantic City Electric Company, BRC Docket No. ER9402003, OAL Docket No. PUC 1427-94, June 1994. Testimony concerning levelized energy adjustment clause.
86. New Mexico, Public Service Company of New Mexico, Case No. 2567, June 1994. Testimony concerning application of utility to reduce rates and write-off plant and regulatory assets.
87. New York, Consolidated Edison Company, Case No. 94-E-0334, October 1994. Testimony concerning health and safety and productivity issues in application of utility to increase base electric rates. Sponsored by Utility Workers Union of America, AFL-CIO, Local 1-2.

88. Maine, New England Telephone Company, Docket No. 94-254, February 1995. Testimony concerning accounting issues and revenue requirements in base rate proceeding. Sponsored by Staff of the Maine Public Utilities Commission.
89. District of Columbia, Potomac Electric Power Company, Formal Case No. 939, March 1995. Testimony in base rate proceeding, addressing utility risk and costs from ownership, sponsorship and financing of nonregulated affiliate. Sponsored by Office of People's Counsel.
90. New Jersey, IntraLATA Toll Presubscription, BPU Docket No. TX94090388, May 1995. Testimony in proceeding determining whether previously authorized 10XXX intraLATA toll competition should be modified to allow 1+ intraLATA toll presubscription.
91. District of Columbia, Bell Atlantic - Washington, Formal Case No. 814, Phase IV, July 1995. Testimony concerning price cap regulation proposal.
92. Massachusetts, Electric Utility Restructuring, appearance before Legislature's Joint Commission on Energy, November 1995.
93. New York, Electric Utility Restructuring, appearance before Assembly's Committee on Energy, December 1995.
94. New Jersey, Salem Outage, BPU Docket Nos. ES96030158 & ES96030159, April 1996. Testimony in proceeding to determine whether rates for Salem Unit 2 should be made interim.
95. New Mexico, Public Service Company of New Mexico, Case No. 2620, May 1996. Testimony in proceeding concerning formation of nonregulated operations.
96. New Mexico, Southwestern Public Service Co., Case No. 2678, June 1996. Testimony in proceeding concerning merger between SPS and Public Service Company of Colorado.
97. Pennsylvania, Commonwealth Telephone Co., Docket No. P-00961024, June 1996. Testimony concerning alternative regulation and network modernization plan.
98. Massachusetts, Massachusetts Electric Company, DPU 96-25, December 1996. Testimony concerning restructure of utility industry.
99. Pennsylvania, PECO Energy, Docket No. R-00973953, June 1997. Testimony concerning code of conduct concerning utility actions in a competitive market.
100. Pennsylvania, Pennsylvania Power & Light, Docket No. R-00973954, July 1997. Testimony concerning code of conduct concerning utility actions in a competitive market.
101. Georgia, BellSouth Telecommunications, Inc., Docket No. 7601-U, August 1997. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.
102. Louisiana, BellSouth Telecommunications, Inc., September 1997. Docket Nos. U-22022 & U-22093. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.

103. Alabama, BellSouth Telecommunications, Inc., Docket No. 26069. September 1997. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.
104. Tennessee, Proceeding to Establish "Permanent Prices" for Interconnection and Unbundled Network Elements, October 1997. Docket No. 97-01262. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.
105. Kentucky, Inquiry into Universal Service and Funding Issues, Administrative Case No. 360. November 1997. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
106. New Jersey, In the Matter of the Energy Master Plan Phase II Proceeding to Investigate the Future of the Electric Power Industry, BPU Docket Nos. EX9120585Y, EO97070461, EO97070462, EO97070463, November 1997. Testimony concerning stranded cost, market transition, competition and securitization.
107. South Carolina, Proceeding to Review BellSouth Telecommunications, Inc.'s Cost for Unbundled Network Elements and Interconnection Arrangements, Docket No. 97-374-C. November 1997. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.
108. Louisiana, The Development of Rules and Regulations Applicable to the Entry and Operations of and the Providing of Services by in the Local Intrastate and/or Interexchange Telecommunications Market in Louisiana (Universal Service), Docket No. U-20883 Subdocket A, January 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
109. North Carolina, Universal Service Support Mechanisms Pursuant to Section 254 of the Telecommunications Act of 1996, Docket No. P-100 Sub. 133b, January 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
110. Alabama, Implementation of the Universal Service Requirements of the Telecommunications Act of 1996, Docket No. 25980, February 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
111. Kentucky, Inquiry into Universal Service Funding Issues, Administrative Case 360, February 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
112. South Carolina, Proceeding to Establish Guidelines for an Intrastate Universal Service Fund, Docket No. 97-239-C. March 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
113. North Carolina, Proceeding to Determine Permanent Pricing for Unbundled Network Elements, Docket No. P-100 Sub 133d, March 1998. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.

114. Mississippi, In the Matter of the Need to Select a Forward-Looking Cost Proxy Model for Calculation of Universal Service Support from the Federal High-Cost Universal Service Fund, Docket No. 98-AD-035, March 1998. Testimony concerning the application of the Hatfield Model to the determination of Universal Service Funding requirement.
115. Mississippi, Generic Proceeding to Establish "Permanent" Prices for BellSouth Interconnection and Unbundled Network Elements, Docket No. 97-AD-544, March 1998. Testimony concerning the application of the Hatfield Model to the determination of Telric unbundled network element rates.

APPENDIX D

STATEMENT OF QUALIFICATIONS

DAVID C. NEWTON

APPENDIX D

Statement of Qualifications

David C. Newton

Mr. Newton has spent 32 years in telecommunications network planning and design. Since 1991, Mr. Newton has served as a consulting telecommunications network engineer, advising clients and testifying in regulatory proceedings on a variety of network matters. Prior to his consulting work, Mr. Newton spent 27 years with the Southern New England Telephone Company, where he held numerous positions in network planning and network design.

Mr. Newton received a Bachelors of Science degree in Operation Management from Quinnipiac College and he holds an Associate Science degree in Electrical Engineering from Hartford State Technical College, awarded in 1965.

A summary of Mr. Newton's professional experience with Southern New England Telephone Company and a list of the engagements he has performed as a consulting telecommunications network engineer are provided on the attached sheets.

**Network Planning and Design Experience With
Southern New England Telephone Company**

1987 - 1991 District Manager - Network Planning

Responsible for directing the development and implementation of strategic long range plans for the evolution of the telephone network for the State of Connecticut, specifically, the technical evaluation and strategic planning for all components of the SNET network -- central office switching, interoffice facilities, local outside plant, Signalling System 7, operator services systems and the E911 network.

1984 - 1987 Staff Manager - Network Planning

Responsible for the economic analysis and planning for the development of new technology in all facets of the network.

1981 - 1984 Manager - Network Design

Responsible for directing analyses of equipment condition and utilization and for managing the preparation of equipment specifications.

1966 - 1981 Various network field assignments in network planning and design

Activities included traffic analysis, trunk network forecasting and application, switch capacity analysis, switch design, switch translations and switch administration.

Consulting Engagements

Guam Public Utilities Commission

Docket No. 93-008 (ongoing) On behalf of the Guam Public Utility Commission, perform annual reviews of the construction program of the Guam Telephone Authority.

Docket No. 97-001 (May 1997) On behalf of the Guam Public Utility Commission, evaluation of the ISDN tariff proposal of the Guam Telephone Authority.

Docket No. 96-007 (October 1996) On behalf of the Guam Public Utility Commission, evaluation of the private line tariff proposal of the Guam Telephone Authority.

Docket No. 93-007 (October 1996) On behalf of the Guam Public Utility Commission, development of a set of service standards for application to the Guam Telephone Authority.

Docket No. 92-005 (November 1992) On behalf of the Guam Public Utility Commission, evaluation of the capital program of the Guam Telephone Authority.

New Jersey Board of Regulatory Commissioners

Docket No. TO92030358 (September 1992) On behalf of Department of Public Advocate, analysis and evaluation of the proposed Network Modernization Plan of the New Jersey Bell Telephone Company, including deployment of narrowband and broadband services, switching deployment alternatives and use of HSDL in the loop.

Pennsylvania Public Utilities Commission

Docket No. P-00961024 (June 1996) On behalf of Office of Consumer Advocate, analysis and evaluation of the proposed Network Modernization Plan of the Commonwealth Telephone Company.

Virgin Islands Public Service Commission

Docket No. 398 (August 1995) On behalf of Virgin Island Public Service Commission, evaluated private line tariff proposal of VITELCO.

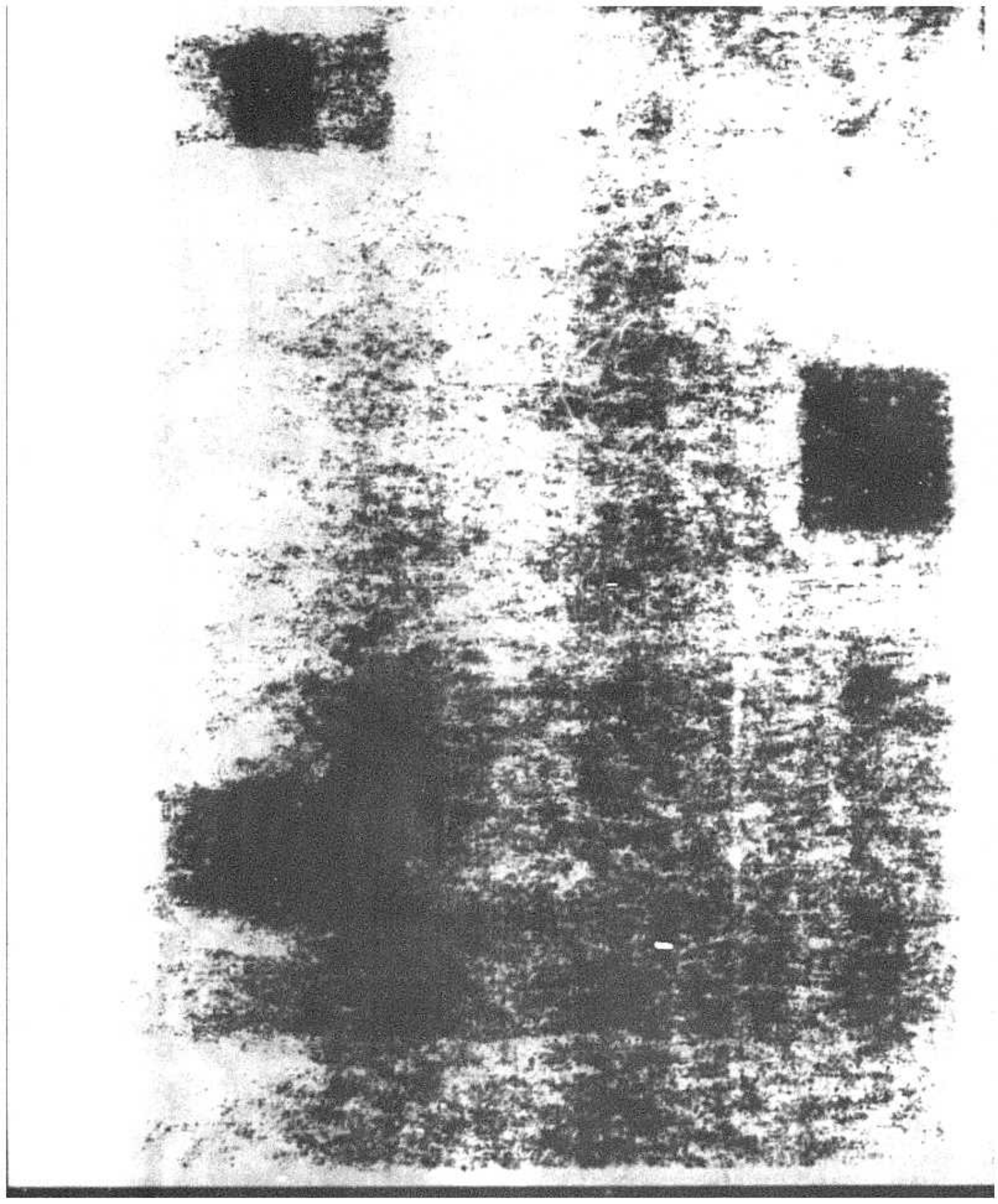
Docket No. 348 (March 1994) On behalf of Virgin Island Public Service Commission, evaluation of the network design and operation for the Enhanced 911 network for the Virgin Islands.

Guyana Public Utilities Commission

Docket No. 95 (January 1997) On behalf of Guyana Public Utilities Commission, evaluated the condition of the network of the Guyana Telephone Company and its compliance with certain modernization mandates included in the original condition of purchase.

TELRIC

On behalf of BellSouth Telecommunications, Inc., testimony concerning application of Hatfield Model in Alabama, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.



**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

In Re: Determination of the Cost of
Basic Local Telecommunications
Service, pursuant to Section 364.025,
Florida Statutes

Docket No. 980696-TP

**Exhibits To
Rebuttal Testimony of
Jamshed K. Madan, Michael D. Dirmeier
and David C. Newton on Behalf of
BellSouth Telecommunications, Inc.**

**Submitted
September 2, 1998**

In Re: Determination of the Cost of
Basic Local Telecommunications
Service, pursuant to Section 369,
Florida Statute.

Docket No. 980696-TP

Testimony of
Michael T. Pines
on Behalf of
[Illegible]

Identical Exhibit
and the

**IDENTIFICATION OF SENSITIVE INPUT GROUPS
AND CORRESPONDING GCG HEARING EXHIBITS**

<u>Sensitive Input Group</u>	<u>Associated HAI R5.0a Appendix B Inputs That Are Sensitive, Not Specific to BST-FL and Not Reasonable</u>	<u>GCG Hearing Exhibit Identifying BST-FL Specific and Reasonable Alternative Inputs</u>
I. NID and Drop	B1 NID Investment B2 Drop Distance B3 Drop Placement, Aerial and Buried B4 Buried Drop Sharing Fraction B8 Drop Cable Investment	Exhibit__(GCG-3)
II. Terminal and Splice	B7 Terminal and Splice Investment per Line	Exhibit__(GCG-4)
III. Distribution Investment	B10 Copper Distribution Cable Investment B11 Riser Cable Investment B13 Buried Distribution Cable Sheath Multiplier B14 Conduit Material Investment per Foot B15 Spare Tubes per Route B16 Regional Labor Adjustment Factor B38 Serving Area Interface (SAI) Investment B197 Underground Excavation B198 Underground Restoration B199 Buried Excavation B200 Buried Installation and Restoration	Exhibit__(GCG-5)
IV. Copper Feeder Investment	B56 Copper Feeder Cable Investment	Exhibit__(GCG-6)
V. Fiber Feeder Investment	B53 Buried Fiber Sheath Addition, per Foot B57 Fiber Feeder Cable Investment	Exhibit__(GCG-7)
VI. Structure Placement Fractions	B5 Drop Structure Fractions B17 Distribution Structure Fractions B46 Copper Feeder Structure Fractions B51 Fiber Feeder Structure Fractions B121 Interoffice Structure Fractions	Exhibit__(GCG-8)

<u>Sensitive Input Group</u>	<u>Associated HAI R5.0a Appendix B Inputs That Are Sensitive, Not Specific to BST-FL and Not Reasonable</u>	<u>GCG Hearing Exhibit Identifying BST-FL Specific and Reasonable Alternative Inputs</u>
VII. Structure Sharing Fractions	B130 Fraction of Interoffice Structure Assigned to Telephone B180 Distribution and Feeder Fractions Assigned to Telephone	Exhibit ____(GCG-9)
VIII. Copper and Fiber Sizing Factors	B18 Distribution Cable Sizing Factor B54 Copper Feeder Sizing Factor B55 Fiber Feeder Sizing Factor	Exhibit ____(GCG-10)
IX. DLC	B58 DLC Site and Power per Remote Terminal B59 Maximum Line Size per Remote Terminal B60 Remote Terminal Fill Factor B61 DLC Initial Common Equipment Investment B62 DLC Channel Unit Investment B63 DLC Lines per Channel Unit B64 Low Density DLC to TR-303 DLC Cutover B65 Fibers per Remote Terminal B66 Optical Patch Panel B68 Common Equipment Investment per Additional Line Increment B69 Maximum Number of Additional Line Modules per Remote	Exhibit ____(GCG-11)
X. Interoffice Investment	B107 Transmission Terminal Investment B108 Number of Fibers B109 Pigtails B110 Optical Distribution Panel B111 E, F & I per Hour B115 Channel Bank Investment, per 24 Lines B117 Digital Cross Connect System, Installed, per DS-3 B118 Transmission Terminal Fill B119 Interoffice Fiber Cable Investment per Foot, Installed B122 Transport Placement B124 Interoffice Conduit Cost and Number of Spare Tubes	Exhibit ____(GCG-12)

<u>Sensitive Input Group</u>	<u>Associated HAI R5.0a Appendix B Inputs That Are Sensitive, Not Specific to BST-FL and Not Reasonable</u>	<u>GCG Hearing Exhibit Identifying BST-FL Specific and Reasonable Alternative Inputs</u>
XI. Switching Factors	B77 Switch Port Administrative Fill B79 MDF/Protector Investment per Line B81 Switch Installation Multiplier B82 Constant EO Switching Investment Term, BOC and Large ICO B88 Wire Center Power Investment B103 Busy Hour Fraction of Daily Usage B104 Annual to Daily Usage Reduction Factor B131 Operator Traffic Fraction B132 Total Interoffice Traffic Fraction B134 Trunk Port, per End B136 Tandem-Routed Fraction of Total IntraLATA Traffic B137 Tandem-Routed Fraction of Total InterLATA Traffic B150 STP Link Capacity B153 Minimum STP Investment, per Pair B154 Link Termination, Both Ends B157 C Link Cross Section B162 Fraction of BHCA requiring TCAP B163 SCP Investment/Transaction/Second B166 Operator Invention Factor	Exhibit ____ (GCG-13)
XII. Expense Factors	B181 Income Tax Rate B183 Other Taxes Factor B186 Forward-Looking Network Operations Factor B187 Alternative CO Switching Expense Factor B188 Alternative Circuit Equipment Factor Other Expense Factors	Exhibit __ (GCG-14)
XIII. Cost of Capital	B178 Cost of Capital	Exhibit __ (GCG-15)
XIV. Depreciation	B179 Depreciation Lives by Plant Type B179 Net Salvage Percentage by Plant Type	Exhibit __ (GCG-16)
Universal Service Support		Exhibit __ (GCG-17)

Exhibit (GCG-2)
Values for User-Adjustable Inputs: GCG Alternative Values
Compared to HAP 1994 Appendix A Default Values

HMS.0a Inputs - BellSouth Telecommunications, Inc.

HM S.OA		HM S.OA Default Scenario Value	Florida HM S.OA Recommended Value
Distribution - NID			
1. 01	Residential NID case, no protector	\$ 10.00	\$ 7.68
2. 01	Residential NID basic labor	\$ 15.00	\$ 33.31
3. 01	Residential Protection Block, per pair	\$ 4.00	\$ 8.10
5. 01	Business NID case, no protector	\$ 25.00	\$ 7.68
6. 01	Business NID basic labor	\$ 18.00	\$ 33.31
7. 01	Business Protection Block, per pair	\$ 4.00	\$ 8.10
9. 01	Indoor NID case	\$ 5.00	no change
Labor Adjustment Factors			
9. 01a	Regional Labor Adjustment Factor	1.000	no change
10. 01a	Contractor excavation and restoration	0.125	no change
11. 01a	Telco construction - copper	0.184	no change
12. 01a	Telco construction - fiber	0.384	no change
13. 01a	Telco drop/NID installation and maintenance	0.971	no change
14. 01a	Contractor pole setting	0.7. 8	no change
Distribution - DROP			
15. 02	Drop Distance, feet - 0	160	215
16. 02	Drop Distance, feet - 5	120	215
17. 02	Drop Distance, feet - 100	100	215
18. 02	Drop Distance, feet - 200	100	215
19. 02	Drop Distance, feet - 500	90	215
20. 02	Drop Distance, feet - 800	90	215
21. 02	Drop Distance, feet - 2500	90	215
22. 02	Drop Distance, feet - 5000	90	215
23. 02	Drop Distance, feet - 10000	80	215
24. 03	Aerial Drop Placement (total) - 0	\$ 23.33	\$ 47.80
25. 03	Aerial Drop Placement (total) - 5	\$ 23.33	\$ 47.80
26. 03	Aerial Drop Placement (total) - 100	\$ 17.50	\$ 47.80
27. 03	Aerial Drop Placement (total) - 200	\$ 7.50	\$ 47.80
28. 03	Aerial Drop Placement (total) - 500	\$ 11.87	\$ 47.80
29. 03	Aerial Drop Placement (total) - 800	\$ 11.87	\$ 47.80
30. 03	Aerial Drop Placement (total) - 2500	\$ 11.87	\$ 47.80
31. 03	Aerial Drop Placement (total) - 5000	\$ 11.87	\$ 47.80
32. 03	Aerial Drop Placement (total) - 10000	\$ 11.87	\$ 47.80
33. 03	Buried Drop Placement (total) - 0	\$ 0.60	\$ 0.52
34. 03	Buried Drop Placement (total) - 5	\$ 0.60	\$ 0.52
35. 03	Buried Drop Placement (total) - 100	\$ 0.60	\$ 0.52
36. 03	Buried Drop Placement (total) - 200	\$ 0.60	\$ 0.52
37. 03	Buried Drop Placement (total) - 500	\$ 0.60	\$ 0.52
38. 03	Buried Drop Placement (total) - 800	\$ 0.60	\$ 0.52
39. 03	Buried Drop Placement (total) - 2500	\$ 0.75	\$ 0.52
40. 03	Buried Drop Placement (total) - 5000	\$ 1.00	\$ 0.52
41. 03	Buried Drop Placement (total) - 10000	\$ 5.00	\$ 0.52
42. 04	Buried Drop Shoring Fraction - 0	0.500	1.000
43. 04	Buried Drop Shoring Fraction - 5	0.500	1.000
44. 04	Buried Drop Shoring Fraction - 100	0.500	1.000
45. 04	Buried Drop Shoring Fraction - 200	0.500	1.000
46. 04	Buried Drop Shoring Fraction - 500	0.500	1.000
47. 04	Buried Drop Shoring Fraction - 800	0.500	1.000
48. 04	Buried Drop Shoring Fraction - 2500	0.500	1.000
49. 04	Buried Drop Shoring Fraction - 5000	0.500	1.000
50. 04	Buried Drop Shoring Fraction - 10000	0.500	1.000

HM S.O.A		HM S.O.A Default Scenario Value	Florida HM S.O.A Recommended Value	
51	BS	Buried Drop Fraction - 0	0.700	0.700
52	BS	Buried Drop Fraction - 5	0.700	0.700
53	BS	Buried Drop Fraction - 100	0.700	0.700
54	BS	Buried Drop Fraction - 200	0.700	0.700
55	BS	Buried Drop Fraction - 500	0.700	0.700
56	BS	Buried Drop Fraction - 600	0.700	0.700
57	BS	Buried Drop Fraction - 2500	0.700	0.700
58	BS	Buried Drop Fraction - 5000	0.400	0.700
59	BS	Buried Drop Fraction - 10000	0.150	0.700
60	DB	Average Lines per business location	4	no change
61	B7	Terminal and Splice per line, buried	\$ 42.50	\$ 0.00
62	B7	Terminal and Splice per line, aerial	\$ 32.00	\$ 0.00
63	B8	Drop cable investment per foot buried	\$ 0.140	\$ 0.127
64	B8	Drop cable buried pairs	3	3
65	B9	Drop cable investment per foot aerial	\$ 0.095	\$ 0.075
66	B9	Drop cable aerial pairs	1	2
Distribution Cable & Riser				
67	B9	Distribution Cable Size 1	2,400	2,400
68	B9	Distribution Cable Size 2	1,800	1,800
69	B9	Distribution Cable Size 3	1,200	1,200
70	B9	Distribution Cable Size 4	900	900
71	B9	Distribution Cable Size 5	600	600
72	B9	Distribution Cable Size 6	400	400
73	B9	Distribution Cable Size 7	200	200
74	B9	Distribution Cable Size 8	100	100
75	B9	Distribution Cable Size 9	50	50
76	B9	Distribution Cable Size 10	25	25
77	B9	Distribution Cable Size 11	12	12
78	B9	Distribution Cable Size 12	6	6
79	B10	Distribution Cable investment per foot 1	\$ 20.00	\$ 52.23
80	B10	Distribution Cable investment per foot 2	\$ 18.00	\$ 40.90
81	B10	Distribution Cable investment per foot 3	\$ 12.00	\$ 27.84
82	B10	Distribution Cable investment per foot 4	\$ 10.00	\$ 21.29
83	B10	Distribution Cable investment per foot 5	\$ 7.75	\$ 19.24
84	B10	Distribution Cable investment per foot 6	\$ 6.00	\$ 10.43
85	B10	Distribution Cable investment per foot 7	\$ 4.25	\$ 5.89
86	B10	Distribution Cable investment per foot 8	\$ 2.50	\$ 3.39
87	B10	Distribution Cable investment per foot 9	\$ 1.63	\$ 2.32
88	B10	Distribution Cable investment per foot 10	\$ 1.19	\$ 1.60
89	B10	Distribution Cable investment per foot 11	\$ 0.78	\$ 1.28
90	B10	Distribution Cable investment per foot 12	\$ 0.63	\$ 1.14
91	B11	Distribution Riser Cable Size 1	2,400	2,400
92	B11	Distribution Riser Cable Size 2	1,800	1,800
93	B11	Distribution Riser Cable Size 3	1,200	1,200
94	B11	Distribution Riser Cable Size 4	900	900
95	B11	Distribution Riser Cable Size 5	600	600
96	B11	Distribution Riser Cable Size 6	400	400
97	B11	Distribution Riser Cable Size 7	200	200
98	B11	Distribution Riser Cable Size 8	100	100
99	B11	Distribution Riser Cable Size 9	50	50
100	B11	Distribution Riser Cable Size 10	25	25
101	B11	Distribution Riser Cable Size 11	12	12
102	B11	Distribution Riser Cable Size 12	6	6

HM S.O.A.		HM S.O.A. Default Scenario Value	Florida HM S.O.A. Recommended Value
103	B11	Distribution Riser Cable Investment per foot 1	\$ 25.00 no change
104	B11	Distribution Riser Cable Investment per foot 2	\$ 20.00 no change
105	B11	Distribution Riser Cable Investment per foot 3	\$ 15.00 no change
106	B11	Distribution Riser Cable Investment per foot 4	\$ 12.50 no change
107	B11	Distribution Riser Cable Investment per foot 5	\$ 10.00 no change
108	B11	Distribution Riser Cable Investment per foot 6	\$ 7.50 no change
109	B11	Distribution Riser Cable Investment per foot 7	\$ 5.30 no change
110	B11	Distribution Riser Cable Investment per foot 8	\$ 3.15 no change
111	B11	Distribution Riser Cable Investment per foot 9	\$ 2.05 no change
112	B11	Distribution Riser Cable Investment per foot 10	\$ 1.50 no change
113	B11	Distribution Riser Cable Investment per foot 11	\$ 0.85 no change
114	B11	Distribution Riser Cable Investment per foot 12	\$ 0.80 no change
Distribution Poles and Conduit			
115	B12	Pole Investment	20% no change
116	B12	Pole Labor	21% no change
117	B13	Buried Cable Jacking Multiplier	1.040 1.011
118	B14	Conduit Investment per foot	\$ 0.90 no change
119	B15	Score Tubes per mile	1 no change
Distribution Placement Fraction			
120	B17	Buried Fraction - 0	0.750 0.871
121	B17	Buried Fraction - 5	0.750 0.871
122	B17	Buried Fraction - 100	0.750 0.871
123	B17	Buried Fraction - 200	0.700 0.871
124	B17	Buried Fraction - 500	0.700 0.871
125	B17	Buried Fraction - 850	0.700 0.871
126	B17	Buried Fraction - 2500	0.650 0.871
127	B17	Buried Fraction - 5000	0.350 0.871
129	B17	Buried Fraction - 10000	0.050 0.871
129	B17	Aerial Cable Fraction - 0	0.250 0.297
130	B17	Aerial Cable Fraction - 5	0.250 0.297
131	B17	Aerial Cable Fraction - 100	0.250 0.297
132	B17	Aerial Cable Fraction - 200	0.300 0.297
133	B17	Aerial Cable Fraction - 500	0.300 0.297
134	B17	Aerial Cable Fraction - 850	0.300 0.297
135	B17	Aerial Cable Fraction - 2500	0.300 0.297
136	B17	Aerial Cable Fraction - 5000	0.600 0.297
137	B17	Aerial Cable Fraction - 10000	0.850 0.297
138	B17	Buried fraction available for shift - 0	0.750 no change
139	B17	Buried fraction available for shift - 5	0.750 no change
140	B17	Buried fraction available for shift - 100	0.750 no change
141	B17	Buried fraction available for shift - 200	0.750 no change
142	B17	Buried fraction available for shift - 500	0.750 no change
143	B17	Buried fraction available for shift - 850	0.750 no change
144	B17	Buried fraction available for shift - 2500	0.750 no change
145	B17	Buried fraction available for shift - 5000	0.000 no change
146	B17	Buried fraction available for shift - 10000	0.000 no change

HM 5.0A		HM 5.0A Default Scenario Value	Florida HM 5.0A Recommended Value	
Distribution - Pole & Pole Spacing				
147	B18	Distribution Cable FIB - 0	0.500	0.536
148	B18	Distribution Cable FIB - 5	0.550	0.536
149	B18	Distribution Cable FIB - 100	0.550	0.536
150	B18	Distribution Cable FIB - 300	0.600	0.536
151	B18	Distribution Cable FIB - 450	0.650	0.536
152	B18	Distribution Cable FIB - 600	0.700	0.536
153	B18	Distribution Cable FIB - 2500	0.750	0.536
154	B18	Distribution Cable FIB - 5000	0.750	0.536
155	B18	Distribution Cable FIB - 10000	0.750	0.536
156	B19	Pole Spacing, feet - 0	250	no change
157	B19	Pole Spacing, feet - 5	250	no change
158	B19	Pole Spacing, feet - 100	200	no change
159	B19	Pole Spacing, feet - 200	200	no change
160	B19	Pole Spacing, feet - 450	175	no change
161	B19	Pole Spacing, feet - 600	175	no change
162	B19	Pole Spacing, feet - 2500	150	no change
163	B19	Pole Spacing, feet - 5000	150	no change
164	B19	Pole Spacing, feet - 10000	100	no change
Distribution - Geometry and Clusters				
165	B20	Distance Multiplier for difficult terrain	1.00	no change
166	B21	Rock Depth Threshold, inches	24	no change
167	B22	Hard Rock Placement Multiplier	3.50	no change
168	B23	Soft Rock Placement Multiplier	2.00	no change
169	B24	Sidewalk/Street Friction	0.20	no change
170	B25	Local RT - Maximum Total Distance	18,000	no change
171	B26	Feeder steering enable	FALSE	no change
172	B27	Main feeder multiplier multiplier	1.27	no change
173	B27a	Rectangular staler switch	FALSE	no change
Distribution - Long loop Investments				
174	B28	Repeater Investment, installed	\$ 527	no change
175	B29	Integrated COT, installed	\$ 420	no change
176	B30	Remote Multiplexer Common Equip Inv, installed	\$ 8,200	no change
177	B31	Channel Unit Investment, per subscriber	\$ 125	no change
178	B32	COT investment per RT, installed	\$ 1,170	no change
179	B33	Remote Terminal B3 factor	0.9000	no change
180	B34	Maximum T1s per cable	8	no change
181	B35	T1 repeater spacing, dB	32	no change
182	B36	Aerial T1 attenuation, dB/dft	6.30	no change
183	B37	Buried T1 attenuation, dB/dft	5.0	no change
Distribution - SAI				
184	B38	SAI Cable Size 1	7.2	7,200
185	B38	SAI Cable Size 2	5.4	5,400
186	B38	SAI Cable Size 3	3.6	3,600
187	B38	SAI Cable Size 4	2.4	2,400
188	B38	SAI Cable Size 5	1.8	1,800
189	B38	SAI Cable Size 6	1.2	1,200
190	B38	SAI Cable Size 7	1.0	900
191	B38	SAI Cable Size 8	600	600
192	B38	SAI Cable Size 9	400	400
193	B38	SAI Cable Size 10	30	300
194	B38	SAI Cable Size 11	00	100
195	B38	SAI Cable Size 12	00	0

HM 5.0A		HM 5.0A Default Scenario Value	Florida HM 5.0A Recommended Value
196. 838	SAI Indoor Investment 1	\$ 9,156	no change
197. 838	SAI Indoor Investment 2	\$ 7,192	no change
198. 838	SAI Indoor Investment 3	\$ 4,128	no change
199. 838	SAI Indoor Investment 4	\$ 3,132	no change
200. 838	SAI Indoor Investment 5	\$ 2,484	no change
201. 838	SAI Indoor Investment 6	\$ 1,776	no change
202. 838	SAI Indoor Investment 7	\$ 1,232	no change
203. 838	SAI Indoor Investment 8	\$ 888	no change
204. 838	SAI Indoor Investment 9	\$ 592	no change
205. 838	SAI Indoor Investment 10	\$ 798	no change
206. 838	SAI Indoor Investment 11	\$ 48	no change
207. 838	SAI Indoor Investment 12	1 98	no change
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208. 838	SAI Outdoor Investment 1	\$ 10,000	\$ 30,800
209. 838	SAI Outdoor Investment 2	\$ 8,200	\$ 25,400
210. 838	SAI Outdoor Investment 3	\$ 6,000	\$ 20,300
211. 838	SAI Outdoor Investment 4	\$ 4,300	* 18,300
212. 838	SAI Outdoor Investment 5	\$ 3,400	\$ 13,600
213. 838	SAI Outdoor Investment 6	\$ 2,400	\$ 10,200
214. 838	SAI Outdoor Investment 7	\$ 1,900	\$ 8,600
215. 838	SAI Outdoor Investment 8	\$ 1,400	\$ 6,200
216. 838	SAI Outdoor Investment 9	\$ 1,000	\$ 4,500
217. 838	SAI Outdoor Investment 10	3 600	\$ 3,000
218. 838	SAI Outdoor Investment 11	\$ 750	\$ 2,200
219. 838	SAI Outdoor Investment 12	\$ 280	\$ 0
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Distribution - Dedicated circuit inputs			
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Percentage of dedicated circuits			
220. 839	DS-0 fraction	1.00	no change
221. 839	DS-1 fraction	0.00	no change
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Pairs per dedicated circuit			
222. 840	DS-0 pair equivalent	1	no change
223. 840	DS-1 pair equivalent	2	no change
224. 840	DS-3 pair equivalent	58	no change
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Distribution - Wireless Investment			
225. 841	Wireless Investment Cap Enabled	FALSE	no change
226. 842	Wireless Point to Point Inv cap - distribution, per line	\$ 7,500	no change
227. 843	Wireless Common Inv, broadcast	\$ 112,500	no change
228. 844	Wireless per line Inv, broadcast	\$ 500	no change
229. 845	Maximum broadcast lines for common Inv	30	no change
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Feeder - Copper placement			
230. 846	Copper Aerial Fraction - 0	0.800	0.042
231. 846	Copper Aerial Fraction - 5	0.800	0.042
232. 846	Copper Aerial Fraction - 100	0.800	0.042
233. 846	Copper Aerial Fraction - 200	0.400	0.042
234. 846	Copper Aerial Fraction - 650	0.300	0.042
235. 846	Copper Aerial Fraction - 850	0.200	0.042
236. 846	Copper Aerial Fraction - 2500	0.150	0.042
237. 846	Copper Aerial Fraction - 5000	0.100	0.042
238. 846	Copper Aerial Fraction - 10000	0.050	0.042
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239. 846	Copper Buried Fraction - 0	0.450	0.240
240. 846	Copper Buried Fraction - 5	0.450	0.240
241. 846	Copper Buried Fraction - 100	0.450	0.240
242. 846	Copper Buried Fraction - 200	0.400	0.240
243. 846	Copper Buried Fraction - 650	0.300	0.240
244. 846	Copper Buried Fraction - 850	0.200	0.240
245. 846	Copper Buried Fraction - 2500	0.100	0.240
246. 846	Copper Buried Fraction - 5000	0.050	0.240
247. 846	Copper Buried Fraction - 10000	0.050	0.240

HM S.OA		HM S.OA Default Scenario Value	Florida HM S.OA Recommended Value
Feeder Copper placement			
248. B47	Copper Manhole Spacing, feet - 0	800	no change
249. B47	Copper Manhole Spacing, feet - 5	800	no change
250. B47	Copper Manhole Spacing, feet - 100	800	no change
251. B47	Copper Manhole Spacing, feet - 200	800	no change
252. B47	Copper Manhole Spacing, feet - 650	800	no change
253. B47	Copper Manhole Spacing, feet - 850	800	no change
254. B47	Copper Manhole Spacing, feet - 2550	800	no change
255. B47	Copper Manhole Spacing, feet - 5000	400	no change
256. B47	Copper Manhole Spacing, feet - 10000	400	no change
Pole Spacing, feet - 0			
257. B48	Pole Spacing, feet - 0	250	no change
258. B48	Pole Spacing, feet - 5	250	no change
259. B48	Pole Spacing, feet - 100	200	no change
260. B48	Pole Spacing, feet - 200	200	no change
261. B48	Pole Spacing, feet - 650	175	no change
262. B48	Pole Spacing, feet - 850	175	no change
263. B48	Pole Spacing, feet - 2550	150	no change
264. B48	Pole Spacing, feet - 5000	150	no change
265. B48	Pole Spacing, feet - 10000	150	no change
266. B49	Pole Materials	201	no change
267. B49	Pole Labor	216	no change
268. B50	Inner Duct Investment per foot	\$ 0.30	no change
269	Conduit Material Investment per foot	\$ 0.80	\$ 0.83
270.	Spare Tubes per section	1	0
Feeder Fiber placement			
271. B51	Fiber Aerial Fraction - 0	0.250	0.081
272. B51	Fiber Aerial Fraction - 5	0.250	0.081
273. B51	Fiber Aerial Fraction - 100	0.250	0.081
274. B51	Fiber Aerial Fraction - 200	0.300	0.081
275. B51	Fiber Aerial Fraction - 650	0.300	0.081
276. B51	Fiber Aerial Fraction - 850	0.300	0.081
277. B51	Fiber Aerial Fraction - 2550	0.150	0.081
278. B51	Fiber Aerial Fraction - 5000	0.100	0.081
279. B51	Fiber Aerial Fraction - 10000	0.050	0.081
Fiber Buried Fraction - 0			
280. B51	Fiber Buried Fraction - 0	0.800	0.200
281. B51	Fiber Buried Fraction - 5	0.800	0.200
282. B51	Fiber Buried Fraction - 170	0.800	0.200
283. B51	Fiber Buried Fraction - 200	0.800	0.200
284. B51	Fiber Buried Fraction - 650	0.300	0.200
285. B51	Fiber Buried Fraction - 850	0.200	0.200
286. B51	Fiber Buried Fraction - 2550	0.100	0.200
287. B51	Fiber Buried Fraction - 5000	0.050	0.200
288. B51	Fiber Buried Fraction - 10000	0.000	0.200
Buried fraction available for shift - 0			
289. B51	Buried fraction available for shift - 0	0.750	no change
290. B51	Buried fraction available for shift - 5	0.750	no change
291. B51	Buried fraction available for shift - 100	0.750	no change
292. B51	Buried fraction available for shift - 200	0.750	no change
293. B51	Buried fraction available for shift - 650	0.750	no change
294. B51	Buried fraction available for shift - 850	0.750	no change
295. B51	Buried fraction available for shift - 2550	0.750	no change
296. B51	Buried fraction available for shift - 5000	0.750	no change
297. B51	Buried fraction available for shift - 10000	0.750	no change

HM S.GA		HM S.GA Default Scenario Value	Florida HM S.GA Recommended Value
296	B52	Fiber Pullbox Spacing, feet - 0	no change
299	B52	Fiber Pullbox Spacing, feet - 5	no change
300	B52	Fiber Pullbox Spacing, feet - 100	no change
301	B52	Fiber Pullbox Spacing, feet - 200	no change
302	B52	Fiber Pullbox Spacing, feet - 300	no change
303	B52	Fiber Pullbox Spacing, feet - 400	no change
304	B52	Fiber Pullbox Spacing, feet - 2500	no change
305	B52	Fiber Pullbox Spacing, feet - 5000	no change
306	B52	Fiber Pullbox Spacing, feet - 10000	no change
Feeder placement			
307		Buried Copper Cable Sheath Multiplier	1.040 1.011
308	B53	Buried Fiber Sheath Addition per foot	\$ 0.20 \$ 0
Feeder Fill factors			
309	B54	Copper Feeder Fill - 0	0.880 0.711
310	B54	Copper Feeder Fill - 5	0.750 0.711
311	B54	Copper Feeder Fill - 100	0.800 0.711
312	B54	Copper Feeder Fill - 200	0.800 0.711
313	B54	Copper Feeder Fill - 450	0.800 0.711
314	B54	Copper Feeder Fill - 650	0.800 0.711
315	B54	Copper Feeder Fill - 2500	0.800 0.711
316	B54	Copper Feeder Fill - 5000	0.800 0.711
317	B54	Copper Feeder Fill - 10000	0.800 0.711
318	B55	Fiber Feeder Strand Fill - 0	1.000 0.867
319	B55	Fiber Feeder Strand Fill - 5	1.000 0.867
320	B55	Fiber Feeder Strand Fill - 100	1.000 0.867
321	B55	Fiber Feeder Strand Fill - 200	1.000 0.867
322	B55	Fiber Feeder Strand Fill - 450	1.000 0.867
323	B55	Fiber Feeder Strand Fill - 650	1.000 0.867
324	B55	Fiber Feeder Strand Fill - 2500	1.000 0.867
325	B55	Fiber Feeder Strand Fill - 5000	1.000 0.867
326	B55	Fiber Feeder Strand Fill - 10000	1.000 0.867
Feeder Cable costs			
327	B56	Copper Feeder Investment per foot - 4000	\$ 29.00 \$ 91.40
328	B56	Copper Feeder Investment per foot - 3600	\$ 26.00 \$ 78.34
329	B56	Copper Feeder Investment per foot - 3000	\$ 23.00 \$ 65.28
330	B56	Copper Feeder Investment per foot - 2400	\$ 20.00 \$ 52.23
331	B56	Copper Feeder Investment per foot - 1800	\$ 16.00 \$ 40.90
332	B56	Copper Feeder Investment per foot - 1200	\$ 12.00 \$ 27.84
333	B56	Copper Feeder Investment per foot - 900	\$ 10.00 \$ 21.29
334	B56	Copper Feeder Investment per foot - 600	\$ 7.75 \$ 15.24
335	B56	Copper Feeder Investment per foot - 400	\$ 6.00 \$ 10.43
336	B56	Copper Feeder Investment per foot - 200	\$ 4.25 \$ 5.96
337	B56	Copper Feeder Investment per foot - 100	\$ 2.50 \$ 3.39
338	B56	Copper investment/strand - feet	\$ 0.0075 \$ 0.0220
339	B57	Fiber Feeder Investment per foot - 216	\$ 13.10 \$ 7.87
340	B57	Fiber Feeder Investment per foot - 144	\$ 9.50 \$ 5.77
341	B57	Fiber Feeder Investment per foot - 96	\$ 7.10 \$ 4.36
342	B57	Fiber Feeder Investment per foot - 72	\$ 5.90 \$ 3.65
343	B57	Fiber Feeder Investment per foot - 60	\$ 5.30 \$ 3.25
344	B57	Fiber Feeder Investment per foot - 48	\$ 4.70 \$ 2.91
345	B57	Fiber Feeder Investment per foot - 36	\$ 4.10 \$ 2.40
346	B57	Fiber Feeder Investment per foot - 24	\$ 3.50 \$ 2.15
347	B57	Fiber Feeder Investment per foot - 18	\$ 3.20 \$ 1.98
348	B57	Fiber Feeder Investment per foot - 12	\$ 2.80 \$ 1.64
349	B57	Fiber investment/strand - foot	\$ 0.1000 \$ 0.0810

HM S.O.A.		HM S.S.A.	Florida
		Default Scenario Value	HM S.O.A. Recommended Value
Feeder DISC'S DLC equipment			
350	858	TR-303 DLC Site and Power	\$ 3,000 \$ 0
351	859	TR-303 DLC Maximum Line/Inchment	672 672
352	860	TR-303 DLC RT Fill Factor	0.9000 0.8500
353	861	TR-303 DLC Basic Common Eght Invest + initial lines	\$ 66,000 \$ 136,094
354	862	TR-303 DLC POTS Channel Unit Investment	\$ 310.00 \$ 68.89
355	863	TR-303 DLC POTS Lines per CU	4 2
356	862	TR-303 DLC Coin Channel Unit Investment	\$ 280.00 \$ 417.26
357	863	TR-303 DLC Coin Lines per CU	2 1
358	864	TR-303 DLC 303LD crossover, lines	480 578
359	865	TR-303 DLC Fibers per RT	4 4
360	866	TR-303 DLC Optical Patch Panel	\$ 1,000 \$ 902.93
361	867	TR-303 DLC Copper Feeder Max Distance, ft	9,000 9,000
362	868	TR-303 DLC Common Eght Invest per additional 672 lines	\$ 18,300 \$ 32,810
363	869	TR-303 DLC Maximum Number of additional line modules/RT	2 2
Feeder LITESPAN DLC equipment			
364	868	TR-303 DLC Site and Power	\$ 3,000 \$ 0
365	869	TR-303 DLC Maximum Line/Inchment	672 224
366	870	TR-303 DLC RT Fill Factor	0.9000 0.7320
367	861	TR-303 DLC Basic Common Eght Invest + initial lines	\$ 89,300 \$ 121,531
368	862	TR-303 DLC POTS Channel Unit Investment	\$ 310.00 \$ 370.41
369	863	TR-303 DLC POTS Lines per CU	4 4
370	862	TR-303 DLC Coin Channel Unit Investment	\$ 280.00 \$ 792.27
371	863	TR-303 DLC Coin Lines per CU	2 4
372	864	TR-303 DLC 303LD crossover, lines	480 384
373	865	TR-303 DLC Fibers per RT	4 4
374	866	TR-303 DLC Optical Patch Panel	\$ 1,000 \$ 902.93
375	867	TR-303 DLC Copper Feeder Max Distance, ft	9,000 9,000
376	868	TR-303 DLC Common Eght Invest per additional 672 lines	\$ 18,300 \$ 6,814
377	869	TR-303 DLC Maximum Number of additional line modules/RT	2 8
Feeder Low Density DLC equipment			
378	858	Low Density DLC Site and Power	\$ 1,300 \$ 0
379	859	Low Density DLC Maximum Line/Inchment	120 192
380	860	Low Density DLC RT Fill Factor	0.9000 follow TR303
381	861	Low Density DLC Basic Common Eght Invest + initial lines	\$ 18,000 \$ 60,220
382	862	Low Density DLC POTS Channel Unit Investment	\$ 600.00 \$ 82.31
383	863	Low Density DLC POTS Lines per CU	6 2
384	862	Low Density DLC Coin Channel Unit Investment	\$ 600.00 \$ 403.85
385	863	Low Density DLC Coin Lines per CU	6 1
386	865	Low Density DLC Fibers per RT	4 4
387	866	Low Density DLC Optical Patch Panel	\$ 1,000.00 \$ 902.93
388	866	Low Density DLC Common Eght Invest per additional 96 lines	\$ 9,400 \$ 25,612
389	869	Low Density DLC Maximum Number of additional line modules/RT	1 9
Feeder Copper Manhole Investment			
390	870	Copper Manhole Materials - 0	\$ 1,885 \$ 0
391	870	Copper Manhole Materials - 5	\$ 1,885 \$ 0
392	870	Copper Manhole Materials - 100	\$ 1,885 \$ 0
393	870	Copper Manhole Materials - 200	\$ 1,885 \$ 0
394	870	Copper Manhole Materials - 500	\$ 1,885 \$ 0
395	870	Copper Manhole Materials - 800	\$ 1,885 \$ 0
396	870	Copper Manhole Materials - 2500	\$ 1,885 \$ 0
397	870	Copper Manhole Materials - 5000	\$ 1,885 \$ 0
398	870	Copper Manhole Materials - 10000	\$ 1,885 \$ 0

HM S.D.A.		HM S.D.A. Default Scenario Value	Florida HM S.D.A. Recommended Value
399. 870	Copper Manhole Frame and Cover - 0	\$ 280	\$ 0
400. 870	Copper Manhole Frame and Cover - 5	\$ 350	\$ 0
401. 870	Copper Manhole Frame and Cover - 100	\$ 330	\$ 0
402. 870	Copper Manhole Frame and Cover - 200	\$ 380	\$ 0
403. 870	Copper Manhole Frame and Cover - 650	\$ 350	\$ 0
404. 870	Copper Manhole Frame and Cover - 850	\$ 350	\$ 0
405. 870	Copper Manhole Frame and Cover - 2350	\$ 350	\$ 0
406. 870	Copper Manhole Frame and Cover - 5000	\$ 350	\$ 0
407. 870	Copper Manhole Frame and Cover - 10000	\$ 350	\$ 0
408. 870	Copper Manhole Site Delivery - 0	\$ 125	\$ 0
409. 870	Copper Manhole Site Delivery - 5	\$ 125	\$ 0
410. 870	Copper Manhole Site Delivery - 100	\$ 125	\$ 0
411. 870	Copper Manhole Site Delivery - 200	\$ 125	\$ 0
412. 870	Copper Manhole Site Delivery - 650	\$ 125	\$ 0
413. 870	Copper Manhole Site Delivery - 850	\$ 125	\$ 0
414. 870	Copper Manhole Site Delivery - 2350	\$ 125	\$ 0
415. 870	Copper Manhole Site Delivery - 5000	\$ 125	\$ 0
416. 870	Copper Manhole Site Delivery - 10000	\$ 125	\$ 0
417. 870	Copper Manhole Excavate and Backfill - 0	\$ 2,800	\$ 0
418. 870	Copper Manhole Excavate and Backfill - 5	\$ 2,800	\$ 0
419. 870	Copper Manhole Excavate and Backfill - 100	\$ 2,800	\$ 0
420. 870	Copper Manhole Excavate and Backfill - 200	\$ 2,800	\$ 0
421. 870	Copper Manhole Excavate and Backfill - 650	\$ 3,200	\$ 0
422. 870	Copper Manhole Excavate and Backfill - 850	\$ 3,500	\$ 0
423. 870	Copper Manhole Excavate and Backfill - 2350	\$ 3,500	\$ 0
424. 870	Copper Manhole Excavate and Backfill - 5000	\$ 5,000	\$ 0
425. 870	Copper Manhole Excavate and Backfill - 10000	\$ 5,000	\$ 0
426. 871	Dewatering fact: manhole excavation (additive)	0.20	no change
427. 872	Water table depth for dewatering, ft	\$	no change
Feeder Fiber Pullbox Investment			
428. 873	Fiber Pullbox Materials - 0	\$ 280	\$ 0
429. 873	Fiber Pullbox Materials - 5	\$ 280	\$ 0
430. 873	Fiber Pullbox Materials - 100	\$ 280	\$ 0
431. 873	Fiber Pullbox Materials - 200	\$ 280	\$ 0
432. 873	Fiber Pullbox Materials - 650	\$ 280	\$ 0
433. 873	Fiber Pullbox Materials - 850	\$ 280	\$ 0
434. 873	Fiber Pullbox Materials - 2350	\$ 280	\$ 0
435. 873	Fiber Pullbox Materials - 5000	\$ 280	\$ 0
436. 873	Fiber Pullbox Materials - 10000	\$ 280	\$ 0
437. 873	Fiber Pullbox Installation - 0	\$ 220	\$ 0
438. 873	Fiber Pullbox Installation - 5	\$ 220	\$ 0
439. 873	Fiber Pullbox Installation - 100	\$ 220	\$ 0
440. 873	Fiber Pullbox Installation - 200	\$ 220	\$ 0
441. 873	Fiber Pullbox Installation - 650	\$ 220	\$ 0
442. 873	Fiber Pullbox Installation - 850	\$ 220	\$ 0
443. 873	Fiber Pullbox Installation - 2350	\$ 220	\$ 0
444. 873	Fiber Pullbox Installation - 5000	\$ 220	\$ 0
445. 873	Fiber Pullbox Installation - 10000	\$ 220	\$ 0

HM S.G.A.		HM S.G.A. Default Scenario Value	Florida HM S.G.A. Recommended Value
	<u>Switching - End Office Switching</u>		
446. 874	Switch Capacity Res-Time (BHCA) - 1	10,000	no change
447. 874	Switch Capacity Res-Time (BHCA) - 2	50,000	no change
448. 874	Switch Capacity Res-Time (BHCA) - 3	200,000	no change
449. 874	Switch Capacity Res-Time (BHCA) - 4	600,000	no change
450. 875	Switch Capacity Traffic (BHCCS) - 1	30,000	no change
451. 875	Switch Capacity Traffic (BHCCS) - 2	150,000	no change
452. 875	Switch Capacity Traffic (BHCCS) - 3	600,000	no change
453. 875	Switch Capacity Traffic (BHCCS) - 4	1,600,000	no change
454. 876	Initial Switch Maximum Equipped Line Size	80,000	no change
455. 877	Switch Port Administrative FR	0.96	0.94
456. 878	Switch Maximum Processor Occupancy	0.90	no change
457. 879	MDF/Protector Investment per line	\$ 12.00	\$ 23.00
458. 880	Analog Line Circuit Offset for DLC lines, per line	\$ 3.00	no change
459. 881	Switch Installation Multiplier	1.1000	.0870
460. 882	Constant EO Switching Investment Term, small ICO	\$ 416.11	no change
461. 882	Constant EO Switching Investment Term, SOC and large ICO	\$ 242.73	\$ 288.58
462. 883	Multiplicative EO Switching Investment Term	\$ (14.122)	no change
463. 884	Processor Feature Loading Multiplier - normal	1.20	no change
464. 884	Processor Feature Loading Multiplier - heavy business	2.70	no change
465. 885	Processor Feature Loading Multiplier - business penetration threshold	0.30	no change
	<u>Switching - Wirecenter</u>		
466. 886	Lot Size, Multiplier of Switch Room Size	2.00	no change
467. 887	Tandem/EO Wire Center Common Factor	0.40	no change
468. 888	Power Investment 1	\$ 1,000	\$ 17,000
469. 888	Power Investment 2	\$ 10,000	\$ 24,000
470. 888	Power Investment 3	\$ 20,000	\$ 50,000
471. 888	Power Investment 4	\$ 50,000	\$ 104,000
472. 888	Power Investment 5	\$ 250,000	\$ 275,000
473. 889	Switch Room Size, sq ft 1	500	no change
474. 889	Switch Room Size, sq ft 2	1,000	no change
475. 889	Switch Room Size, sq ft 3	2,000	no change
476. 889	Switch Room Size, sq ft 4	5,000	no change
477. 889	Switch Room Size, sq ft 5	10,000	no change
478. 890	Construction Investment, sq ft 1	\$ 75	no change
479. 890	Construction Investment, sq ft 2	\$ 85	no change
480. 890	Construction Investment, sq ft 3	\$ 100	no change
481. 890	Construction Investment, sq ft 4	\$ 125	no change
482. 890	Construction Investment, sq ft 5	\$ 150	no change
483. 891	Land Investment, sq ft 1	\$ 5	no change
484. 891	Land Investment, sq ft 2	\$ 5	no change
485. 891	Land Investment, sq ft 3	\$ 10	no change
486. 891	Land Investment, sq ft 4	\$ 15	no change
487. 891	Land Investment, sq ft 5	\$ 20	no change

H&M S.D.A.		H&M S.D.A.	Florida
		Default Scenario Value	vsd S.D.A. Recommended Value
<u>Switching - Traffic Parameters</u>			
488	892	Local Call Attempts	static no change
489	893	Call Completion Factor	specific no change
490	894	InterLATA Calls Completed	values no change
491	895	InterLATA Interstate Calls Completed	95m no change
492	896	InterLATA Interstate Calls Completed	ARMS no change
493	897	Local DEMs, thousands	Gas no change
494	898	Interstate DEMs, thousands	no change
495	899	Interstate DEMs, thousands	no change
496	9100	Local Business/Residence DEMs	1.10 no change
497	9101	Interstate Business/Residence DEMs	2.00 no change
498	9102	Interstate Business/Residence DEMs	3.00 no change
499	9103	BH Fraction of Daily Usage	0.1000 0.0865
500	9104	Annual to Daily Usage Reduction Factor	270 310
501	9105	Residential Holding Time Multiplier	1.00 no change
502	9105	Business Holding Time Multiplier	1.00 no change
503	9106	Residential Call Attempts per BH	1.30 no change
504	9106	Business Call Attempts per BH	3.50 no change
<u>Switching - Interoffice Investment</u>			
505	9107	OC-48 ADM, installed, 48 DS-3s	\$ 50,000 \$ 107,544
506	9107	OC-48 ADM, installed, 12 DS-3s	\$ 40,000 \$ 62,065
507	9107	OC-3DS-1 Terminal Multiplexer, installed, 64 DS-1s	\$ 26,000 \$ 30,720
508	9107	Investment per T DS-1s	\$ 500 \$ 668
509	9108	Number of Fibers	24 24
510	9108	Pigtails, per Strand	\$ 90.00 \$ 26.05
511	9110	Optical Distribution Panel	\$ 1,000 \$ 1,805
512	9111	EFM, per hour	\$ 55 \$ 0
513	9112	EFM hours	\$ 32 \$ 0
514	9113	Regenerator, installed	\$ 15,000 no change
515	9114	Regenerator spacing, miles	40 40
516	9115	Channel Bank Investment, per 24 lines	\$ 5,000 \$ 2,995
517	9116	Fraction of SA Lines Requiring Multiplexing	0.0000 no change
518	9117	DCS installed, per DS-3	\$ 30,000 \$ 5,812
519	9118	Transmission Terminal Fee (DS-0 level)	0.90 0.80
520	9119	Fiber investment, fiber cable	\$ 3.50 \$ 2.15
521	9120	Fiber, number of strands per ADM	4 4
522	9121	Fiber investment, buried fraction	0.80 0.48
523	9121	Fiber, aerial fraction	0.20 0.14
524	9122	Fiber investment, conduit placement	\$ 18.40 \$ 4.79
525	9122	Fiber investment, buried placement	\$ 1.77 \$ 3.11
526	9123	Fiber investment, buried sheath addition	\$ 0.20 \$ 0.00
527	9124	Fiber investment, conduit	\$ 0.60 \$ 0.83
528	9124	Fiber, spare tubes per route	1 0
529	9125	Fiber, pullbox spacing	2,000 no change
530	9126	Fiber investment, pullbox investment	\$ 500.00 \$ 0.00
531	9127	Fiber, pole spacing, feet	150 no change
532	9128	Fiber investment, pole material	\$ 201 no change
533	9128	Fiber investment, pole labor (basic)	\$ 216 no change
534	9129	Fraction Poles and Buried/JG Placement Common with Feeder	0.750 no change
535	9130	Fraction of Aerial Structure Assigned to Telephone	0.330 0.399
536	9130	Fraction of Buried Structure Assigned to Telephone	0.330 1.000
537	9130	Fraction of Underground Structure Assigned to Telephone	0.330 1.000

HM S.O.A		HM S.O.A	Florida
		Default Scenario Value	HM S.O.A Recommended Value
<u>Exhibit - Transmission Parameters</u>			
538	B131	Operator Traffic Fraction	0.0200 0.0030
539	B132	Total Interoffice Traffic Fraction	0.8500 0.7400
540	B133	Maximum Trunk Occupancy, CCS	2" 1 27.5
541	B134	Trunk Port, per end	\$ 100.00 \$ 79.95
542	B135	Direct-routed Fraction of Local Interoffice	0.98 no change
543	B136	Tandem-routed Fraction of Total InterLATA Traffic	0.200 0.200
544	B137	Tandem-routed Fraction of Total InterLATA Traffic	0.200 0.200
545	B138	POFs per Tandem Location	5 no change
546	B139	Threshold value for off-ring wire centers, total lines	1.00 no change
547	B140	Remote-host fraction of interoffice traffic - remote	0.10 no change
548	B141	Host-remote fraction of interoffice traffic - host	0.05 no change
549	B142	Maximum nodes per ring	16 no change
550	B142a	Ring traveling traffic factor	0.40 no change
551	B142b	Inter-tandem fraction of tandem trunks (additive)	0.10 no change
<u>Switching - Tandem Switching</u>			
552	B143	Real-time Limit, BHCA	750,000 no change
553	B144	Port Limit, trunks	100,000 no change
554	B145	Common Equipment Investment	\$ 1,070,000 no change
555	B146	Maximum Port PB	1.90 no change
556	B147	Maximum Real-time Occupancy	0.90 no change
557	B148	Common Equipment Intercept Factor	0.80 no change
558	B149	Entrance Facility Distance, miles	0.50 no change
<u>Switching - Signaling</u>			
559	B150	STP Link Capacity	720 1,024
560	B151	STP Maximum Link PB	0.80 no change
561	B152	Maximum STP Investment, per pair	\$ 2,000,000 \$ 5,000,000
562	B153	Minimum STP Investment, per pair	\$ 1,000,000 \$ 224,000
563	B154	Link Termination, both ends	\$ 900 \$ 725
564	B155	Signaling Link Bit Rate	56,000 no change
565	B156	Link Occupancy	0.40 no change
566	B157	C Link Cross Section	24 16
567	B158	ISUP Messages per Interoffice BHCA	6 no change
568	B159	ISUP Message Length, bytes	25 no change
569	B160	TCAP Messages per transaction	2 no change
570	B161	TCAP Message length, bytes	100 no change
571	B162	Fraction of BHCA requiring TCAP	0.10 0.50
572	B163	SCP Investment/Transaction/Second	\$ 20,000 \$ 2,444
<u>Switching - OS and Public Telephone</u>			
573	B164	Operator Investment per position	\$ 6,400 no change
574	B165	Operator Maximum Utilization, per position, CCS	32.0 no change
575	B166	Operator Intervention Factor	10 2
576	B167	Public Telephone Investment, per station	\$ 780 no change
<u>Switching - ICO Parameters</u>			
577	B168	ICO STP Investment, per line (equipment)	\$ 5.50 no change
578	B169	ICO Local Tandem Investment, per line	\$ 1.90 no change
579	B170	ICO OS Tandem Investment, per line	\$ 0.50 no change
580	B171	ICO SCP Investment per line (equipment)	\$ 2.50 no change
581	B172	ICO SCP - STP per line (wirecenter)	\$ 0.40 no change
582	B173	ICO Local Tandem Investment, per line (wirecenter)	\$ 2.50 no change
583	B174	ICO OS Tandem Investment, per line (wirecenter)	\$ 1.00 no change
584	B175	ICO Tandem A Links and C Links per line (wirecenter)	\$ 0.30 no change
585	B175a	Equivalent facility investment, per DS-0	\$ 128.08 no change
586	B175b	Equivalent terminal investment, per DS-0	\$ 111.62 no change

HM S.DA		HM S.DA Default Scenario Value	Florida HM S.DA Recommended Value
<u>Switching Host/Remote Parameters</u>			
587	0176		Input form
588	0177	FALSE	no change
<u>Switching Host/Remote Investment</u>			
589	0177a	0	no change
590	0177a	640	no change
591	0177a	\$,000	no change
592	0177a	10,000	no change
593	0177b	\$ 175,000	no change
594	0177b	\$ 175,000	no change
595	0177b	\$ 175,000	no change
596	0177b	\$ 475,000	no change
597	0177b	\$ 183,750	no change
598	0177b	\$ 183,750	no change
599	0177b	\$ 183,750	no change
600	0177b	\$ 183,750	no change
601	0177b	\$ 10,000	no change
602	0177b	\$ 55,000	no change
603	0177b	\$ 70,000	no change
604	0177b	\$ 225,000	no change
605	0177b	\$ 75	no change
606	0177b	\$ 75	no change
607	0177b	\$ 75	no change
608	0177b	\$ 73	no change
609	0177b	\$ 75	no change
610	0177b	\$ 75	no change
611	0177b	\$ 75	no change
612	0177b	\$ 73	no change
613	0177b	\$ 85	no change
614	0177b	\$ 85	no change
615	0177b	\$ 85	no change
616	0177b	\$ 70	no change
617	0177b	\$ 300,001	no change
618	0177b	\$ 300,001	no change
619	0177b	\$ 300,001	no change
620	0177b	\$ 814,289	no change
621	0177b	\$ 315,001	no change
622	0177b	\$ 315,001	no change
623	0177b	\$ 315,001	no change
624	0177b	\$ 855,000	no change
625	0177b	\$ 17,143	no change
626	0177b	\$ 94,286	no change
627	0177b	\$ 120,000	no change
628	0177b	\$ 385,716	no change
629	0177b	\$ 129	no change
630	0177b	\$ 129	no change
631	0177b	\$ 129	no change
632	0177b	\$ 124	no change
633	0177b	\$ 129	no change
634	0177b	\$ 129	no change
635	0177b	\$ 129	no change
636	0177b	\$ 124	no change
637	0177b	\$ 148	no change
638	0177b	\$ 141	no change
639	0177b	\$ 148	no change
640	0177b	\$ 120	no change

HM 3.0A		HM 3.0A Default Scenario Value	Florida HM 3.0A Recommended Value	
Expense - Cost of Capital				
641	B178	Cost of Debt	7.70%	6.50%
642	B178	Debt Fraction	45.00%	40.00%
643	B178	Cost of Equity	11.90%	14.40%
Expense - Depreciation				
644	B179	Motor Vehicles - Economic Life	8.34	8.00
645	B179	Garage Work Equipment - Economic Life	12.22	12.00
646	B179	Other Work Equipment - Economic Life	13.04	15.00
647	B179	Buildings - Economic Life	48.93	48.00
648	B179	Furniture - Economic Life	15.92	15.00
649	B179	Office Support Equipment - Economic Life	10.78	11.50
650	B179	Company Comm. Equipment - Economic Life	7.40	7.00
651	B179	General Purpose Computer - Economic Life	6.13	5.00
652	B179	Digital Electronic Switching - Economic Life	16.17	10.00
653	B179	Operator Systems - Economic Life	9.41	10.00
654	B179	Digital Circuit Equipment - Economic Life	10.34	9.00
655	B179	Public Telephone Terminal Equipment - Economic Life	7.80	8.00
656	B179	Poles - Economic Life	30.25	34.00
657	B179	Aerial Cable - metallic - Economic Life	20.81	14.00
658	B179	Aerial Cable - non metallic - Economic Life	31.14	20.00
659	B179	Underground Cable - metallic - Economic Life	25.00	12.00
660	B179	Underground Cable - non metallic - Economic Life	28.45	20.00
661	B179	Buried - metallic - Economic Life	21.57	14.00
662	B179	Buried - non metallic - Economic Life	25.91	20.00
663	B179	Intrabuilding Cable - metallic - Economic Life	18.18	20.00
664	B179	Intrabuilding Cable - non metallic - Economic Life	26.11	20.00
665	B179	Conduit Systems - Economic Life	58.19	85.00
666	B179	Motor Vehicles - Net Salvage %	11.21%	16.00%
667	B179	Garage Work Equipment - Net Salvage %	-10.71%	0.00%
668	B179	Other Work Equipment - Net Salvage %	3.21%	0.00%
669	B179	Buildings - Net Salvage %	1.87%	0.00%
670	B179	Furniture - Net Salvage %	6.69%	10.00%
671	B179	Office Support Equipment - Net Salvage %	8.91%	3.00%
672	B179	Company Comm. Equipment - Net Salvage %	3.76%	10.00%
673	B179	General Purpose Computer - Net Salvage %	3.73%	0.00%
674	B179	Digital Electronic Switching - Net Salvage %	2.97%	0.00%
675	B179	Operator Systems - Net Salvage %	-0.82%	0.00%
676	B179	Digital Circuit Equipment - Net Salvage %	-1.89%	0.00%
677	B179	Public Telephone Terminal Equipment - Net Salvage %	7.97%	5.00%
678	B179	Poles - Net Salvage %	-60.96%	-60.00%
679	B179	Aerial Cable - metallic - Net Salvage %	-23.03%	-14.00%
680	B179	Aerial Cable - non metallic - Net Salvage %	-17.53%	-14.00%
681	B179	Underground Cable - metallic - Net Salvage %	-18.28%	-8.00%
682	B179	Underground Cable - non metallic - Net Salvage %	-14.58%	-8.00%
683	B179	Buried - metallic - Net Salvage %	-8.39%	-7.00%
684	B179	Buried - non metallic - Net Salvage %	-8.58%	-7.00%
685	B179	Intrabuilding Cable - metallic - Net Salvage %	-15.74%	-10.00%
686	B179	Intrabuilding Cable - non metallic - Net Salvage %	-10.52%	-10.00%
687	B179	Conduit Systems - Net Salvage %	-10.34%	-10.00%

HM S.DA		HM S.DA Default Stanana Value	Florida HM S.DA Recommended Value
688. B179a	Furniture - Capital Costs - % assigned per line	0.0000	0.0000
689. B179a	Furniture - Expenses - % assigned per line	0.0000	0.0000
690. B179a	Office Equipment - Capital Costs - % assigned per line	0.0000	0.0000
691. B179a	Office Equipment - Expenses - % assigned per line	0.0000	0.0000
692. B179a	General Purpose Computer - Capital Costs - % assigned per line	0.0000	0.0000
693. B179a	General Purpose Computer - Expenses - % assigned per line	0.0000	0.0000
694. B179a	Motor Vehicles - Capital Costs - % assigned per line	0.0000	0.0000
695. B179a	Motor Vehicles - Expenses - % assigned per line	0.0000	0.0000
696. B179a	Buildings - Capital Costs - % assigned per line	0.0000	0.0000
697. B179a	Buildings - Expenses - % assigned per line	0.0000	0.0000
698. B179a	Garage Work Eqpt. - Capital Costs - % assigned per line	0.0000	0.0000
699. B179a	Garage Work Eqpt. - Expenses - % assigned per line	0.0000	0.0000
700. B179a	Other Work Eqpt. - Capital Costs - % assigned per line	0.0000	0.0000
701. B179a	Other Work Eqpt. - Expenses - % assigned per line	0.0000	0.0000
702. B179a	Network Operations - % assigned per line	0.0000	0.0000
703. B179a	Other Taxes - % assigned per line	0.0000	0.0000
704. B179a	Variable Overhead - % assigned per line	0.0000	0.0000
Expense - Structure Fraction Assigned to Telephone			
705. B180	Distribution Aerial String Fraction - 0	0.300	0.399
706. B180	Distribution Aerial String Fraction - 5	0.330	0.399
707. B180	Distribution Aerial String Fraction - 100	0.350	0.399
708. B180	Distribution Aerial String Fraction - 200	0.250	0.399
709. B180	Distribution Aerial String Fraction - 500	0.250	0.399
710. B180	Distribution Aerial String Fraction - 850	0.250	0.399
711. B180	Distribution Aerial String Fraction - 2550	0.250	0.399
712. B180	Distribution Aerial String Fraction - 5050	0.250	0.399
713. B180	Distribution Aerial String Fraction - 10000	0.250	0.399
714. B180	Distribution Buried String Fraction - 0	0.330	0.960
715. B180	Distribution Buried String Fraction - 5	0.330	0.960
716. B180	Distribution Buried String Fraction - 100	0.330	0.960
717. B180	Distribution Buried String Fraction - 200	0.330	0.960
718. B180	Distribution Buried String Fraction - 500	0.330	0.960
719. B180	Distribution Buried String Fraction - 850	0.330	0.960
720. B180	Distribution Buried String Fraction - 2550	0.330	0.960
721. B180	Distribution Buried String Fraction - 5000	0.330	0.960
722. B180	Distribution Buried String Fraction - 10000	0.330	0.960
723. B180	Distribution Underground String Fraction - 0	1.000	1.000
724. B180	Distribution Underground String Fraction - 5	0.500	1.000
725. B180	Distribution Underground String Fraction - 100	0.500	1.000
726. B180	Distribution Underground String Fraction - 200	0.500	1.000
727. B180	Distribution Underground String Fraction - 500	0.400	1.000
728. B180	Distribution Underground String Fraction - 850	0.330	1.000
729. B180	Distribution Underground String Fraction - 2550	0.330	1.000
730. B180	Distribution Underground String Fraction - 5000	0.330	1.000
731. B180	Distribution Underground String Fraction - 10000	0.330	1.000
732. B180	Feeder Aerial String Fraction - 0	0.500	0.399
733. B180	Feeder Aerial String Fraction - 5	0.330	0.399
734. B180	Feeder Aerial String Fraction - 100	0.250	0.399
735. B180	Feeder Aerial String Fraction - 200	0.250	0.399
736. B180	Feeder Aerial String Fraction - 500	0.250	0.399
737. B180	Feeder Aerial String Fraction - 850	0.250	0.399
738. B180	Feeder Aerial String Fraction - 2550	0.250	0.399
739. B180	Feeder Aerial String Fraction - 5000	0.250	0.399
740. B180	Feeder Aerial String Fraction - 10000	0.250	0.399

HM S.OA		HM S.OA	Florida
		Output Scenario Value	HM S.OA Recommended Value
741	B190	Feeder Underground String Fraction - 0	1.000
742	B180	Feeder Underground String Fraction - 5	1.000
743	B190	Feeder Underground String Fraction - 100	1.000
744	B180	Feeder Underground String Fraction - 200	1.000
745	B180	Feeder Underground String Fraction - 300	1.000
746	B180	Feeder Underground String Fraction - 400	1.000
747	B180	Feeder Underground String Fraction - 500	1.000
748	B180	Feeder Underground String Fraction - 600	1.000
749	B180	Feeder Underground String Fraction - 700	1.000
750	B180	Feeder Underground String Fraction - 800	1.000
751	B180	Feeder Underground String Fraction - 900	1.000
752	B180	Feeder Underground String Fraction - 1000	1.000
753	B180	Feeder Underground String Fraction - 1100	1.000
754	B180	Feeder Underground String Fraction - 1200	1.000
755	B180	Feeder Underground String Fraction - 1300	1.000
756	B180	Feeder Underground String Fraction - 1400	1.000
757	B180	Feeder Underground String Fraction - 1500	1.000
758	B180	Feeder Underground String Fraction - 1600	1.000
Expense - Other			
759	B181	Tax Rate	39.75%
760	B182	Corporate Overhead Factor	0.10%
761	B183	Other Taxes Factor	0.0000
762	B184	Billing/Bill Inquiry per line per month	\$ 1.22
763	B185	Directory Listing per line per month	\$ 0.00
764	B186	Forward-looking Network Operations Factor	0.50
765	B187	Alternative CO Switching Factor	0.0289
766	B188	Alternative Circuit Equipment Factor	0.0153
767	B189	EO Traffic Sensitive Fraction	0.70
768	B190	Monthly LNP cost, per line	\$ 0.25
769	B191	Carrier to Carrier Customer Service, per line per year	\$ 1.89
770	B192	NID Expense per line per year	\$ 1.20
771	B193	DI-4DS-1 Terminal Factor	12.4
772	B194	DS-1/DS-3 Terminal Factor	9.8
773	B195	Average Lines per Business Location	4
774	B196	Average Trunk Utilization	0.20
Underground Excavation/Restoration Computation			
775		Computed Underground cable installation cost - 0	\$ 10.29
776		Computed Underground cable installation cost - 5	\$ 10.29
777		Computed Underground cable installation cost - 100	\$ 10.29
778		Computed Underground cable installation cost - 200	\$ 11.28
779		Computed Underground cable installation cost - 300	\$ 11.58
780		Computed Underground cable installation cost - 400	\$ 16.40
781		Computed Underground cable installation cost - 500	\$ 21.60
782		Computed Underground cable installation cost - 600	\$ 20.10
783		Computed Underground cable installation cost - 10000	\$ 75.00

HM S.OA		HM S.OA	Florida
		Default Scenario Value	HM S.OA Recommended Value
784. 0197	Trench Per Ft - 0	\$ 1.90	\$ 0.00
785. 0197	Trench Per Ft - 5	\$ 1.90	\$ 0.00
786. 0197	Trench Per Ft - 100	\$ 1.90	\$ 0.00
787. 0197	Trench Per Ft - 200	\$ 1.90	\$ 0.00
788. 0197	Trench Per Ft - 650	\$ 1.95	\$ 0.00
789. 0197	Trench Per Ft - 850	\$ 2.15	\$ 0.00
790. 0197	Trench Per Ft - 2500	\$ 2.15	\$ 0.00
791. 0197	Trench Per Ft - 5000	\$ 6.00	\$ 0.00
792. 0197	Trench Per Ft -10000	\$ 6.00	\$ 0.00
793.	Computed Probability Normal Trenching Per Ft - 0	0.540	0.000
794.	Computed Probability Normal Trenching Per Ft - 5	0.540	0.000
795.	Computed Probability Normal Trenching Per Ft - 100	0.540	0.000
796.	Computed Probability Normal Trenching Per Ft - 200	0.529	0.000
797.	Computed Probability Normal Trenching Per Ft - 650	0.520	0.000
798.	Computed Probability Normal Trenching Per Ft - 850	0.500	0.000
799.	Computed Probability Normal Trenching Per Ft - 2500	0.350	0.000
800.	Computed Probability Normal Trenching Per Ft - 5000	0.230	0.000
801.	Computed Probability Normal Trenching Per Ft -10000	0.160	0.000
802. 0197	Sackhoe Trench Fraction - 0	0.45	1.00
803. 0197	Sackhoe Trench Fraction - 5	0.45	1.00
804. 0197	Sackhoe Trench Fraction - 100	0.45	1.00
805. 0197	Sackhoe Trench Fraction - 200	0.45	1.00
806. 0197	Sackhoe Trench Fraction - 650	0.45	1.00
807. 0197	Sackhoe Trench Fraction - 850	0.45	1.00
808. 0197	Sackhoe Trench Fraction - 2500	0.35	1.00
809. 0197	Sackhoe Trench Fraction - 5000	0.27	1.00
810. 0197	Sackhoe Trench Fraction -10000	0.22	1.00
811. 0197	Sackhoe Trench Per Ft - 0	\$ 3.00	\$ 4.79
812. 0197	Sackhoe Trench Per Ft - 5	\$ 3.00	\$ 4.79
813. 0197	Sackhoe Trench Per Ft - 100	\$ 3.00	\$ 4.79
814. 0197	Sackhoe Trench Per Ft - 200	\$ 3.00	\$ 4.79
815. 0197	Sackhoe Trench Per Ft - 650	\$ 3.00	\$ 4.79
816. 0197	Sackhoe Trench Per Ft - 850	\$ 3.00	\$ 4.79
817. 0197	Sackhoe Trench Per Ft - 2500	\$ 3.00	\$ 4.79
818. 0197	Sackhoe Trench Per Ft - 5000	\$ 20.00	\$ 4.79
819. 0197	Sackhoe Trench Per Ft -10000	\$ 30.00	\$ 4.79
820. 0197	Hand Trench Fraction - 0	0.01	0.00
821. 0197	Hand Trench Fraction - 5	0.01	0.00
822. 0197	Hand Trench Fraction - 100	0.01	0.00
823. 0197	Hand Trench Fraction - 200	0.03	0.00
824. 0197	Hand Trench Fraction - 650	0.03	0.00
825. 0197	Hand Trench Fraction - 850	0.05	0.00
826. 0197	Hand Trench Fraction - 2500	0.10	0.00
827. 0197	Hand Trench Fraction - 5000	0.10	0.00
828. 0197	Hand Trench Fraction -10000	0.12	0.00
829. 0197	Hand Trench Per Ft - 0	\$ 5.00	\$ 0.00
830. 0197	Hand Trench Per Ft - 5	\$ 5.00	\$ 0.00
831. 0197	Hand Trench Per Ft - 100	\$ 5.00	\$ 0.00
832. 0197	Hand Trench Per Ft - 200	\$ 5.00	\$ 0.00
833. 0197	Hand Trench Per Ft - 650	\$ 5.00	\$ 0.00
834. 0197	Hand Trench Per Ft - 850	\$ 5.00	\$ 0.00
835. 0197	Hand Trench Per Ft - 2500	\$ 5.00	\$ 0.00
836. 0197	Hand Trench Per Ft - 5000	\$ 10.00	\$ 0.00
837. 0197	Hand Trench Per Ft -10000	\$ 18.00	\$ 0.00

HM S DA		HM S DA Default Scenario Value	Florida HM S DA Recommended Value	
826	8198	Cut/Restore Asphalt Fraction - 0	0.55	0.00
829	8198	Cut/Restore Asphalt Fraction - 5	0.55	0.00
840	8198	Cut/Restore Asphalt Fraction - 100	0.55	0.00
841	8198	Cut/Restore Asphalt Fraction - 200	0.65	0.00
842	8198	Cut/Restore Asphalt Fraction - 500	0.70	0.00
843	8198	Cut/Restore Asphalt Fraction - 800	0.75	0.00
844	8198	Cut/Restore Asphalt Fraction - 2500	0.75	0.00
845	8198	Cut/Restore Asphalt Fraction - 5000	0.80	0.00
846	8198	Cut/Restore Asphalt Fraction -10000	0.82	0.00
847	8198	Cut/Restore Asphalt Per Ft - 0	\$ 6.00	\$ 0.00
848	8198	Cut/Restore Asphalt Per Ft - 5	\$ 6.00	\$ 0.00
849	8198	Cut/Restore Asphalt Per Ft - 100	\$ 6.00	\$ 0.00
850	8198	Cut/Restore Asphalt Per Ft - 200	\$ 6.00	\$ 0.00
851	8198	Cut/Restore Asphalt Per Ft - 500	\$ 6.00	\$ 0.00
852	8198	Cut/Restore Asphalt Per Ft - 800	\$ 6.00	\$ 0.00
853	8198	Cut/Restore Asphalt Per Ft - 2500	\$ 6.00	\$ 0.00
854	8198	Cut/Restore Asphalt Per Ft - 5000	\$ 18.00	\$ 0.00
855	8198	Cut/Restore Asphalt Per Ft -10000	\$ 30.00	\$ 0.00
856	8198	Cut/Restore Concrete Fraction - 0	0.10	0.00
857	8198	Cut/Restore Concrete Fraction - 5	0.10	0.00
858	8198	Cut/Restore Concrete Fraction - 100	0.10	0.00
859	8198	Cut/Restore Concrete Fraction - 200	0.10	0.00
860	8198	Cut/Restore Concrete Fraction - 500	0.10	0.00
861	8198	Cut/Restore Concrete Fraction - 800	0 -0	0.00
862	8198	Cut/Restore Concrete Fraction - 2500	0.15	0.00
863	8198	Cut/Restore Concrete Fraction - 5000	0.15	0.00
864	8198	Cut/Restore Concrete Fraction -10000	0.16	0.00
865	8198	Cut/Restore Concrete Per Ft - 0	\$ 9.00	\$ 0.00
866	8198	Cut/Restore Concrete Per Ft - 5	\$ 1.00	\$ 0.00
867	8198	Cut/Restore Concrete Per Ft - 100	\$ 9.00	\$ 0.00
868	8198	Cut/Restore Concrete Per Ft - 200	\$ 9.00	\$ 0.00
869	8198	Cut/Restore Concrete Per Ft - 500	\$ 9.00	\$ 0.00
870	8198	Cut/Restore Concrete Per Ft - 800	\$ 9.00	\$ 0.00
871	8198	Cut/Restore Concrete Per Ft - 2500	\$ 9.00	\$ 0.00
872	8198	Cut/Restore Concrete Per Ft - 5000	\$ 21.00	\$ 0.00
873	8198	Cut/Restore Concrete Per Ft -10000	\$ 36.00	\$ 0.00
874	8198	Cut/Restore Sod Fraction - 0	0.01	0.00
875	8198	Cut/Restore Sod Fraction - 5	0.01	0.00
876	8198	Cut/Restore Sod Fraction - 100	0.01	0.00
877	8198	Cut/Restore Sod Fraction - 200	0.03	0.00
878	8198	Cut/Restore Sod Fraction - 500	0.04	0.00
879	8198	Cut/Restore Sod Fraction - 800	0.06	0.00
880	8198	Cut/Restore Sod Fraction - 2500	0.04	0.00
881	8198	Cut/Restore Sod Fraction - 5000	0.02	0.00
882	8198	Cut/Restore Sod Fraction -10000	0.00	0.00
883	8198	Cut/Restore Sod Per Ft - 0	\$ 1.00	\$ 0.00
884	8198	Cut/Restore Sod Per Ft - 5	\$ 1.00	\$ 0.00
885	8198	Cut/Restore Sod Per Ft - 100	\$ 1.00	\$ 0.00
886	8198	Cut/Restore Sod Per Ft - 200	\$ 1.00	\$ 0.00
887	8198	Cut/Restore Sod Per Ft - 500	\$ 1.00	\$ 0.00
888	8198	Cut/Restore Sod Per Ft - 800	\$ 1.00	\$ 0.00
889	8198	Cut/Restore Sod Per Ft - 2500	\$ 1.00	\$ 0.00
890	8198	Cut/Restore Sod Per Ft - 5000	\$ 1.00	\$ 0.00
891	8198	Cut/Restore Sod Per Ft -10000	\$ 1.00	\$ 0.00

HM S.D.A.		HM S.D.A.	Florida
		Default Scenario Value	HM S.D.A. Recommended Value
892. 0198	Pavement Stabilization Per Ft - 0	\$ 5.00	\$ 0.00
893. 0198	Pavement Stabilization Per Ft - 5	\$ 5.00	\$ 0.00
894. 0198	Pavement Stabilization Per Ft - 100	\$ 5.00	\$ 0.00
895. 0198	Pavement Stabilization Per Ft - 200	\$ 5.00	\$ 0.00
896. 0198	Pavement Stabilization Per Ft - 650	\$ 5.00	\$ 0.00
897. 0198	Pavement Stabilization Per Ft - 850	\$ 2.00	\$ 0.00
898. 0198	Pavement Stabilization Per Ft - 2500	\$ 13.00	\$ 0.00
899. 0198	Pavement Stabilization Per Ft - 5000	\$ 17.00	\$ 0.00
900. 0198	Pavement Stabilization Per Ft -10000	\$ 20.00	\$ 0.00
901.	Computed probability Pavement Stabilization Per Ft - 0	0.650	0.000
902.	Computed probability Pavement Stabilization Per Ft - 5	0.650	0.000
903.	Computed probability Pavement Stabilization Per Ft - 100	0.650	0.000
904.	Computed probability Pavement Stabilization Per Ft - 200	0.750	0.000
905.	Computed probability Pavement Stabilization Per Ft - 650	0.800	0.000
906.	Computed probability Pavement Stabilization Per Ft - 850	0.850	0.000
907.	Computed probability Pavement Stabilization Per Ft - 2500	0.900	0.000
908.	Computed probability Pavement Stabilization Per Ft - 5000	0.980	0.000
909.	Computed probability Pavement Stabilization Per Ft -10000	0.985	0.000
910. 0190	Dirt Stabilization Per Ft - 0	\$ 1.00	\$ 0.00
911. 0190	Dirt Stabilization Per Ft - 5	\$ 1.00	\$ 0.00
912. 0190	Dirt Stabilization Per Ft - 100	\$ 1.00	\$ 0.00
913. 0190	Dirt Stabilization Per Ft - 200	\$ 1.00	\$ 0.00
914. 0190	Dirt Stabilization Per Ft - 650	\$ 1.00	\$ 0.00
915. 0190	Dirt Stabilization Per Ft - 850	\$ 4.00	\$ 0.00
916. 0190	Dirt Stabilization Per Ft - 2500	\$ 11.00	\$ 0.00
917. 0190	Dirt Stabilization Per Ft - 5000	\$ 12.00	\$ 0.00
918. 0190	Dirt Stabilization Per Ft -10000	\$ 16.00	\$ 0.00
919.	Computed probability Dirt Stabilization Per Ft - 0	0.350	1.000
920.	Computed probability Dirt Stabilization Per Ft - 5	0.350	1.000
921.	Computed probability Dirt Stabilization Per Ft - 100	0.350	1.000
922.	Computed probability Dirt Stabilization Per Ft - 200	0.250	1.000
923.	Computed probability Dirt Stabilization Per Ft - 650	0.200	1.000
924.	Computed probability Dirt Stabilization Per Ft - 850	0.150	1.000
925.	Computed probability Dirt Stabilization Per Ft - 2500	0.100	1.000
926.	Computed probability Dirt Stabilization Per Ft - 5000	0.050	1.000
927.	Computed probability Dirt Stabilization Per Ft -10000	0.020	1.000
928. 0190	Simple Backfill - 0	\$ 0.15	\$ 0.00
929. 0190	Simple Backfill - 5	\$ 0.15	\$ 0.00
930. 0190	Simple Backfill - 100	\$ 0.15	\$ 0.00
931. 0190	Simple Backfill - 200	\$ 0.15	\$ 0.00
932. 0190	Simple Backfill - 650	\$ 0.15	\$ 0.00
933. 0190	Simple Backfill - 850	\$ 0.15	\$ 0.00
934. 0190	Simple Backfill - 2500	\$ 0.15	\$ 0.00
935. 0190	Simple Backfill - 5000	\$ 0.15	\$ 0.00
936. 0190	Simple Backfill -10000	\$ 0.15	\$ 0.00
937.	Computed probability Simple Backfill - 0	0.340	1.000
938.	Computed probability Simple Backfill - 5	0.340	1.000
939.	Computed probability Simple Backfill - 100	0.340	1.000
940.	Computed probability Simple Backfill - 200	0.220	1.000
941.	Computed probability Simple Backfill - 650	0.160	1.000
942.	Computed probability Simple Backfill - 850	0.090	1.000
943.	Computed probability Simple Backfill - 2500	0.060	1.000
944.	Computed probability Simple Backfill - 5000	0.020	1.000
945.	Computed probability Simple Backfill -10000	0.020	1.000

HM S.DA

HM S.DA	Florida
Default	HM S.DA
Scenario	Recommended
Value	Value

Buried Excavation/Restoration

946	Computed buried cable installation cost - 0	\$ 1.77	\$ 3.09
947	Computed buried cable installation cost - 5	\$ 1.77	\$ 3.09
948	Computed buried cable installation cost - 100	\$ 1.77	\$ 3.09
949	Computed buried cable installation cost - 200	\$ 1.83	\$ 3.09
950	Computed buried cable installation cost - 500	\$ 2.17	\$ 3.09
951	Computed buried cable installation cost - 800	\$ 2.94	\$ 3.09
952	Computed buried cable installation cost - 2500	\$ 4.27	\$ 3.09
953	Computed buried cable installation cost - 5000	\$ 12.00	\$ 3.09
954	Computed buried cable installation cost - 10000	\$ 45.00	\$ 3.09
955. 0199	Flow Fraction - 0	0.80	0.00
956. 0199	Flow Fraction - 5	0.80	0.00
957. 0199	Flow Fraction - 100	0.80	0.00
958. 0199	Flow Fraction - 200	0.80	0.00
959. 0199	Flow Fraction - 500	0.28	0.00
960. 0199	Flow Fraction - 800	0.20	0.00
961. 0199	Flow Fraction - 2500	0.11	0.00
962. 0199	Flow Fraction - 5000	0.00	0.00
963. 0199	Flow Fraction - 10000	0.00	0.00
964. 0199	Flow Per Ft - 0	\$ 0.80	\$ 0.00
965. 0199	Flow Per Ft - 5	\$ 0.80	\$ 0.00
966. 0199	Flow Per Ft - 100	\$ 0.80	\$ 0.00
967. 0199	Flow Per Ft - 200	\$ 0.80	\$ 0.00
968. 0199	Flow Per Ft - 500	\$ 0.80	\$ 0.00
969. 0199	Flow Per Ft - 800	\$ 1.20	\$ 0.00
970. 0199	Flow Per Ft - 2500	\$ 1.20	\$ 0.00
971. 0199	Flow Per Ft - 5000	\$ 1.20	\$ 0.00
972. 0199	Flow Per Ft - 10000	\$ 1.20	\$ 0.00
973. 0199	Trench Per Ft - 0	\$ 1.90	\$ 0.00
974. 0199	Trench Per Ft - 5	\$ 1.90	\$ 0.00
975. 0199	Trench Per Ft - 100	\$ 1.90	\$ 0.00
976. 0199	Trench Per Ft - 200	\$ 1.90	\$ 0.00
977. 0199	Trench Per Ft - 500	\$ 1.90	\$ 0.00
978. 0199	Trench Per Ft - 800	\$ 2.15	\$ 0.00
979. 0199	Trench Per Ft - 2500	\$ 2.15	\$ 0.00
980. 0199	Trench Per Ft - 5000	\$ 5.00	\$ 0.00
981. 0199	Trench Per Ft - 10000	\$ 15.00	\$ 0.00
982.	Computed probability [Normal] Trench Per Ft - 0	0.280	0.000
983.	Computed probability [Normal] Trench Per Ft - 5	0.280	0.000
984.	Computed probability [Normal] Trench Per Ft - 100	0.280	0.000
985.	Computed probability [Normal] Trench Per Ft - 200	0.170	0.000
986.	Computed probability [Normal] Trench Per Ft - 500	0.110	0.000
987.	Computed probability [Normal] Trench Per Ft - 800	0.090	0.000
988.	Computed probability [Normal] Trench Per Ft - 2500	0.780	0.000
989.	Computed probability [Normal] Trench Per Ft - 5000	0.730	0.000
990.	Computed probability [Normal] Trench Per Ft - 10000	0.940	0.000

HM S&A		HM S&A Default Scenario Value	Florida HM S&A Recommended Value	
991	0199	Sediment Trench Fraction - 0	0.10	0.00
992	0199	Sediment Trench Fraction - 5	0.10	0.00
993	0199	Sediment Trench Fraction - 100	0.10	0.00
994	0199	Sediment Trench Fraction - 200	0.10	0.00
995	0199	Sediment Trench Fraction - 500	0.10	0.00
996	0199	Sediment Trench Fraction - 800	0.10	0.00
997	0199	Sediment Trench Fraction - 2500	0.10	0.00
998	0199	Sediment Trench Fraction - 5000	0.10	0.00
999	0199	Sediment Trench Fraction -10000	0.25	0.00
1000	0199	Sediment Trench Per Ft - 0	\$ 3.00	\$ 0.00
1001	0199	Sediment Trench Per Ft - 5	\$ 3.00	\$ 0.00
1002	0199	Sediment Trench Per Ft - 100	\$ 3.00	\$ 0.00
1003	0199	Sediment Trench Per Ft - 200	\$ 3.00	\$ 0.00
1004	0199	Sediment Trench Per Ft - 500	\$ 3.00	\$ 0.00
1005	0199	Sediment Trench Per Ft - 800	\$ 3.00	\$ 0.00
1006	0199	Sediment Trench Per Ft - 2500	\$ 3.00	\$ 0.00
1007	0199	Sediment Trench Per Ft - 5000	\$ 20.00	\$ 0.00
1008	0199	Sediment Trench Per Ft -10000	\$ 20.00	\$ 0.00
1009	0199	Hard Trench Fraction - 0	0.00	1.00
1010	0199	Hard Trench Fraction - 5	0.00	1.00
1011	0199	Hard Trench Fraction - 100	0.00	1.00
1012	0199	Hard Trench Fraction - 200	0.01	1.00
1013	0199	Hard Trench Fraction - 500	0.02	1.00
1014	0199	Hard Trench Fraction - 800	0.04	1.00
1015	0199	Hard Trench Fraction - 2500	0.06	1.00
1016	0199	Hard Trench Fraction - 5000	0.08	1.00
1017	0199	Hard Trench Fraction -10000	0.10	1.00
1018	0199	Hard Trench Per Ft - 0	\$ 5.00	\$ 3.00
1019	0199	Hard Trench Per Ft - 5	\$ 5.00	\$ 3.00
1020	0199	Hard Trench Per Ft - 100	\$ 5.00	\$ 3.00
1021	0199	Hard Trench Per Ft - 200	\$ 5.00	\$ 3.00
1022	0199	Hard Trench Per Ft - 500	\$ 5.00	\$ 3.00
1023	0199	Hard Trench Per Ft - 800	\$ 5.00	\$ 3.00
1024	0199	Hard Trench Per Ft - 2500	\$ 5.00	\$ 3.00
1025	0199	Hard Trench Per Ft - 5000	\$ 10.00	\$ 3.00
1026	0199	Hard Trench Per Ft -10000	\$ 18.00	\$ 3.00
1027	0199	Sore Cable Fraction - 0	0.00	0.00
1028	0199	Sore Cable Fraction - 5	0.00	0.00
1029	0199	Sore Cable Fraction - 100	0.00	0.00
1030	0199	Sore Cable Fraction - 200	0.00	0.00
1031	0199	Sore Cable Fraction - 500	0.00	0.00
1032	0199	Sore Cable Fraction - 800	0.03	0.00
1033	0199	Sore Cable Fraction - 2500	0.04	0.00
1034	0199	Sore Cable Fraction - 5000	0.05	0.00
1035	0199	Sore Cable Fraction -10000	0.05	0.00
1036	0199	Sore Cable Per Ft - 0	\$ 11.00	\$ 0.00
1037	0199	Sore Cable Per Ft - 5	\$ 11.00	\$ 0.00
1038	0199	Sore Cable Per Ft - 100	\$ 11.00	\$ 0.00
1039	0199	Sore Cable Per Ft - 200	\$ 11.00	\$ 0.00
1040	0199	Sore Cable Per Ft - 500	\$ 11.00	\$ 0.00
1041	0199	Sore Cable Per Ft - 800	\$ 11.00	\$ 0.00
1042	0199	Sore Cable Per Ft - 2500	\$ 11.00	\$ 0.00
1043	0199	Sore Cable Per Ft - 5000	\$ 11.00	\$ 0.00
1044	0199	Sore Cable Per Ft -10000	\$ 15.00	\$ 0.00

HM S.DA		HM S.SA Default Scenario Value	Florida HM S.DA Recommended Value
1045. \$200	Push Pipe/Pull Cable Fraction - 0	0.02	0.00
1046. \$200	Push Pipe/Pull Cable Fraction - 5	0.02	0.00
1047. \$200	Push Pipe/Pull Cable Fraction - 100	0.02	0.00
1048. \$200	Push Pipe/Pull Cable Fraction - 200	0.02	0.00
1049. \$200	Push Pipe/Pull Cable Fraction - 650	0.02	0.00
1050. \$200	Push Pipe/Pull Cable Fraction - 850	0.04	0.00
1051. \$200	Push Pipe/Pull Cable Fraction - 2500	0.06	0.00
1052. \$200	Push Pipe/Pull Cable Fraction - 5000	0.06	0.00
1053. \$200	Push Pipe/Pull Cable Fraction -10000	0.06	0.00
1054. \$200	Push Pipe/Pull Cable Per Ft - 0	\$ 6.00	\$ 0.00
1055. \$200	Push Pipe/Pull Cable Per Ft - 5	\$ 6.00	\$ 0.00
1056. \$200	Push Pipe/Pull Cable Per Ft - 100	\$ 6.00	\$ 0.00
1057. \$200	Push Pipe/Pull Cable Per Ft - 200	\$ 6.00	\$ 0.00
1058. \$200	Push Pipe/Pull Cable Per Ft - 650	\$ 6.00	\$ 0.00
1059. \$200	Push Pipe/Pull Cable Per Ft - 850	\$ 6.00	\$ 0.00
1060. \$200	Push Pipe/Pull Cable Per Ft - 2500	\$ 6.00	\$ 0.00
1061. \$200	Push Pipe/Pull Cable Per Ft - 5000	\$ 6.00	\$ 0.00
1062. \$200	Push Pipe/Pull Cable Per Ft -10000	\$ 24.00	\$ 0.00
1063. \$200	Cut/Restore Asphalt Fraction - 0	0.03	0.00
1064. \$200	Cut/Restore Asphalt Fraction - 5	0.03	0.00
1065. \$200	Cut/Restore Asphalt Fraction - 100	0.03	0.00
1066. \$200	Cut/Restore Asphalt Fraction - 200	0.03	0.00
1067. \$200	Cut/Restore Asphalt Fraction - 650	0.03	0.00
1068. \$200	Cut/Restore Asphalt Fraction - 850	0.06	0.00
1069. \$200	Cut/Restore Asphalt Fraction - 2500	0.06	0.00
1070. \$200	Cut/Restore Asphalt Fraction - 5000	0.18	0.00
1071. \$200	Cut/Restore Asphalt Fraction -10000	0.60	0.00
1072. \$200	Cut/Restore Asphalt Per Ft - 0	\$ 6.00	\$ 0.00
1073. \$200	Cut/Restore Asphalt Per Ft - 5	\$ 6.00	\$ 0.00
1074. \$200	Cut/Restore Asphalt Per Ft - 100	\$ 6.00	\$ 0.00
1075. \$200	Cut/Restore Asphalt Per Ft - 200	\$ 6.00	\$ 0.00
1076. \$200	Cut/Restore Asphalt Per Ft - 650	\$ 6.00	\$ 0.00
1077. \$200	Cut/Restore Asphalt Per Ft - 850	\$ 6.00	\$ 0.00
1078. \$200	Cut/Restore Asphalt Per Ft - 2500	\$ 6.00	\$ 0.00
1079. \$200	Cut/Restore Asphalt Per Ft - 5000	\$ 18.00	\$ 0.00
1080. \$200	Cut/Restore Asphalt Per Ft -10000	\$ 30.00	\$ 0.00
1081. \$200	Cut/Restore Concrete Fraction - 0	0.01	0.00
1082. \$200	Cut/Restore Concrete Fraction - 5	0.01	0.00
1083. \$200	Cut/Restore Concrete Fraction - 100	0.01	0.00
1084. \$200	Cut/Restore Concrete Fraction - 200	0.01	0.00
1085. \$200	Cut/Restore Concrete Fraction - 650	0.01	0.00
1086. \$200	Cut/Restore Concrete Fraction - 850	0.03	0.00
1087. \$200	Cut/Restore Concrete Fraction - 2500	0.06	0.00
1088. \$200	Cut/Restore Concrete Fraction - 5000	0.06	0.00
1089. \$200	Cut/Restore Concrete Fraction -10000	0.20	0.00
1090. \$200	Cut/Restore Concrete Per Ft - 0	\$ 6.00	\$ 0.00
1091. \$200	Cut/Restore Concrete Per Ft - 5	\$ 6.00	\$ 0.00
1092. \$200	Cut/Restore Concrete Per Ft - 100	\$ 6.00	\$ 0.00
1093. \$200	Cut/Restore Concrete Per Ft - 200	\$ 6.00	\$ 0.00
1094. \$200	Cut/Restore Concrete Per Ft - 650	\$ 6.00	\$ 0.00
1095. \$200	Cut/Restore Concrete Per Ft - 850	\$ 6.00	\$ 0.00
1096. \$200	Cut/Restore Concrete Per Ft - 2500	\$ 6.00	\$ 0.00
1097. \$200	Cut/Restore Concrete Per Ft - 5000	\$ 21.00	\$ 0.00
1098. \$200	Cut/Restore Concrete Per Ft -10000	\$ 38.00	\$ 0.00

HM S.0A		HM S.0A Default Scenario Value	Florida HM S.0A Recommended Value
1099. S200	Cut/Restore Sed Fraction - 0	0.02	0.00
1100. S200	Cut/Restore Sed Fraction - 5	0.02	0.00
1101. S200	Cut/Restore Sed Fraction - 100	0.02	0.00
1102. S200	Cut/Restore Sed Fraction - 200	0.02	0.00
1103. S200	Cut/Restore Sed Fraction - 500	0.02	0.00
1104. S200	Cut/Restore Sed Fraction - 600	0.38	0.00
1105. S200	Cut/Restore Sed Fraction - 2500	0.38	0.00
1106. S200	Cut/Restore Sed Fraction - 5000	0.11	0.00
1107. S200	Cut/Restore Sed Fraction - 10000	0.08	0.00
1108. S200	Cut/Restore Sed Per Ft - 0	\$ 1.00	\$ 0.00
1109. S200	Cut/Restore Sed Per Ft - 5	\$ 1.00	\$ 0.00
1110. S200	Cut/Restore Sed Per Ft - 100	\$ 1.00	\$ 0.00
1111. S200	Cut/Restore Sed Per Ft - 200	\$ 1.00	\$ 0.00
1112. S200	Cut/Restore Sed Per Ft - 500	\$ 1.00	\$ 0.00
1113. S200	Cut/Restore Sed Per Ft - 600	\$ 1.00	\$ 0.00
1114. S200	Cut/Restore Sed Per Ft - 2500	\$ 1.00	\$ 0.00
1115. S200	Cut/Restore Sed Per Ft - 5000	\$ 1.00	\$ 0.00
1116. S200	Cut/Restore Sed Per Ft - 10000	\$ 1.00	\$ 0.00
1117. S200	Simple Backfill - 0	\$ 0.15	\$ 0.00
1118. S200	Simple Backfill - 5	\$ 0.15	\$ 0.00
1119. S200	Simple Backfill - 100	\$ 0.15	\$ 0.00
1120. S200	Simple Backfill - 200	\$ 0.15	\$ 0.00
1121. S200	Simple Backfill - 500	\$ 0.15	\$ 0.00
1122. S200	Simple Backfill - 600	\$ 0.15	\$ 0.00
1123. S200	Simple Backfill - 2500	\$ 0.15	\$ 0.00
1124. S200	Simple Backfill - 5000	\$ 0.15	\$ 0.00
1125. S200	Simple Backfill - 10000	\$ 0.15	\$ 0.00
1126.	Computed probability Simple Backfill - 0	0.320	1.000
1127.	Computed probability Simple Backfill - 5	0.320	1.000
1128.	Computed probability Simple Backfill - 100	0.320	1.000
1129.	Computed probability Simple Backfill - 200	0.420	1.000
1130.	Computed probability Simple Backfill - 500	0.570	1.000
1131.	Computed probability Simple Backfill - 600	0.300	1.000
1132.	Computed probability Simple Backfill - 2500	0.430	1.000
1133.	Computed probability Simple Backfill - 5000	0.520	1.000
1134.	Computed probability Simple Backfill - 10000	0.040	1.000
1135. S200	Restoration Not Required - 0	0.82	0.00
1136. S200	Restoration Not Required - 5	0.82	0.00
1137. S200	Restoration Not Required - 100	0.82	0.00
1138. S200	Restoration Not Required - 200	0.82	0.00
1139. S200	Restoration Not Required - 500	0.37	0.00
1140. S200	Restoration Not Required - 600	0.27	0.00
1141. S200	Restoration Not Required - 2500	0.09	0.00
1142. S200	Restoration Not Required - 5000	0.11	0.00
1143. S200	Restoration Not Required - 10000	0.11	0.00

ESTIMATE (GCC-3)
Sensitive Input Control: NED and Drop

EXHIBIT (GCG-3)
SENSITIVE INPUT GROUP I: NID AND DROP

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-1 NID Investment per Line
- B-2 Drop Distance
- B-3 Drop Placement Costs, Aerial and Buried
- B-4 Buried Drop Sharing Fraction
- B-8 Drop Cable Investment per Foot and Pairs per Drop

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-1 - NID Investment

- Residential NID case, no protector.
- Residential NID basic labor for travel and installation based upon the BST regional labor rates and times for installation.
- Residential protection block.
- Business NID case, no protector.
- Business NID labor for travel and installation based on BST regional labor rates and times for installation.
- Business protection block.

2. Input B-2 - Drop Distance
 - The average distance for an aerial drop and for a buried drop.
3. Input B-3 - Drop Placement, Aerial and Buried
 - For aerial drop placement, it is the cost for labor associated with travel time and installation and the amount of time required for travel and installation.
 - For buried drop placement, it is the cost for labor associated with travel time and installation and the amount of time required for travel and installation, plus the amount for contract labor associated with buried drop placement.
4. Input B-4 - Buried Drop Sharing Fraction
 - The fraction of buried drop cost that is assigned to the telephone company. The other portion of the cost is borne by other utilities.
5. Input B-8 - Drop Cable Investment
 - The investment for material cost per foot for both aerial and buried cable. When combined with average distance for an aerial or buried drop, this produces the drop cable investment per foot.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. A work time of 25 minutes was used for installation, based upon the opinion of a team of "outside plant experts." No backup of the opinion was provided.
2. Travel time was not separately identified, if included at all.

3. No source for the loaded labor rate of \$35 per hour was provided. This labor rate is adjusted in HAI R5.0a by a regional labor factor adjustment of 0.68, resulting in a net labor cost of \$28.60 per hour¹.
4. The drop distances used in HAI R5.0a are based on various assumptions and hypothetical situations without any backup. The model uniformly assumes that all lot sizes are twice as deep as they are wide and hypothesizes the length of the various setbacks required. No validation of any of these assumptions for BST-Florida was provided.
5. The installation time for aerial drop placement is based upon the "opinion of expert outside plant engineers and estimators." No backup was provided.
6. The estimate for buried drop placement is based upon price quotes from contractors for a set of specifications that has not been provided.
7. The stated basis to support the buried drop sharing fraction in HAI R5.0a is virtually identical to the support provided for the same input in HM R3.1. With this almost identical support, the value for the input has been changed from 1.0 in HM R3.1 to 0.5 in HAI R5.0a. This change in input is said to be based upon "judgement of outside plant experts" that buried drops will normally be used with buried distribution cable. The support goes on to say that although many cases would result in three way sharing of such structure, a conservative approach was used at 50% sharing.

Contrast this with the support provided in HM R3.1 which stated, "even though opportunities may arise in new construction, and could justify a smaller allocation, the model presently uses no sharing of buried drop wire trench as a default value." The change in input value between HM R3.1 and HAI R5.0a will have a considerable impact in reducing overall cost. No workpapers or supporting documents were provided to support the basis of the changed assumption.

\$ 35.00	Hourly labor rate
57.1%	Portion affected by regional labor adjustment
<hr style="width: 20%; margin-left: 0;"/>	
\$ 20.00	Hourly rate affected by regional labor adjustment
- 32%	1 - Wood's regional labor adjustment
<hr style="width: 20%; margin-left: 0;"/>	
\$ (6.40)	Hourly reduction due to regional labor adjustment factor
35.00	Default hourly labor rate
<hr style="width: 20%; margin-left: 0;"/>	
\$ 28.60	Loaded hourly labor rate as adjusted by Mr. Wood

8. For buried drop cable investment per foot the default value in HAI R5.0a is 14 cents per foot. However, MCI and AT&T appear to have gathered price quotes ranging from 14 cents to 20 cents per foot.
9. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAs for this Sensitive Input Group reflected the conditions of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
10. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a, and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group I:

1. The Florida-specific price for the residential and business NID case (B-1) is \$7.65. This is less than the HAI R5.0a default value.
2. The relevant BST-regional loaded labor rate for installation is \$43.45 for 1998-2000. Compare Part (2), note 3, herein. Therefore, no regional labor adjustment is required because the GCG HAI R5.0a Application uses the labor rate specific to Florida. The 1997-1999 rate is the appropriate forward-looking rate to be used in this analysis.
3. The Florida-specific time associated with the installation of the residential and business NID is 35 minutes. Compare Part (2), notes 1 and 5, herein.
4. The Florida-specific time associated with travel is 22 minutes and is divided equally between the installation of the drop and the installation of the NID. Compare Part (2), note 2, herein.
5. The Florida-specific price for the residential and business protection block (B-1) is \$8.10.

6. The average distance of drops in Florida (B-2) is estimated to be 250 feet for aerial drops and 200 feet for buried drops. These are based upon judgement of BST-Florida personnel responsible for the installation of drops. In HAI R5.0a, the default average distance for the drop based upon a line weighted density is approximately 70 feet. See Part (2), note 4, herein. The difference between the HAI R5.0a default value and the Florida-specific values for drop distance are significant and must be kept in mind when evaluating the input value for the buried drop placement per foot (B-3). Since the values for buried drop placement (B3) are derived from BST-specific values per drop and then divided by the estimated value of the buried drop distance to derive the input values per foot, the total cost of placement for buried drops is not affected by the average length of the drop.

7. There is no indication that the arbitrary change in assumption made between HM R3.1 and HAI R5.0a for buried drop sharing fraction (B-4) is appropriate or supportable. Even using a scorched node approach, there is no evidence that half of all buried drops would be shared with some other utility. It is unclear whether HAI R5.0a assumes that either the electric utility, the cable utility, or some other undefined utility would also be in a scorched node approach and abandon all of their existing structures. This input appears to have been changed to artificially lower the overall loop cost determined by the model as compared to the assumption used in HM R3.1 which was deemed reasonable as recently as the middle of June 1997. We recommend that the appropriate forward looking input be 1.0 which is the same input included in HM R3.1.

8. The Florida-specific material cost per foot for drop cable (B-8) is \$0.075 for aerial and \$0.127 for buried.

Input B-1: NID Materials and Installation

	Default	BST-FL Specific
	-----	-----
Residential NID case, no protector	\$ 10.00	\$ 7.65
Residential NID basic labor	<u>15.00</u>	<u>33.31</u>
Installed NID case	\$ 25.00	\$ 40.96
Protection block, per line	\$ 4.00	\$ 8.10
Business NID case, no protector	\$ 25.00	\$ 7.65
Business NID basic labor	<u>15.00</u>	<u>33.31</u>
Installed NID case	\$ 40.00	\$ 40.96
Protection block, per line	\$ 4.00	\$ 8.10

Input B-2: Drop Distance by Density

Density Zone	Default	BST-FL Specific	
	Drop Distance, Feet	Aerial	Buried
0-5	150		
100-200	150	Not available	
200-650	100	by density zone	
650-850	100		
850-2,550	50	Average value =	
2,550-5,000	50	250	200
5,000-10,000	50		
10,000+	50		

Input B-3: Drop Placement, Aerial & Buried

Density Zone	Default		BST-FL Specific	
	Aerial, Total	Buried, per Foot	Aerial	Buried
0-5	\$ 23.33	\$ 0.60		
5-100	23.33	0.60	Not available	
100-200	17.50	0.60	by density zone	
200-650	17.50	0.60		
650-850	11.67	0.60		
850-2,550	11.67	0.60	Average value =	
2,550-5,000	11.67	0.75	\$ 47.80	\$ 0.52
5,000-10,000	11.67	1.50		
10,000+	11.67	5.00		

(GCG-4)
Sensitive Input **Group II: Terminal and Splice**

EXHIBIT ___ (GCG-4)
SENSITIVE INPUT GROUP II: TERMINAL AND SPLICE

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-7 Terminal and Splice

A description of this user-adjustable input can be found in the HAI Model Release 5.0a Inputs Portfolio.

We have determined that BST-specific data for terminal and splice investment per line in Florida cannot be extracted from BST's accounting system. BST accounts for these costs in an installation loading. This loading includes BST labor, contract labor and exempt materials billed to an account. The terminal identified in HAI R5.0a for this input are four pair terminals. In the BST accounting system, any terminal (or crossbox) that is 100 pair or less is considered exempt material that is not capitalized. The portion of this input that relates to the splice investment per line occurs through labor and does not include any special material. This labor is also accounted for in the loading and is billed to an account with many other labor activities.

It is possible to account for the impact of the terminal and splice investment per line when determining the appropriate cable cost together with all the appropriate loadings, including the loading for terminal and splice investment per line. The impact of this input will therefore be contained in the various BST-Florida-specific costs that will be taken into consideration in Exhibit ___ (GCG-5). It is therefore appropriate to adjust the default values for input B-7 to zero and include in the impact as a loading for the appropriate default input in Exhibit ___ (GCG-5).

Input B-7: Terminal & Splice Investment per Line

Default		BST-FL Specific	
Aerial	Buried	Aerial	Buried
\$ 32.00	\$ 42.50	\$ 0.00	\$ 0.00

Sensitive Input (GCG-9) Distribution Investment

EXHIBIT (GCG-5)
SENSITIVE INPUT GROUP III: DISTRIBUTION INVESTMENT

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-10 Distribution Cable Cost, \$ per Foot
- B-11 Riser Cable Cost, \$ per Foot
- B-13 Buried Distribution Cable Sheath Multiplier
- B-14 Distribution Conduit Cost, \$ per Foot
- B-15 Spare Tubes per Route (Distribution)
- B-16 Regional Labor Adjustment
- B-38 Serving Area Interface (SAI) Investment
- B-197 Underground Excavation, Cost per Foot
- B-198 Underground Restoration Cost per Foot
- B-199 Buried Excavation, Cost per Foot
- B-200 Buried Installation and Restoration, Cost per Foot

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-10 - Distribution Cable Cost

- The cost per foot of *aerial and underground* copper distribution cable.²

² Buried cable increases the aerial cable cost per foot, in all cross-sections, by input B-13, cable sheath multiplier.

- Cost of installation including costs for:
 - BST labor and engineering
 - vendor engineering and installation
 - exempt materials
2. Input B-11 - Riser cable cost
 - This variable is used in insignificant amounts in the HAI Model as applied to BST-Florida using default inputs, because BST-Florida has very few clusters that are *both* smaller than 0.03 square miles with a density greater than 30,000 lines per sq. mile (*i.e.* the conditions under which HAI R5.0a would install riser cable). BST-Florida-specific data shows that riser cable is installed in larger quantities and the installed cost of riser cable is significantly higher than installed aerial cable. In HAI R5.0a the cost of riser cable (B-11) has been increased approximately 25% over the cost of distribution cable (B-10). In the prior release, HM 4.0, the cost was assumed to be identical.
 3. Input B-13 - Buried Distribution Cable Sheath Multiplier
 - The additional cost of buried distribution cable compared to the cost of aerial/underground distribution cable.
 4. Input B-14 - Distribution Conduit Cost
 - The material cost related to distribution conduit per foot, based on Florida-specific costs. BST-Florida accounting records do not segregate distribution conduit by itself, but aggregate distribution and feeder conduit costs and include manholes and related items. Since use of the BST-Florida costs will, therefore, combine distribution conduit, feeder conduit and manhole costs, the use of BellSouth-Florida costs as available are inappropriate for this input which is for distribution conduit costs only. Because manholes are rarely placed in the distribution network, we recommend the use of the default input for B-14, distribution conduit cost.
 5. Input B-16 - Regional Labor Adjustment
 - Since we have used the BST-specific labor rates directly in the GCG HAI R5.0a Application, no regional labor adjustment factor is necessary or appropriate.
 6. Input B-38 - SAI Investment

- The BST-Florida-specific costs are recommended for outdoor SAI investment. HAI R5.0a logic deploys only a small amount of indoor SAI investment in Florida. Therefore, we have not adjusted the default values for indoor SAIs.
7. Input B-197 through Input B-200 - Excavation and Restoration
- Inputs B-197 through B-200 were newly developed for HM R4.0 to account for excavation and restoration in extreme detail. HAI R5.0a reflects the same default input values as HM R4.0 for these inputs, which account for underground excavation, underground restoration, buried excavation, and buried installation and restoration. As has been mentioned previously in the discussion of B-14, distribution conduit cost, BST-Florida accounting records to do not segregate distribution conduit by itself, but aggregate distribution and feeder placement costs in a composite figure.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. The cost per foot of copper distribution cable as a function of cable size (B-10) is based on 24 gauge copper and contains assumptions that are alleged to be commonly made by outside plant planning engineers that the cost of cable material can be represented as an A+BX straight line graph for cable sizes below 400 pairs. It is alleged that while, in the past, the cost of copper cable was typically (\$.50 + \$.01 per pair) per foot, current costs are typically (\$.30 + \$.007 per pair) per foot. No backup or data for these estimates have been provided.

Based upon the "opinion" of expert outside plant engineers, material costs associated with copper distribution cable represents approximately 40% of the total installed costs. The experts further opine that the average cost of engineering for installed copper cable is 15% of the installed cost. The remaining 45% of the cost is assumed to represent direct labor for placing and splicing cable, exclusive of the cost of splicing block terminals into the cable. No backup or workpapers were provided to support these assumptions.

2. The additional cost of the filling compound used in buried cable to protect the cable from moisture (B-13), expressed as a multiplier (1.04) of the cost of aerial installed non-armored cable. No backup or workpapers was provided for this assertion.

3. The material cost per foot of 4 inch PVC pipe (B-14) is stated to be \$0.60. The basis for this estimate is claimed to be contact made with several material suppliers. No detail was provided as to the nature of the specifications, location in the country, other particulars associated with the quote or other information for material prices received from material suppliers.
4. The labor rates assumed in HAI R5.0a are as follows:
 - A fully loaded direct labor cost of \$55 per hour for heavy construction of outside plant cable, for a placing or splicing technician who receives pay of \$20 per hour.
 - HAI R5.0a assumes that the fully loaded direct labor component of \$55 per hour accounts for 45% of the investment for copper feeder and copper distribution cable. Based upon this and other further assumptions, a labor adjustment factor is applied to 16.4% of the installed cost of copper cable.
 - The labor adjustment index (B-16) for the State of Florida of 0.68 is presented as the appropriate labor adjustment factor for direct labor costs related to some national average. No backup or workpapers for this determination has been presented.
5. The investment required for outdoor Serving Area Interfaces (B-38) are indicated to be more expensive than indoor Serving Area Interfaces, because outdoor SAIs require steel cabinets that protect the cross-connection termination for the direct effects of water. The basis of the default values is the opinion of a "group of engineering experts." No backup or workpapers were provided.
6. The inputs required for excavation and restoration, inputs B-197 through B-200 were developed based on estimates made by "a team of experienced outside plant experts." Additional information was obtained from printed resources identified as the 1997 National Construction Estimator, 45th edition. Still other information was provided by several contractors who allegedly routinely perform excavation, conduit and manhole placement work for telephone companies. The base information, backup, and workpapers were not supplied. The HAI Inputs Portfolio does contain what is alleged to be a summary of the information received. There is a significant variation in the information received. For example, normal trenching in dirt with backfill to a 36 inch depth in a suburban environment has estimates ranging all the way from \$2.00 per foot to \$15.00 per foot. This represents a variation of over 700% (see page 127, HAI R5.0a, Inputs Portfolio, January 5, 1998). Similarly, trenching in pavement with restoration metro areas to a depth of 36 inches apparently contains estimates ranging from below \$10.00 per foot to in excess of \$60.00 per foot (see page 127, HAI R5.0a, Inputs Portfolio).

7. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAIs for this Sensitive Input Group reflected the conditions of the territory of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
8. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group III:

1. The BellSouth-Florida-specific costs per foot of copper distribution cable (B-10) including the costs of engineering, installation and delivery, as well as the material itself was determined for each cable size that is required by HAI R5.0a except for the two smallest sizes. The values of these two smallest sizes were interpolated from BellSouth-Florida-specific data.
2. As previously stated, it appears that HAI R5.0a as applied to Florida in this proceeding produces the result that very little riser cable has been used by the model. In reality, there is riser cable that is appropriately used in the system. For purposes of this proceeding, riser cable (B-11) has been set to default.
3. The Florida-specific value for the buried copper cable sheath multiplier (B-13) was determined by a direct comparison of the aerial material costs to the buried material costs for each size of cable contained in HAI R5.0a. Over all the various cable sizes, the multiplier is 1.011.
4. As previously discussed, conduit costs (B-14) should be set to the default level of \$0.60.
5. No change to the regional labor adjustment factor (B-16) is necessary since BST-specific values for labor have been used wherever required.

6. The BST-Florida values for the investment required for outdoor SAIs (B-38) were determined from specific field reporting quotes associated with this investment.
7. As previously mentioned in the discussion of input B-14, Distribution Conduit Cost, BST-Florida accounting records do not segregate distribution and a feeder placement cost, but rather aggregate them. These aggregated costs include related items such as manhole cost and related exempt materials.

Information available on a BST-Florida-specific basis has been developed and indicates that, on a composite basis, underground excavation and restoration cost per foot (B-197 and B-198) is \$4.79. Similarly, the BST-Florida composite value of buried excavation and restoration per foot (B-199 and B-200) is \$3.09.

Input B-10: Copper Distribution Cable, \$/Foot

<u>Cable Size</u>	<u>Default</u>	<u>BST-FL Specific</u>
6	\$ 0.63	\$ 1.14
12	0.76	1.28
25	1.19	1.60
50	1.63	2.22
100	2.50	3.39
200	4.25	5.86
400	6.00	10.43
600	7.75	15.24
900	10.00	21.29
1200	12.00	27.64
1800	16.00	40.90
2400	20.00	52.23

Input B-13: Buried Copper Cable Sheath Multiplier

<u>Default</u>	<u>BST-FL Specific</u>
1.040	1.011

Input B-14: Conduit Material Investment per Foot

<u>Default</u>	<u>BST-FL Specific</u>
\$ 0.60	\$ 0.60 ³

Input B-16: Regional Labor Adjustment Factor

<u>Default</u>	<u>BST-FL Specific</u>
0.68 ⁴	1.00

Input B-38: SAI Investment - Outdoor

<u>Cable Size</u>	<u>Default</u>	<u>BST-FL Specific</u>
7200	\$ 10,000	\$ 30,500
5400	8,200	25,400
3600	6,000	20,300
2400	4,300	15,300
1800	3,400	13,600
1200	2,400	10,200
900	1,900	8,600
600	1,400	6,200
400	1,000	4,600
200	600	3,000
100	350	2,200

³ Use default. See text.

⁴ The HAI R5.0a default value for the Regional Labor Adjustment Factor is 1.00. Mr. Wood's recommended value for Florida is 0.68.

Inputs B-197 through B-200: Excavation and Restoration

We recommend that the end result of implementing inputs B-197 through B-200 be the BST-FL specific cost derived for those activities combined. To implement our recommendation the specific values displayed below are used to derive the end result and are not the values that correspond to the individual input displayed. All other input values for inputs B-197 through B-200 are set to zero.

Input B-197: Underground Excavation

Density Zone	B-197 Backhoe Trench Fraction		B-197 Backhoe Trench, \$/Foot		
	Default	BST-FL Specific	Default	BST-FL Specific	
0-5	0.45	1.00	\$ 3.00		
5-100	0.45	1.00	3.00		
100-200	0.45	1.00	3.00		Not Available by Density Zone
200-650	0.45	1.00	3.00		
650-850	0.45	1.00	3.00		Average = \$ 4.79
850-2,550	0.45	1.00	3.00		
2,550-5,000	0.55	1.00	3.00		
5,000-10,000	0.67	1.00	20.00		
10,000+	0.72	1.00	30.00		

Input B-199: Buried Excavation

Density Zone	B-199 Hand Trench Fraction		B-199 Hand Trench, \$/Foot		
	Default	BST-FL Specific	Default	BST-FL Specific	
0-5	0.00	1.00	\$ 5.00		
5-100	0.00	1.00	5.00		
100-200	0.00	1.00	5.00		Not Available by Density Zone
200-650	0.01	1.00	5.00		
650-850	0.02	1.00	5.00		Average = \$ 3.09
850-2,550	0.04	1.00	5.00		
2,550-5,000	0.05	1.00	5.00		
5,000-10,000	0.06	1.00	10.00		
10,000+	0.10	1.00	18.00		

Sensitive Input **ESG-O** **Super Feeder Investment**

EXHIBIT (GCG-6)
SENSITIVE INPUT GROUP IV: COPPER FEEDER INVESTMENT

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-13 Buried Feeder Cable Sheath Multiplier
- B-56 Copper Feeder Cable, \$/Foot

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

The inputs in this section are almost entirely identical to the inputs B-10 and B-13 used in the previous section Exhibit _____, (GCG-5), Distribution Investment.

Input B-13 is the same for Feeder as for Distribution, and input B-56 is virtually identical to input B-10. While B-10 contains values for the cost per foot of copper distribution cable between cable sizes 6 and 2400, input B-56 contains the cost per foot for cable sizes 100 through 4200. The values required by input B-56 are contained in a table in this section.

HAI R5.0a has an additional UAI for Copper Feeder Investment per pair-foot of \$0.0075. Based on the BST-FL-specific values for copper feeder cable, the equivalent BST-FL-specific value is \$0.0220.

Input B-13: Buried Copper Cable Sheath Multiplier

<u>Default</u>	<u>BST-FL Specific</u>
1.040	1.011

Input B-56: Copper Feeder Cable, \$/Foot

<u>Cable Size</u>	<u>Default</u>	<u>BST-FL Specific</u>
100	\$ 2.50	\$ 3.39
200	4.25	5.86
400	6.00	10.43
600	7.75	15.24
900	10.00	21.29
1200	12.00	27.64
1800	16.00	40.90
2400	20.00	52.23
3000	23.00	65.28
3600	26.00	78.34
4200	29.00	91.40

Copper Investment
per Pair-Foot

\$ 0.0075

\$ 0.0220

Table (GCC-7)
Sensitive Input Cases vs. Fiber Feeder Investment

EXHIBIT (GCG-7)
SENSITIVE INPUT GROUP V: FIBER FEEDER INVESTMENT

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-53 Buried Fiber Sheath Addition, \$ per Foot
- B-57 Fiber Feeder Cable, \$ per Foot

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-53 - Buried Fiber Sheath Addition
 - Costs were developed for both material and installation for aerial fiber cable, buried fiber cable, and underground fiber cable.
2. Input B-57 - Fiber Feeder Cable
 - The cost per foot of aerial fiber feeder cable was developed for both material costs and installation costs, for the size fibers identified by HAI R5.0a.
 - Installation costs were developed based on actual factors expressing the relationship between material cost and total installed cost, including costs for:
 - ** BST labor and engineering;
 - ** Vendor engineering and installation;
 - ** Exempt materials.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. The cost of dual sheathing for additional mechanical protection of buried fiber feeder cable (B-53) is based upon an estimate by a team of "experienced outside plant experts" who are alleged to have purchased millions of feet of fiber optic cable. No data or backup workpapers have been provided.
2. The cost per foot of fiber feeder cable (B-57) is based on an assumption allegedly commonly made by outside plant planning engineers. The assumption is that the cost of cable material can be represented as an A+BX straight line graph. It is alleged that as technology, manufacturing methods and competition have advanced, the price of cable has been reduced. It is contended that while, in the past, the cost of fiber cable was typically \$0.50 + \$0.10 per fiber, per foot, current costs are typically \$0.30 + \$0.05 per fiber, per foot.

The cost of installation for aerial fiber cable is assumed to be \$2.00 per foot, consisting of \$0.50 per foot for engineering + \$1.50 per foot for direct labor. These figures are estimates that have been provided by a team of outside plant engineering and construction personnel. No backup or workpapers have been provided.

HM 5.0a has an additional UAI for fiber feeder investment per strand-foot of \$0.1000.

3. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAIs for this Sensitive Input Group reflected the conditions of the territory of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
4. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a, and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group V:

1. Since this cost for buried installation is comprehensive and the accounting system does not specifically identify the additional cost for buried fiber sheathing, no additional amount for the buried fiber sheathing addition per foot (B-53) is required.
2. The Florida-specific costs per foot of aerial fiber cable (B-57) including the costs of engineering, installation and delivery, as well as the material itself was determined for each cable size that is required by HAI R5.0a. The resulting costs per foot are significantly lower than the default values in HAI R5.0a.

Based on the BST-Florida-specific values for fiber feeder cable, the BST-Florida-specific value for fiber investment per strand foot is \$0.0610.

Input B-53: Buried Fiber Sheath Addition, \$/Foot

<u>Default</u>	<u>BST-FL Specific</u>
\$ 0.20	\$ 0.00

Input B-57: Fiber Feeder Cable, \$/Foot

<u>Cable Size</u>	<u>Default</u>	<u>BST-FL Specific</u>
12	\$ 2.90	\$ 1.84
18	3.20	1.99
24	3.50	2.15
36	4.10	2.40
48	4.70	2.91
60	5.30	3.28
72	5.90	3.65
96	7.10	4.36
144	9.50	5.77
216	13.10	7.97
<u>Fiber Investment per Strand-Foot</u>	\$ 0.1000	\$ 0.0610

Exhibit (GCG-8)
Sensitive Input Group Vis. Structure Placement Fractions

EXHIBIT (GCG-8)
SENSITIVE INPUT GROUP VI: STRUCTURE PLACEMENT FRACTIONS

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-5 Drop Structure Fractions
- B-17 Distribution Structure Fractions
- B-46 Copper Feeder Structure Fractions
- B-51 Fiber Feeder Structure Fractions
- B-121 Interoffice Structure Fractions

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELL SOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-5 - Drop Structure Fractions
 - The structure fractions for aerial and buried drops.
2. Input B-17 - Distribution Structure Fractions
 - The fractions for aerial, buried and underground distribution cable.
3. Input B-46 - Copper Feeder Structure Fractions
 - The fractions for aerial, buried and underground copper feeder cable.

4. Input B-51 - Fiber Feeder Structure Fractions
 - The fractions for aerial, buried and underground fiber feeder cable.
5. Input B-121 - Interoffice Structure Fractions
 - The percentages for the division of interoffice structures between aerial, buried and underground.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. The percentages of drops that are aerial and buried (B-5) are based on the opinion and judgement of plant engineering experts. This judgement, in part, states that as developed areas become more dense, placements will more likely occur under pavement conditions. No data or workpapers were provided as backup.
2. The fractions of aerial, buried and underground cable for distribution structure (B-17) are supported only by general statements that relate to the three different kinds of structures. For aerial/block cable, HAI R5.0a quotes from a Bellcore manual which states, "The most common cable structure is still the pole line. Buried cable is now used wherever feasible, but pole lines remain an important structure in today's environment."

For buried cable, HAI R5.0a states that it reflects an increasing trend towards use of buried cable in new subdivisions.

For underground cable, HAI R5.0a states that underground cable, conduit and manholes are primarily used for feeder and interoffice transport cables, not for distribution cable.

No backup or workpapers were provided to support any of the specific inputs recommended by HAI R5.0a.

3. For the fraction of aerial, buried and underground cable for copper feeder structure (B-46), HAI R5.0a refers back to the discussion for distribution cable structure fractions. No backup or workpapers were provided to support any of the specific inputs recommended by HAI R5.0a.

4. For the fractions of aerial, buried and underground cable for fiber feeder structure (B-51), HAI R5.0a refers back to the discussion for distribution cable structure fractions. No backup or workpapers were provided to support any of the specific inputs recommended by HAI R5.0a.
5. For interoffice structure percentages (B-121), HAI R5.0a asserts that the inputs recommended are an average figure accounting for the mix of density zones applicable to interoffice transmission facilities. It is not clear whether this mix is for a nationwide average, urban areas or different geographical regions of the country, or whether it is applicable to Florida. No backup or workpapers were provided to support any of the specific inputs recommended by HAI R5.0a.
6. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAIs for this Sensitive Input Group reflected the conditions of the territory of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
7. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a, and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group VI:

1. The fractions for aerial and buried drop (B-5) related to drop structure based upon BST-Florida-specific information should be consistent with the value developed for the fractions of aerial, buried and underground cable for distribution cable structure (B-17).

2. The fractions of aerial, buried and underground cable for distribution cable structure (B-17), based on the BellSouth-Florida loop sample reconfigured to reflect forward-looking technology and a scorched node approach are as follows:

Distribution Cable

Aerial	29.7%
Buried	67.1%
Underground	3.2%

HM 5.0a has added a new UAI for buried fraction available for shift. We are not recommending any change to the default values.

3. The fractions of aerial, buried and underground cable for copper feeder structure (B-46) based upon the BellSouth-Florida loop sample reconfigured to reflect forward-looking technology and a scorched node approach as follows:

Copper Feeder Structure

Aerial	4.2%
Buried	24.0%
Underground	71.8%

4. The fractions for aerial, buried and underground cable for fiber feeder structure (B-51) based upon the BellSouth-Florida loop sample reconfigured to reflect forward-looking technology and a scorched node approach as follows:

Fiber Feeder Structure

Aerial	8.1%
Buried	20.0%
Underground	71.9%

5. The percentages of aerial, buried and underground structures for fiber optic facilities based upon BST-Florida-specific data as follows:

1996 Sheath Miles of Fiber Optic Cable

	<u>Year-End</u>	<u>1996 Additions</u>
Aerial	10.0%	14%
Buried	40.0%	46%
Underground	50.0%	40%

Input B-5: Drop Structure Fractions

<u>Density Zone</u>	<u>Default</u>		<u>BST-FL Specific</u>	
	<u>Aerial</u>	<u>Buried</u>	<u>Aerial</u>	<u>Buried</u>
0-5	0.25	0.75		
5-100	0.25	0.75	Not available	
100-200	0.25	0.75	by density zone	
200-650	0.30	0.70		
650-850	0.30	0.70	Average value =	
850-2,550	0.30	0.70	0.297	0.703
2,550-5,000	0.30	0.70		
5,000-10,000	0.60	0.40		
10,000+	0.85	0.15		

Input B-17: Distribution Cable Structure Fractions

Default	Density Zone	Aerial	Buried	Underground
	0-5	0.25	0.75	0.00
	5-100	0.25	0.75	0.00
	100-200	0.25	0.75	0.00
	200-650	0.30	0.70	0.00
	650-850	0.30	0.70	0.00
	850-2,550	0.30	0.70	0.00
	2,550-5,000	0.30	0.65	0.05
	5,000-10,000	0.60	0.35	0.05
	10,000+	0.85	0.05	0.10

 BST-FL Specific Not available 0.297 0.671 0.032
 ----- by density zone

Input B-46: Copper Feeder Structure Fractions

Default	Density Zone	Aerial	Buried	Underground
	0-5	0.50	0.45	0.05
	5-100	0.50	0.45	0.05
	100-200	0.50	0.45	0.05
	200-650	0.40	0.40	0.20
	650-850	0.30	0.30	0.40
	850-2,550	0.20	0.20	0.60
	2,550-5,000	0.15	0.10	0.75
	5,000-10,000	0.10	0.05	0.85
	10,000+	0.05	0.05	0.90

 BST-FL Specific Not available 0.042 0.240 0.718
 ----- by density zone

Input B-51: Fiber Feeder Structure Fractions

Default	Density Zone	Aerial	Buried	Underground
	0-5	0.35	0.60	0.05
	5-100	0.35	0.60	0.05
	100-200	0.35	0.60	0.05
	200-650	0.30	0.60	0.10
	650-850	0.30	0.30	0.40
	850-2,550	0.20	0.20	0.60
	2,550-5,000	0.15	0.10	0.75
	5,000-10,000	0.10	0.05	0.85
	10,000+	0.05	0.05	0.90
BST-FL Specific	Not available by density zone	<u>0.081</u>	<u>0.200</u>	<u>0.719</u>

Input B-121: Interoffice Structure Percentages

	Aerial	Buried	Underground
Default	0.20	0.60	0.20
BST-FL Specific	<u>0.14</u>	<u>0.46</u>	<u>0.40</u>

Exhibit (GCG-9)
Sensitive Input Group Structure Sharing Fractions

EXHIBIT (GCG-9)
SENSITIVE INPUT GROUP VII: STRUCTURE SHARING FRACTIONS

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-130 Fractions of Interoffice Structure Assigned to Telephone
- B-180 Distribution and Feeder Structure Percentages Assigned to Telephone

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-130 - Fractions of Interoffice Structure Assigned to Telephone
 - The sharing percentages for aerial, buried and underground structure for interoffice facilities.
2. Input B-180 - Distribution and Feeder Structure Percentages Assigned to Telephone
 - The sharing percentage for aerial, buried and underground distribution and feeder structures.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. The default value for sharing that is covered by input B-130 involves the structure which is not shared with feeder cable. Separately, in input B-129, it is assumed that 75% of the interoffice structure is shared with and situated on feeder facilities, leaving 25% to uniquely represent interoffice structure facilities. This 25% is further assumed to be shared by two other utilities resulting in 1/3 of the 25% or 8.3% of the original interoffice investment as being assigned to telephone. No backup was provided for these assertions.
2. The default values for sharing of distribution and feeder structures (B-180) that are assigned to the telephone company are stated to be based upon industry experience and expertise of HAI Consulting, outside plant engineers and other industry groups. Also, it is represented that conversations took place with representatives of local utility companies and the suggestion is that these conversations also formed part of the basis for selecting the default value. In addition, a white paper has been prepared to state the rationale and reasoning for the proposed percentages. While the white paper makes various assertions, no data or statistics of any kind have been provided.
3. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAs for this Sensitive Input Group reflected the conditions of the territory of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
4. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a, and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group VII:

1. The number of BST owned poles in Florida is 454,608. The number of poles leased by BST from the power companies is 685,303 for a total number of poles in use of 1,139,911. BST has directly invested in 39.88% of the poles used for telephone service. This value represents the BST-Florida-specific sharing percentage for aerial structures (B-130 and B-180).
2. BST does not identify joint trench as a unique item in any of the data that is collected in Florida. State contract coordinators dealing with ongoing construction were asked to make estimates regarding the ongoing activity in sharing buried and underground facilities. The state coordinators indicated that joint trench work does occur to some degree in new subdivision environments that are relatively free from obstructions. The state coordinators estimated that for Florida on the distribution side negligible amount of the structures were shared by other utilities. For the feeder routes, the sharing is also negligible.
3. BST-Florida-specific data with regard to the sharing of underground facilities on a current basis indicates that the percent of sharing is negligible.

Input B-130: Fraction of Interoffice Structure Assigned to Telephone

	<u>Aerial</u>	<u>Buried</u>	<u>Underground</u>
Default	0.33	0.33	0.33
BST-FL Specific	0.399	1.00	1.00

Input B-180: Structure Percent Assigned to Telephone Company

Default	Density Zone	Distribution			Feeder		
		Aerial	Buried	Underground	Aerial	Buried	Underground
	0-5	0.50	0.33	1.00	0.50	0.40	0.50
	5-100	0.33	0.33	0.50	0.33	0.40	0.50
	100-200	0.25	0.33	0.50	0.25	0.40	0.40
	200-650	0.25	0.33	0.50	0.25	0.40	0.33
	650-850	0.25	0.33	0.40	0.25	0.40	0.33
	850-2,550	0.25	0.33	0.33	0.25	0.40	0.33
	2,550-5,000	0.25	0.33	0.33	0.25	0.40	0.33
	5,000-10,000	0.25	0.33	0.33	0.25	0.40	0.33
	10,000+	0.25	0.33	0.33	0.25	0.40	0.33

BST-FL Specific

Not Available by Density Zone	<u>0.399</u>	<u>0.960</u>	<u>1.000</u>	<u>0.399</u>	<u>1.000</u>	<u>1.000</u>
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Exhibit (GCG-10)
Sensitive Input Group VIII: Copper and Fiber Sizing
Factors

EXHIBIT __ (GCG-10)
SENSITIVE INPUT GROUP VIII: COPPER AND FIBER SIZING FACTORS

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-18 Distribution Cable Sizing Factor
- B-54 Copper Feeder Sizing Factor
- B-55 Fiber Feeder Sizing Factor

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-18 - Distribution Cable Sizing Factor
 2. Input B-54 - Copper Feeder Sizing Factor
 3. Input B-55 - Fiber Feeder Sizing Factor
- The BST-Florida-specific cable sizing factors are based on Florida-specific experience, and a review of engineering and planning criteria. These values represent the outputs of the model rather than direct inputs. The model lacks the flexibility to enable the user to directly input the desired cable fill that would be the result of the model. Therefore, we have recommended inputs fill factors that produce the BST-Florida-specific output fill factors.

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group VIII:

1. Distribution cable fills (B-18) obtained from the BST network department for Florida indicates that for the State of Florida 6,666,255 pairs out of a total of 16,149,650, or 41.3% are assigned and continue to reflect reasonable engineering guidelines looking forward.
2. The EST-specific data for copper feeder utilization for the State of Florida indicates that 65.7% of the copper pairs available are assigned and continue to reflect reasonable engineering guidelines looking forward.
3. The BST-specific fiber feeder data for Florida indicates that approximately 74.0% of DLC channels available are assigned and continue to reflect reasonable engineering guidelines looking forward.

Input B-18: Distribution Cable Sizing Factors

<u>Density Zone</u>	<u>Default</u>	<u>BST-FL Specific</u>
0-5	0.50	
5-100	0.55	Not available
100-200	0.55	by density zone
200-650	0.60	
650-850	0.65	Average value =
850-2,550	0.70	0.636
2,550-5,000	0.75	
5,000-10,000	0.75	(This results in an
10,000+	0.75	output fill of 0.413)

Input B-54: Copper Feeder Cable Sizing Factor

<u>Density Zone</u>	<u>Default</u>	<u>BST-FL Specific</u>
0-5	0.65	
5-100	0.75	Not available
100-200	0.80	by density zone
200-650	0.80	
650-850	0.80	Average value =
850-2,550	0.80	0.711
2,550-5,000	0.80	
5,000-10,000	0.80	(This results in an
10,000+	0.80	output fill of 0.657)

Input B-55: Fiber Feeder Sizing Factor

<u>Density Zone</u>	<u>Default</u>	<u>BST-FL Specific</u>
0-5	1.00	
5-100	1.00	Not available
100-200	1.00	by density zone
200-650	1.00	
650-850	1.00	Average value =
850-2,550	1.00	0.867
2,550-5,000	1.00	
5,000-10,000	1.00	(This results in an
10,000+	1.00	output fill of 0.740)

Exhibit __ (GCG-11)
Sensitive Input Group IX: DLC

EXHIBIT (GCG-11)
SENSITIVE INPUT GROUP IX: DLC

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-58 DLC Site and Power per Remote Terminal
- B-59 Maximum Line Size per Remote Terminal
- B-60 Remote Terminal Fill Factor
- B-61 DLC Initial Common Equipment Investment
- B-62 DLC Channel Unit Investment
- B-63 DLC Lines per Channel Unit
- B-64 Low Density DLC to TR-303 DLC Cutover
- B-65 Fibers per Remote Terminal
- B-66 Optical Patch Panel
- B-68 Common Equipment Investment per Additional Line Increment
- B-69 Maximum Number of Additional Line Modules per Remote

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-58 - DLC Site and Power per Remote Terminal
2. Input B-59 - Maximum Line Size per Remote Terminal
3. Input B-60 - Remote Terminal Fill Factor
4. Input B-61 - DLC Initial Common Equipment Investment

5. Input B-62 - DLC Channel Unit Investment
6. Input B-63 - DLC Lines per Channel Unit
7. Input B-64 - Low Density DLC to TR-303 DLC Cutover
8. Input B-65 - Fibers per Remote Terminal
9. Input B-66 - Optical Patch Panel
10. Input B-68 - Common Equipment Investment per Additional Line Increment
11. Input B-69 - Maximum Number of Additional Line Modules per Remote

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. For the investment in site preparation and power for the remote terminal of a Digital Loop Carrier (DLC) system (B-58), the incremental per site cost was estimated by a team of experienced outside plant experts who are alleged to have contracted for hundreds of remote terminal site installations. The decrease in the input for low density DLC is because it is claimed that low density DLC requires less space. No backup workpapers or data was provided to support the default values.
2. The maximum number of lines supported by the initial line module of a remote terminal (B-59) is based on what is claimed to be Next Generation Digital Loop Carrier, compliant with Bellcore Generic Requirements GR-303. HAI R5.0a does not possess the flexibility to permit multiple types of integrated digital loop carrier systems with varying maximum line sizes per remote terminal.

For low density digital loop carrier, HAI R5.0a utilizes an integrated configuration based upon a 120 line unit which is also GR-303 compliant.

3. The ratio of lines served by a DLC remote terminal to the number of line units equipped in the remote terminal (B-60) is based on the assumption and reasoning that line cards represent the most expensive part of integrated digital loop carrier provisioning, and that facility relief can be provided by dispatching a technician with line cards rather than engaging in a several month long copper cable feeder addition. It is, therefore, asserted that high fill rates should be the norm for an

efficient provider using forward-looking technology. No data or backup was provided to support this input.

4. The cost of an initial increment of integrated digital loop electronics (B-61) was based on an estimate made by a team of experienced outside plant experts who are alleged to have contracted for hundreds of remote terminal site installations. No backup, data or workpapers was provided to support this input.

HAI R5.0a asserts that low density DLC requires less initial investment than high density DLC and are allegedly based upon vendor list prices. The default input for low density DLC is approximately 20% of the value of the input for high density DLC. No workpapers or backup was provided to support any of these inputs.

5. The investment in channel units required in the remote terminal of the DLC system (B-62) is based upon the cost of individual POTS channel unit cards that was estimated by a team of experienced outside plant experts who are alleged to have purchased thousands of these cards from suppliers. No backup or workpapers were provided to support any of these input values.
6. The number of lines that can be supported on a single DLC channel unit (B-63) is based upon what is alleged to be vendor documentation. No data or workpapers were provided to support these inputs.
7. The threshold number of lines that are assumed to be served by low density DLC, above which high density DLC will be used (B-64), is based on an analysis that reveals that two low density DLC units, at 240 lines each, are more cost effective than a single DLC unit with a capacity of 672 lines. Although no workpapers or data were provided to support this analysis, our independent analysis shows that the assumptions appear to be correct for the default inputs.
8. The number of fibers connected to each DLC remote terminal (B-65) is based upon including one fiber for upstream transmission, one fiber for downstream transmission and two for redundancy. The number of fibers is allegedly based on vendor documentation. No backup or workpapers were provided to support this input value.
9. The investment required for each optical patch panel associated with a DLC remote terminal (B-66) was estimated by a team of experienced outside plant experts who are alleged to have contracted for hundreds of such installations. No backup or workpapers were provided to support any of these inputs.
10. The cost of the common equipment required to add a line module in a remote terminal (B-68) was based upon an estimate made by a team of experienced outside plant experts who are alleged to have contracted for hundreds of remote terminal

2. The maximum number of lines supported by the initial line module of a remote terminal (B-59) is determined as follows:
 - For high density DLC, the current forward-looking application installations are of two types. The first is DISC*S which is equipped with 672 initial lines per remote terminal and the second is Litespan, which is equipped with 224 lines per remote terminal. Since HAI R5.0a does not provide the flexibility of using a combination of these remote terminals and their respective line increments, the data in this proceeding has been modeled using the DISC*S DLC system and the Litespan system separately. Since each system is about equally used, an average of the loop and switching costs determined for each system separately is appropriate.
 - For low density DLC, BST employs the SLC 5 system. This system permits 192 initial lines per remote terminal.
3. The Remote Terminal Sizing factor in a DLC remote terminal (B-60) is the ratio of lines served by a DLC remote terminal to the number of lines equipped in the remote terminal. The actual BST-Florida value is 0.515 and is appropriate on a forward-looking basis. This value is the output fill that is desired. The relevant values for the input in the model that produces this result is 0.860 when running DISC*S and 0.732 when running Litespan.
4. The cost of all common equipment and housing in the remote terminal, as well as the fiber optics multiplexer required at the CO end for the initial line module of the DLC (DISC*S) system (B-61) is determined as follows:
 - For high density DLC (DISC*S), the following material costs have been obtained:
 - The cost of the cabinet is \$31,494.
 - The cost of the hard wire and the common equipment at the remote terminal is \$16,755.
 - The cost of the multiplexer at the remote terminal and central office is \$15,129.
 - The cost of the digital cross connect system at the central office is \$5,622.

The total cost of the high density DLC (DISC*S) initial common equipment investment, including installation, is \$136,094.

- For high density DLC (Litespan), the following material costs have been obtained:

- ** The cost of the cabinet is \$21,685.
- ** The cost of the hard wire and the common equipment at the remote terminal is \$5,880.
- ** The cost of the multiplexer at the remote terminal and central office is \$27,450.
- ** The cost of the digital cross connect system at the central office is \$1,874.

The total cost of the high density DLC (Litespan) initial common equipment investment, including installation is \$121,531.

- For low density (SLC 5) DLC, the following values apply:
 - ** The cost of the cabinet is \$13,075.
 - ** The cost of the hard wire and common equipment at both the remote terminal and central office is \$13,630.
 - ** The cost of the multiplexer at the remote terminal and the central office is \$12,651.
 - ** The cost of the digital cross connect at the central office is \$1,606.

The total cost for DLC initial common equipment investment for low density DLC is \$80,220.

5. The investment in channel units required in the remote terminal of the DLC system (B-62) is determined as follows:
 - For high density (DISC*S) DLC, the channel unit investment at the remote terminal is \$69 installed. Similarly, for the coin channel unit in the same system, the installed costs is \$417.
 - For high density (Litespan) DLC, the channel unit investment at the remote terminal is \$370 installed. Similarly, for the coin channel unit in the same system, the installed costs is \$792.
 - For low density (SLC 5) DLC, the channel unit investment at the remote terminal is \$82 installed. Similarly, the coin channel unit investment is \$406 installed.

6. The number of lines that can be supported on a single DLC channel unit (B-63) is:
 - For high density DLC (DISC*S), there are two circuits per card for POTS and one circuit per card for coin.

- For high density DLC (Litespan), there are four circuits per card for POTS and four circuits per card for coin.
 - For low density DLC, there are two circuits per card for POTS and one circuit per card for coin.
7. The threshold number of lines served by low density DLC, above which high density DLC (DISC*S) will be used (B-64), based upon the specific low density and high density systems employed by BST-Florida, indicates a cutover value of 576 lines from low density to high density DLC installation.
 8. The threshold number of lines served by low density DLC, above which high density DLC (Litespan) will be used (B-64), based upon the specific low density and high density systems employed by BST-Florida, indicates a cutover value of 384 lines from low density to high density DLC installation.
 9. The number of fibers connected to each DLC remote terminal (B-65) is 6 for both high and low density for BST-Florida. Although this practice is employed to produce a high degree of reliability, we have modeled 4 fibers per remote terminal to produce a more conservative result.
 10. The investment required for each optical patch panel associated with a DLC remote terminal (B-66), based upon a requirement of a splicing terminal and 24 fiber pigtailed, is \$903 installed.
 11. The cost of common equipment required to add a line module in a remote terminal (B-68) is determined for BST-Florida as follows:
 - For high density (DISC*S) DLC, the cost of hard wire, common equipment, DCS and installation is \$32,810.
 - For high density (Litespan) DLC, the cost of hard wire, common equipment, DCS and installation is \$6,814.
 - For low density (SLC 5) DLC, the cost of the hard wire, common equipment, DCS and installation per additional line module is \$25,612.
 12. The number of additional modules that can be added to a remote terminal (B-69), for each high density DLC and the SLC 5 system for the low density DLC is as follows:
 - 2 additional line modules for the DISC*S system.
 - 8 additional line modules for the Litespan system.
 - 9 additional line modules for a SLC 5 remote terminal.

Input B-58: DLC Site and Power per Remote Terminal

	<u>Default</u>	<u>BST-FL Specific</u>
Low density DLC	\$ 1,300	\$ 0
TR-303 DLC	3,000	0

Input B-59: Maximum Line Size per Remote Terminal

	<u>Default</u>	<u>BST-FL Specific</u>
Low density DLC	120	192
TR-303 DLC (DISC*S)	672	672
TR-303 DLC (Litespan)	672	224

Input B-60: Remote Terminal Fill Factor

	<u>Default</u>	<u>BST-FL Specific</u>
Low density DLC	0.900	Same as high density DLC being run
TR-303 DLC (DISC*S)	0.900	0.860
TR-303 DLC (Litespan)	0.900	0.732

Input B-61: DLC Initial Common Equipment Investment

	<u>Default</u>	<u>BST-FL Specific</u>
Low density DLC	\$ 13,000	\$ 80,220
TR-303 DLC (DISC*S)	66,000	136,094
TR-303 DLC (Litespan)	66,000	121,531

Input B-62: DLC Channel Unit Investme...

	Default	BST-FL Specific
	-----	-----
<u>Low Density DLC</u>		
POTS Channel Unit	\$ 600	\$ 82
Coin Channel Unit	600	406
<u>TR-303 DLC (DISC*S)</u>		
POTS Channel Unit	\$ 310	\$ 69
Coin Channel Unit	250	417
<u>TR-303 DLC (Litespan)</u>		
POTS Channel Unit	\$ 310	\$ 370
Coin Channel Unit	250	792

Input B-63: DLC Lines per Channel Unit

	Default	BST-FL Specific	
	-----	DISC*S	Litespan
		-----	-----
<u>TR-303 DLC</u>			
POTS Channel Unit	4	2	4
Coin Channel Unit	2	1	4
<u>Low Density</u>			
	Default	BST-FL Specific	
	-----	-----	
POTS Channel Unit	6	2	
Coin Channel Unit	6	1	

Input B-64: Low Density DLC to TR-303 DLC Cutover

	BST-FL Specific		
	Default	DISC*S	Litespan
Cutover	480	576	384

Input B-66: Optical Patch Panel

	Default	BST-FL Specific	
Low density DLC	\$ 1,000	\$ 903	
TR-303 DLC -	1,000	903	(DISC*S and Litespan)

Input B-68: Common Equipment Investment per Additional Line Increment

	Default	BST-FL Specific	
Low density DLC	\$ 9,400	\$ 25,612	
TR-303 DLC	18,500	32,810	DISC*S
TR-303 DLC	18,500	6,814	Litespan

Input B-69: Maximum Number of Additional Line Modules per Remote

	Default	BST-FL Specific	
Low density DLC	1	9	
TR-303 DLC	2	2	DISC*S
TR-303 DLC	2	8	Litespan

Exhibit (GCG-12)
Sensitive Input Group X: Interoffice Investment

EXHIBIT (GCG-12)
SENSITIVE INPUT GROUP X: INTEROFFICE INVESTMENT

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-107 Transmission Terminal Investment
- B-108 Number of Fibers
- B-109 Pigtails, per Strand
- B-110 Optical Distribution Panel
- B-111 E, F & I, per Hour
- B-115 Channel Bank Investment, per 24 Lines
- B-117 Digital Cross Connect System, Installed, per DS-3
- B-118 Transmission Terminal Fill
- B-119 Interoffice Fiber Cable Investment per Foot, Installed
- B-122 Transport Placement
- B-124 Interoffice Conduit, Cost and Number of Tubes

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-107 - Transmission Terminal Investment
2. Input B-108 - Number of Fibers
3. Input B-109 - Pigtails, per Strand
4. Input B-110 - Optical Distribution Panel

5. Input B-111 - E, F & I, per Hour
6. Input B-115 - Channel Bank Investment, per 24 Lines
7. Input B-117 - Digital Cross Connect System, Installed, per DS-3
8. Input B-118 - Transmission Terminal Fill (D-0 Level)
9. Input B-119 - Installed Cost per Foot of Interoffice Fiber Cable
 - This assumes a 24-fiber cable. The default value is derived from input B-57 and is \$3.50 installed.
10. Input B-122 - Transport Placement
 - The cost of placement of fiber cable structures.
11. Input B-124 - Interoffice Conduit, Cost and Number of Tubes
 - The cost per foot of interoffice cable conduit and the number of spare tubes placed per route.

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. For the investment in the Add-Drop Multiplexers (ADMs) that extract/insert signals into OC-48 fiber rings (B-107), the estimates for the input were based upon industry experience and the expertise of HAI Consulting, supplemented by consultations with telecommunications equipment suppliers. No backup workpapers or data was provided to support this input.
2. The assumed fiber cross section, or number of fibers in a cable, in the interoffice fiber ring and point for point network (B-108), is stated to be 24. The default value is based upon the engineering judgement of HAI Model developers. No backup workpapers or data was provided to support this input.
3. The cost of the short fiber connectors that attach the interoffice ring fibers to the wire center transmission equipment via a patch panel (B-109) is estimated to be \$60 per pigtail. The source of this figure is a 1992 publication entitled Residential Fiber Optic

Networks and Engineering and Economic Analysis, and the engineering judgement of HAI R5.0a developers.

4. The cost of the physical fiber patch panel used to connect 24 fibers to the transmission equipment (B-110) was based upon an estimate by a team of experienced outside plant experts who are alleged to have contracted for hundreds of such installations. No backup workpapers or data was provided to support this input.
5. The per hour cost for the "engineered, furnished, and installed" activities for equipment in each wire center (B-100) associated with the interoffice fiber ring was estimated by a team of experienced outside plant experts. No backup workpapers or data was provided to support this input.
6. Investment in voice grade to DS-1 multiplexers in wire centers (B-115) required for some special access circuits was based upon industry experience and the expertise of HAI Consulting, supplemented by consultations with telecommunications equipment suppliers. No backup workpapers or data was provided to support this input.
7. The investment required for a digital cross connect system that interfaces DS-1 signals between switches and OC-3 multiplexers (B-117), expressed on a per DS-3 basis, is based upon the estimate made by HAI Consulting, supplemented by consultations with telecommunications equipment suppliers.
8. The fraction of maximum DS-0 circuit capacity that can actually be utilized in ADMs and DS-1 to OC-3 multiplexers (B-118) is based upon judgement made by outside plant subject matter experts.
9. MCI and AT&T did not state the specific steps they took to ensure that the default values for each of the UAIs for this Sensitive Input Group reflected the conditions of the territory of BST-Florida and did not state the results of the steps they undertook to make that assurance. Thus, there is no demonstration that the default values they have chosen (which presumably MCI and AT&T believe are forward-looking) are reflective of the conditions in BellSouth-Florida's territory.
10. MCI and AT&T did not state the basis upon which their experts developed their estimates for the default values used in applying HAI R5.0a, and did not provide workpapers and sources associated therewith, where the basis for the default values was claimed to be "expert opinion."

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group X:

1. For transmission terminal investment (B-107), specific information was obtained for the following components:
 - For OC-48 ADMs, installed information was available on two systems:
 - FT 2000, for an installed investment of \$130,762.
 - FLM 2400, for an installed cost of \$107,544.
 - The appropriate weighted average of the two systems of \$107,544 is employed.
 - For OC-48 ADMs, with 12 DS-3 capacity, there are two systems:
 - FT 2000, with an installed investment of \$73,428.
 - FLM 2400, for an installed investment of \$62,085.
 - The appropriate weighted average is \$62,085.
 - For the OC-3/DS-1 terminal multiplexer, information is available on two BST-specific systems:
 - DDM 2000, for an installed investment of \$32,360.
 - FLM 150, for an installed investment of \$30,017.
 - The appropriate weighted average is \$30,720.
 - The "investment per 7 DS-1" figure, is stated to represent the amount by which the investment in OC-3s is reduced for each unit of 7 DS-1s below full capacity of the OC-3. Cards capable of handling four DS-1s are available for the systems described above:
 - DDM 2000, for an installed investment of \$772.
 - FLM 150, for an installed investment of \$476.
 - A usage weighted average cost of \$564 is appropriate for cards capable of handling 4 DS-1s. Including installation costs, this is equivalent to \$988 per 7 DS-1s.
2. The fiber cross section, or number of fibers in a cable (B-108), in the interoffice ring varies on the type of structure. It is current BST-Florida practice to have a cross section

of 36 fibers for aerial cable, 30 fibers for buried cable and 30 fibers for underground cable. However, to be conservative in this proceeding, we have accepted the default value of 24 fibers in a cable for aerial, buried and underground fiber.

3. The cost of the short fiber connectors that attach the interoffice ring fibers to the wire center transmission equipment via a patch panel (B-109) is \$26 installed.
4. The cost of the physical fiber patch panel used to connect 24 fibers to the transmission equipment (B-110) is \$1,805 installed.
5. As we have stated in prior sections, all the installed prices that have been provided include the labor costs that are envisioned in input B-111. Specifically, in input B-117 for transmission terminal investment, our prices have included the cost of labor. Therefore, this input will be set to 0.
6. The investment in voice-grade to DS-1 multiplexers in wire centers (B-115) required for some special access circuits is \$2,995 installed.
7. The investment required for a digital cross connect system that interfaces DS-1 signals between switches and OC-3 multiplexers, expressed on a DS-3 basis (B-117), is based upon the following equipment:
 - TELLABS-5500, for a cost of \$5,301.
 - DACS IV, for a cost of \$7,005.
 - The appropriate weighted average installed cost is \$5,812.
8. The fraction of maximum DS-0 circuit capacity that can actually be utilized in ADMs and DS-1 to OC-3 multiplexers (B-118) is not readily available from BST actual data. The value employed by HAI R5.0a has not been supported and, in our opinion, would cause poor service levels. Some information was provided that on a total capacity available basis, the transmission terminal fill at the DS-0 level is less than 40% for BST. For purposes of this proceeding, we recommend that a fill of 80% be used.
9. The installed cost of interoffice aerial fiber (B-119) per foot is \$2.15.
10. The cost of placement of fiber cable structures (B-122) is derived from specific field reporting codes. As previously discussed the placement cost of conduit is aggregated for copper and fiber and is treated accordingly throughout the model. For conduit, the costs for both material (B-124) and placement (B-122) include the cost for manholes and pullboxes. Therefore, we have set the investment in both manholes and pullboxes to zero. The costs also include the cost of spare tubes which are, in turn, also set to zero.

Input B-107: Transmission Terminal Investment

	<u>OC - 48 ADM</u>		<u>OC 3/DS-1 MUX</u>	<u>Investment/7 DS-1s</u>
	<u>48 DS-3s</u>	<u>12 DS-3s</u>	<u>84 DS-1s</u>	
Default	\$ 50,000	\$ 40,000	\$ 26,000	\$ 500
BST-FL Specific	107,544	62,085	30,720	988

Input B-108: Number of Fibers

Default: 24
BST-FL Specific: 24

Input B-109: Pigtails

Default: \$ 60
BST-FL Specific: 26

Input B-110: Optical Distribution Panel

Default: \$ 1,000
BST-FL Specific: 1,805

Input B-111: E, F & I, per Hour

Default: \$ 55
BST-FL Specific: 0

Input B-115: Channel Bank Investment, per 24 Lines

Default: \$ 5,000
BST-FL Specific: 2,995

Input B-117: Digital Cross Connect System, Installed

Default: \$ 30,000
BST-FL Specific: 5,812

Input B-118: Transmission Terminal Fill (DS-0 Lead)

Default: 0.90
BST-FL Specific: 0.80

Input B-119: Interoffice 24-Fiber Cable Investment, \$/Foot

Default	BST-FL Specific
-----	-----
\$ 3.50	\$ 2.15

Input B-122: Transport Placement

	Default	BST-FL Specific
	-----	-----
Buried	\$ 1.77	\$ 3.11
Conduit	\$ 16.40	\$ 4.79

Input B-124: Interoffice Conduit, Cost and Number of Tubes

	<u>Default</u>	<u>BST-FL Specific</u>
Cost/Foot ³	\$ 0.60	\$ 0.83
Spare Tubes per Route	1	0

³ The cost per foot of conduit is also applied to feeder conduit. Feeder conduit has not been assigned a separate "B" number in HAI R5.0a Appendix B. Nonetheless there appears to be an input for this variable in the interface of the model.

Exhibit __ (GCG-13)
Sensitive Input Group XI: Switching Factors

EXHIBIT (GCG-13)
SENSITIVE INPUT GROUP XI: SWITCHING FACTORS

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-77 Switch Port Administrative Fill
- B-79 MDF/Protector Investment per Line
- B-81 Switch Installation Multiplier
- B-82 Constant EO Switching Investment Term, BOC and Large ICO
- B-88 Wire Center Power Investment
- B-103 Busy Hour Fraction of Daily Usage
- B-104 Annual to Daily Usage Reduction Factor
- B-131 Operator Traffic Fraction
- B-132 Total Interoffice Traffic Fraction
- B-134 Trunk Port, per End
- B-136 Tandem-routed Fraction of Total IntraLATA Traffic
- B-137 Tandem-routed Fraction of Total InterLATA Traffic
- B-150 STP Link Capacity
- B-153 Minimum STP Investment, per Pair
- B-154 Link Termination, Both Ends
- B-157 C Link Cross Section
- B-162 Fraction of BHCA Requiring TCAP
- B-163 SCP Investment/Transaction/Second
- B-166 Operator Intervention Factor

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELL SOUTH-FLORIDA

Forward-looking cost (i.e., no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-77 - Switch Port Administrative Fill
 - The switch port administrative fill used for planning and engineering purposes.
2. Input B-79 - MDF/Protector Investment per Line
 - The investment for the protector and terminal and the copper feeder fill factor.
3. Input B-81 - Switch Installation Multiplier
 - The investment in switch engineering and installation activities, expressed as a multiplier of the switch investment.
4. Input B-82 - Constant EO Switching Investment Term, BOC and Large ICO
 - The cost per line per switch used to determine the appropriate constant and office switching investment term.
5. Input B-88 - Wire Center Power Investment
 - The wire center investment required for rectifiers, battery strings, backup generators and various distribution frames, as a function of switch line size.
6. Input B-103 - Busy Hour Fraction of Daily Usage
7. Input B-104 - Annual to Daily Usage Reduction Factor
 - The assumptions, used by engineering and planning, of the effective number of business days in a year to determine the annual to daily usage reduction factor.
8. Input B-131 - Operator Traffic Fraction
 - The fraction of traffic that requires operator assistance.

9. Input B-132 - Total Interoffice Traffic Fraction
 - The fraction of all calls that are completed on a switch other than the originating switch.
10. Input B-134 - Trunk Port, per End
 - The investment in switch trunk port at each end of a trunk.
11. Input B-136 - Tandem-routed Fraction of Total IntraLATA Traffic
12. Input B-137 - Tandem-routed Fraction of Total InterLATA Traffic
13. Input B-150 - STP Link Capacity
14. Input B-153 - Minimum STP Investment, per Pair
15. Input B-154 - Link Termination, Both Ends
16. Input B-157 - C Link Cross Section
17. Input B-162 - Fraction of BHCA Requiring TCAP
18. Input B-163 - SCP Investment/Transaction/Second
19. Input B-166 - Operator Intervention Factor

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. Switch Port Administrative Fill (B-77) is the percentage of lines in a switch that are assigned to subscribers, compared to the total equipped lines in a switch. The input portfolio states the default value to 0.98 based upon the expertise of HAI Consulting personnel. No explanation, backup or workpapers as to how this input was provided.
2. The Main Distribution Frame (MDF)/protector investment per line (B-79) is provided as \$12.00. This is the MDF investment, including protector, required to terminate one line. The price was obtained by Telecom Visions, Inc., a

consulting firm that assisted in the preparation of the Inputs Portfolio. No explanation, backup or workpapers were provided as to how this default was derived.

3. The switch installation multiplier (B-81), which is the telephone company investment in switch engineering and installation activities, expressed as a multiplier of the switched investment, is 1.10. This input is based upon Bell Atlantic and SBC ONA filings made in 1992.
4. The end office switching investment constant term (B-82) is \$242.73. This input is the value of the constant appearing in the function that calculates the per line switching investment as a function of switch line size. It is emphasized that this input is *not* average switch investment cost per line. This input is based upon switching cost surveys as reported in the Northern Business Information (NBI) publication, "US, Central Office Equipment Market: 1995 data base."
5. The wire center investment required for rectifiers, battery strings, backup generators and various distributing frames, as a function of switch line size (B-88), is simply stated to be an estimate made by HAI Consulting. There is no source description, backup or workpapers for this estimate.
6. The busy hour fraction of daily use (B-103), which is the percentage of daily usage that occurs during the busy hour, is estimated to be 0.10. This is based upon an AT&T capacity cost study dated June 20, 1990.
7. The annual to daily usage reduction factor (B-104), which is the effective number of business days in a year, used to concentrate annual usage into a fewer number of days as a step in determining busy hour usage, is estimated to be 270. This estimate is based upon the AT&T capacity cost study referred to above, which uses an annual to daily usage reduction factor of 264 days.
8. The operator traffic fraction (B-131), which is the fraction of traffic, automated or manual, that requires operator assistance, is estimated to be 0.02. This is based upon the expertise of HAI Consulting personnel. There is no backup or workpapers for this estimate.
9. The total interoffice traffic fraction (B-132) is defined as the fraction of all calls that are completed on a switch other than the originating switch and is estimated to be approximately 0.65. The default value is based upon Table 4-5, p. 125, of Engineering and Operations in the Bell System, which shows a range from 0.34 for rural areas and 0.69 for urban areas.

10. The trunk port investment per end (B-134), which is the per trunk equivalent investment in switch trunk port at each end of a trunk, is estimated to be \$100. This is based upon the AT&T capacity cost study referred to above, and, further, HAI Consulting's assumption that \$100 is for the switch port itself.
11. The tandem routed fraction of total intraLATA traffic (B-136) is estimated to be 0.2. The source of this information is data filed by the LECs in response to an FCC data request in Docket 80-286, "In the Matter of Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, December 1, 1994."
12. The tandem routed fraction of total interLATA traffic (B-137), which is the fraction of interLATA calls that are routed through a tandem instead of directly to the IXC, is estimated to be 0.2. The source is the same data filed by the LECs in Docket 80-286, described above.
13. The STP link capacity (B-150), which is the maximum number of signaling links that can be terminated on a given STP pair, is estimated to be 720. The source of this information is the AT&T updated capacity cost study described above.
14. The STP minimum common equipment investment per pair (B-153), which is the minimum investment for a minimum capacity STP, is estimated to be \$1,000,000. This is based upon the judgement of HAI Consulting personnel.
15. The cost of transmission equipment that terminates both ends of an SS7 signalling link (B-154) is estimated at \$900 and based on the aforementioned AT&T study.
16. The C link cross section (B-157), which is the number of C-links in each segment connecting a mated STP pair, is estimated to be 24. This is derived assuming the 56 kbps signaling links between STPs are normally transported in a DS-1 signal, whose capacity is 24 DS-0s.
17. The fraction of busy hour call attempts (BHCA) requiring transaction capabilities application part (TCAP) (B-162), which is the percentage of BHCAs that require a database query and thus generate TCAP messages, is estimated to be 0.10. The source of this information is data from the AT&T updated capacity cost study, adjusted by HAI Consulting's personnel.

18. The service control point (SCP) investment per transaction per second (B-163), which is the investment in SCP associated with database queries, or transactions, stated as the investment required per transaction per second, is estimated to be \$20,000. This is based upon the 1990 data in the AT&T updated cost study referred to above, which uses a default value of \$30,000. The default value used in the HAI model represents the judgement of HAI Consulting as to the reduction of such processing costs since 1990.
19. The operator intervention factor (B-166), which is the percentage of all operator assisted calls that require operator intervention, expressed as one out of every n calls, is estimated to be 10. No source for this input was described and no backup or workpapers were provided.

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELLSOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group XI:

1. The default value in HAI R5.0a of 0.98 for part administrative fill (B-77) is too high. A more normal forward-looking switch port administrative fill of 0.94 is recommended in this proceeding.
2. The Florida-specific value for the MDF/protector investment per line (B-79) is \$15.22. When this is combined with the target output copper feeder fill factor of 0.660, the appropriate input is \$23.06 ($\$15.22/0.660$). This takes into account that additional MDF/protector investment per line that is required to terminate the number of equipped lines rather than the number of working lines.
3. Florida-specific data for the telephone company investment in switch engineering and installation activities indicates a switch installation multiplier (B-81) of 1.0870.
4. BellSouth-specific data for digital DMS and 5E switches provides a range of costs for switches on a forward looking basis. Using the lower end of the range of values provided (from about \$100 per line to over \$300 per line) we conservatively recommend a cost per line (excluding MDF and protector which are included in input B-81), of \$129 per line. When this information is fitted to the switching cost parameter curve assumed by HAI R5.0a, the constant end-

office switching investment term (B-82) consistent with Florida-specific data is \$288.58.

5. Florida-specific data for the power investment required per line (B-88) is based upon an analysis of the specific requirements for line sizes from 1,000 lines and below to 50,000 lines.
6. Florida-specific busy hour traffic studies indicate that the percentage of daily usage that occurs during the busy hour (B-103) is 0.0865.
7. The effective number of business days in a year used to concentrate annual usage into a fewer number of days, as a step in determining busy hour usage as used for engineering and planning in Florida (B-104), is 310. This is based upon the assumption that weekend and holiday traffic should be weighted as 1/2 of a business day.
8. Operator traffic data from March 1997 for Florida indicates that the fraction of traffic that requires operator assistance, automated or manual (B-131), is 0.0030.
9. Florida data for interoffice traffic indicates that a fraction of 0.740 of all calls are completed on a different switch than the originating switch (B-132).
10. Florida-specific data for the trunk termination investment (B-134) reflects an investment of \$79.95 per end for each trunk cost.
11. Florida-specific traffic and separations data indicates that the tandem routed fraction of total intraLATA traffic (B-136) is 0.200.
12. Florida-specific traffic and separations data, indicates that the tandem routed fraction of total interLATA traffic (B-137) is 0.200.
13. The STP link capacity for a pair of STPs in Florida is 1,040. This represents the maximum number of signaling links that can be terminated on a given STP pair (B-140). Given that 16 links are required as a cross connection between the mated pair, the appropriate STP link capacity for input B-143 is 1,024 (1,040 - 16).
14. The Florida-specific value for the minimum STP investment, per pair (B-153), is \$224,000.
15. The Florida-specific investment for the transmission equipment that terminates both ends of an SS7 signalling link (B-154) is \$725.

16. The number of C-links in each segment connecting a mated STP pair (B-157) is 16 as previously indicated.
17. The percent of busy hour call attempts that require a database query (B-162) is set in its default value in HAI R5.0a to 0.10. While this figure may be reasonable under the current environment, we believe that this is not representative in a forward-looking environment that includes competition and line number portability. With the transfer of BST-Florida customers to other competitors, the requirements for line number portability will be significant. Based upon the forward-looking nature of this assumption, there is no current data that can be provided. It is our opinion that a value substantially in excess of 0.50 will evolve as the appropriate forward-looking input for this factor.
18. Florida-specific data indicates that the SCP investment per transaction per second (B-163) of \$2,444 is appropriate.
19. Florida-specific traffic data from March 1997 for the percent of all operator assisted calls that require operator intervention (B-166), expressed as one out of every n calls, indicates the value of two is appropriate.

Input B-77: Switch Port Administrative Fill

<u>Default</u>	<u>BST-FL Specific</u>
0.98	0.94

Input B-79: MDF/Protector Investment per Line

<u>Default</u>	<u>BST-FL Specific</u>
\$ 12.00	\$ 23.06

Input B-81: Switch Installation Multiplier

<u>Default</u>	<u>BST-FL Specific</u>
1.1000	1.0870

Input B-82: Constant EO Switching Investment Term, BOC & Large ICO

<u>Default</u>	<u>BST-FL Specific</u>
\$ 242.73	\$ 288.58

Input B-88: Wire Center Power Investment

<u>Lines</u>	<u>Default</u>	<u>BST-FL Specific</u>
0	\$ 5,000	\$ 17,000
1000	10,000	24,000
5000	20,000	56,000
25,000	50,000	164,000
50,000	250,000	275,000

Input B-103: Busy Hour Fraction of Daily Usage

<u>Default</u>	<u>BST-FL Specific</u>
0.1000	0.0865

Input B-104: Annual to Daily Usage Reduction Factor

<u>Default</u>	<u>BST-FL Specific</u>
270	310

Input B-131: Operator Traffic Fraction

<u>Default</u>	<u>BST-FL Specific</u>
0.0200	0.0030

Input B-132: Total Interoffice Traffic Fraction

<u>Default</u>	<u>BST-FL Specific</u>
0.650	0.740

Input B-134: Trunk, Port, per End

<u>Default</u>	<u>BST-FL Specific</u>
\$ 100.00	\$ 79.95

Input B-136: Tandem Routed Fraction of Total IntraLATA Traffic

<u>Default</u>	<u>BST-FL Specific</u>
0.200	0.200

Input B-137: Tandem Routed Fraction of Total InterLATA Traffic

<u>Default</u>	<u>BST-FL Specific</u>
0.200	0.200

Input B-150: STP Link Capacity

<u>Default</u>	<u>BST-FL Specific</u>
720	1,024

Input B-153: Minimum STP Investment, per Pair

<u>Default</u>	<u>BST-FL Specific</u>
\$ 1,000,000	\$ 224,000

Input B-154: Link Termination, Both Ends

<u>Default</u>	<u>BST-FL Specific</u>
\$ 900	\$ 725

Input B-157: C Link Cross Section

<u>Default</u>	<u>BST-FL Specific</u>
24	16

Input B-162: Fraction of BHCA Requiring TCAP

<u>Default</u>	<u>BST-FL Specific</u>
0.10	0.50

Input B-163: SCP Investment/Transaction/Second

<u>Default</u>	<u>BST-FL Specific</u>
\$ 20,000	\$ 2,444

Input B-166: Operation Intervention Factor

<u>Default</u>	<u>BST-FL Specific</u>
10	2

**Exhibit (GCG-14)
Sensitive Input Category II: Expense Factors**

EXHIBIT ___ (GCG-14)
SENSITIVE INPUT GROUP XI: EXPENSE FACTORS

This Exhibit analyzes and evaluates HAI R5.0a default values, and identifies alternative values, for the following HAI R5.0a Appendix B user-adjustable inputs:

- B-181 Income Tax Rate
- B-183 Other Taxes Factor
- B-186 Forward-Looking Network Operations Factor
- B-187 Alternative CO Switching Expense Factor
- B-188 Alternative Circuit Equipment Factor
- Other Expense Factors

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio.

This Exhibit is structured in 3 parts: Part (1) identifies the UAIs in this Sensitive Input Group for which we have been able to obtain forward-looking cost and other forward-looking data that is specific to BellSouth-Florida, Part (2) identifies the basis upon which MCI and AT&T state they have developed their default values for the UAIs in this Sensitive Input Group and contains some of our observations about the default values, and Part (3) identifies the alternative values developed by GCG to replace the default values in order to reflect forward-looking costs and other conditions, based on BellSouth-Florida data.

(1)
AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

Forward-looking cost (*i.e.*, no embedded cost characteristics) and other forward-looking data specific to BellSouth-Florida have been obtained for the following user-adjustable inputs:

1. Input B-181 - Income Tax Rate
 2. Input B-183 - Other Taxes Factor
 3. Input B-186 - Forward-Looking Network Operations Factor
 4. Input B-187 - Alternative CO Switching Expense Factor
- The expense to investment ratio for digital switching equipment.

5. Input B-188 - Alternative Circuit Equipment Factor
 - The expense to investment ratio for all circuit equipment (as categorized in the ARMIS report).
6. Other Expense Factors

(2)
MCI'S AND AT&T'S STATED BASIS
FOR THEIR DEFAULT VALUES

MCI and AT&T claim the following basis for deriving the default values:

1. The combined Federal and State income tax rate on earnings (B-181) in HAI R5.0a is estimated based upon a nationwide average of the Federal and individual State tax rates. This nationwide average is apparently based upon an aggregate of all fifty states. While the computation of that average may include Florida-specific conditions, the average is not specifically applicable to Florida. No backup or data for the estimate has been provided.
2. The taxes to be paid in addition to Federal and State income taxes (B-183) is an estimate based upon the average of all Tier I LECs, expressed as a percentage of total revenue. This data is stated to be derived from ARMIS report 43-03. The estimate based upon Tier I LECs may not reflect the specific conditions in Florida. The default value used in HAI R5.0a for this input is 5.0%. No backup or data for this estimate has been provided.
3. The default value for the forward-looking network operations factor (B-186) used in HAI R5.0a is 50%. This means that for the category of expenses for BST-Florida called Network Operations Expenses, which are reported in the ARMIS reports to be \$235 million in 1996, HAI R5.0a assumes that the expense on a forward-looking basis will be \$117.5 million, or a reduction of \$117.5 million (approximately \$1.50 per loop per month).

The Hatfield Model Release 3.1 inputs portfolio (draft dated April 3, 1997, issued during a Workshop held in Georgia) contends that the forward-looking network operations factor is supported by the testimony of Pacific Bell witness Mr. R. L. Scholl, dated April 17, 1996. In MCI's and AT&T's, MCI and AT&T do not state that the forward-looking network operations factor is based on the testimony of Mr. R. L. Scholl or any other testimony submitted by Pacific Bell. No explanation for the apparent contradiction between the HM R4.0 inputs portfolio and the response to discovery was provided. Later drafts remove this reference (draft dated August 1, 1997 and later).

HAI R5.0a states that Network Operations Expenses are driven upward by antiquated systems that are more costly to maintain than the modern equipment that is assumed to be installed by the HAI Model. It further states that the HAI Model assumes that today's costs do not reflect much of the substantial savings opportunities posed by new technologies, such as new management network standards, intranet and the like. Nonetheless, no specific backup or workpapers were provided to document how the proposed \$48 million reduction in Network Operations Expenses is to be accomplished.

4. The expense to investment ratio for Digital Switching Equipment (B-187), which has a default value of 0.0269 in HAI R5.0a, is based upon a value derived in the New England Incremental Cost Study. The New Hampshire Incremental Cost Study is based upon 1993 or older New Hampshire data, and represents a system whose architecture is based upon a system that is approximately one sixth the size of BST-Florida.

MCI and AT&T did not provide the basis upon which the default value for this input is applicable to the Florida operations of BST and how the expense to investment ratio for digital switching for New England Telephone's New Hampshire operations compares to the expense to investment ratios for digital switching equipment for other state telephone operations and specifically for the Florida operations of BST.

5. The expense to investment ratio for all circuit equipment (B-188), as categorized in the ARMIS reports, of 0.0153 is based upon the New England Incremental Cost Study. This is the same study as described above for input B-187, based upon 1993 or older New Hampshire data.

MCI and AT&T did not provide the basis upon which the default value for this input is applicable to the Florida operations of BST.

6. The operating costs or cost/investment ratios determined by HAI R5.0a, other than the expenses for digital switching equipment (B-187) and expenses related to circuit equipment (B-188), are not provided as user changeable inputs. These expenses primarily consist of expenses related to public telephone terminal equipment, poles, buildings, aerial cable, operator systems, buried cable, total cable and wire facilities and underground cable. The model recognizes that for the year 1996, the base year for which ARMIS data has been accumulated, the net expenses related to the items listed above is approximately \$339 million. On a forward-looking basis, HAI R5.0a estimates these same expenses to be \$140 million, a reduction of \$199 million below the 1996 expense level for these categories. This represents a reduction of approximately 59% below the 1996 current figures. This proposed reduction of expenses amounts to \$2.54 per loop per month.

There is virtually no support or explanation for this methodology employed by HAI R5.0a. Page 64 of the model description of HAI R5.0a states:

estimating LEC operating costs is more difficult. Few publicly available forward-looking cost studies are available from the ILECs. Consequently, many of the operating cost estimates developed here must rely on relationships to and within historical ILEC cost information as a point of departure for estimating forward-looking costs. While certain of these costs are closely linked to the number of lines provided by the ILEC, other categories of operating expenses are related more closely to the levels of their related investments. For this reason, the expense module develops factors for numerous expense categories and applies these factors both against investment levels and demand quantities (as appropriate) generated by previous modules.

There is no validation of the arbitrary assumption made by HAI R5.0a that it would be appropriate to use historical cost information to develop a relationship between expenses and investment, and then multiply this ratio by an estimate of forward-looking investment developed by HAI R5.0a. In fact, in response to discovery in Georgia, HAI Consulting [then Hatfield Associates], MCI and AT&T agree that equipment prices are not always a direct driver of indirect expenses, including maintenance and operation.

(3)
THE GCG ALTERNATIVE VALUES BASED
UPON COST AND OTHER DATA SPECIFIC
TO BELL SOUTH-FLORIDA

The following BellSouth-Florida-specific values were obtained for the user-adjustable inputs that make up Sensitive Input Group XII:

1. The combined Federal and State income tax rate for input B-181 is 38.57%.
2. The tax rate paid by BST-Florida in addition to Federal and State income taxes (B-183), derived from the ARMIS report 43-03, is 4.77% as follows:

	<u>\$000s</u>
Other Taxes	\$ 160,217
Net Revenue	\$ 3,361,147
Ratio	4.77%

3. The support for the forward-looking network operations factor (B-186) provided by MCI/AT&T was previously cited to be the testimony of Pacific Bell witness,

Mr. R.L. Scholl, dated April 17, 1996. In this testimony, Mr. Scholl made the following observations:

- The cost estimates produced by the model presented by MCI and AT&T known as "the Hatfield Proxy Model" consistently understate the costs of providing universal service in California, and the model is, therefore, not appropriate (see page 2, April 17, 1996 testimony).
- The Hatfield Model's basic structure to estimate operating expenses by applying factors to incremental investments is wrong (see page 3, April 17, 1996 testimony).
- While the Hatfield Model's factor approach may be useful in an embedded cost study where embedded investments (the aggregate of all the investments on a company's books) are relatively stable over time, it has no place in an incremental study where equipment prices can be quite volatile (see page 4, April 17, 1996 testimony). In this Florida proceeding, however, MCI and AT&T continue to advocate the factor approach to estimate operating expenses.
- The factor used in the Hatfield Model to estimate digital switch maintenance expenses are from the New England Telephone Cost Study for New Hampshire (see page 6, April 17, 1996 testimony). As there is no evidence that digital switch maintenance costs per line vary significantly by the line size of the switch, by using the switch maintenance factor for New Hampshire's high switch unit investment, the Hatfield Model creates a factor only for "small town" states like New Hampshire, but that factor is clearly much too low for California with its cities. Applying the low switch maintenance factor from New Hampshire to Pacific's lower per line switch investment will, by necessity, underestimate the switch maintenance costs of Pacific Bell.
- The Hatfield Model uses Pacific Bell data for development of other maintenance cost factors (see page 5, April 17, 1996 testimony). This is an example of the builders of the Hatfield Model selectively choosing their processes to consistently underestimate costs.

Mr. Scholl's testimony supports a cost per line per month of \$26.33 (see page 11, April 17, 1996 testimony), versus the Hatfield Model estimate of \$14.94 per line per month. Mr. Scholl's overall estimate is 76% greater than the estimate produced by the Hatfield Model in that proceeding. There are only two specific areas in which the estimate made by Mr. Scholl is lower than the estimate made by the Hatfield Model. This is in the area of uncollectibles, where the Hatfield Model uses a specific line item for uncollectibles, whereas the recommendations of Mr. Scholl may have this included in other accounts.

The only other area where Mr. Scholl shows a lower cost per line is in network operations. No analysis of the data has been performed to determine what accounts were used by Mr. Scholl and upon what basis for this one line item were the expenses substantially below those predicted by the Hatfield Model. It must be remembered that in the overall context, recommendations made by Mr. Scholl are 76% above those recommended by the Hatfield Model including the estimate for network operations, which is more than double that recommended by Mr. Scholl.

No analysis or backup has been provided to determine how the network operations expenses can be reduced by 50%. We would point out that since the early nineties, BST-Florida has implemented a considerable amount of cost savings and has reduced its workforce. Therefore the 1996 ARMIS expense data already reflects these cost savings.

Personnel expenses represent a considerable portion of the network operation expenses. It would be totally unreasonable to assume that over the period in which MCI and AT&T expect that rates would be in effect from this proceeding, that a further 50% reduction in network operations expense and the related workforce can be achieved. In the 1997 to 1999 timeframe, based on continuing productivity and workforce management, a reasonable reduction in network operations expense can be expected. We recommend that the appropriate input for B-186 in this proceeding is 90%.

4. The value recommended by HAI R5.0a for input B-187 is 0.0269 based upon data from a 1993 New Hampshire Incremental Cost Study. The similarities with using the New Hampshire Incremental Cost Study have already been dealt with in the prior section and are summarized as follows:
 - The data is from 1993 or older.
 - The application of conditions in New Hampshire to the situation in Florida is dubious at best. In New Hampshire, there were approximately 600,000 residents and business lines in the 1993 study while there are approximately 2.3 million lines in HAI R5.0a for Florida.
 - While MCI and AT&T have relied in the past on support from Mr. R.L. Scholl of Pacific Bell in the use of forward-looking factor, his strong criticism of the use of the New Hampshire Incremental Cost Study for this input has been ignored. Specifically, Mr. Scholl states:

FCC ARMIS data bear out that the HAI Model's switch maintenance expense factor and reliance on New Hampshire data results in a completely unreliable estimate of switching maintenance expense. The

HAI Model uses a digital switch maintenance factor of 0.0269 from a 1992 study for New Hampshire. The 1993 ARMIS data shows that the average RBOC has a digital switch maintenance factor of 0.0580, while Pacific's was 0.0540. The New Hampshire factor clearly has no relevance for Pacific Bell.

In the table attached to this section, we have presented the digital electronic switching expense factor for 160 telephone companies based on 1996 data. The average for the entire group was 0.0570. The ratio for BST-Florida is 0.0650 in 1997 and 0.0572 in 1996. The figure for the New Hampshire operations of the New England Telephone Company is 0.0247.

In order to be conservative we have assumed that increased efficiencies would ensue to this account in the timeframe over which rates in this proceeding would be effective. We recommend that a 10% increase in efficiency be assumed for purposes of this proceeding. Using 90% of the expense to investment ratio of 0.0650 for BST-Florida results in a ratio of 0.0585.

MCI and AT&T did not describe the steps taken by HAI Consulting and/or MCI and AT&T to verify that the default value for input B-187 is applicable to the Florida operations of BST on a forward-looking basis.

5. The value recommended by HAI R5.0a for input B-188 which is the expense to for all circuit equipment is also based upon the New Hampshire Incremental Cost Study. The infirmities of using the values from the New Hampshire Incremental Cost Study has already been discussed for the prior two default inputs and will not be repeated here.

Attached in this section is a table using 1996 data calculating the ratio of the circuit equipment expense to its corresponding investment for all of the state by state ARMIS data as well as the Company by Company data which accompanied HAI R5.0a. The data shows an average circuit equipment expense to investment ratio of 0.0198. This is higher than the ARMIS book expense to investment ratio for BST-Florida of 0.0189 in 1997 and 0.096 in 1996. Consistent with our recommendations in prior input variables to be conservative and to reflect productivity going forward, we recommend that 90% of the expense to investment ratio of 0.0189 or 0.0170 be used as the appropriate input in this proceeding.

MCI and AT&T did not describe any step taken by HAI Consulting and/or MCI and AT&T to verify that the default value for input B-188 is applicable to the territory of the Florida operations of BST on a forward-looking basis.

6. The expense-to-investment ratios developed by HAI R5.0a for expenses related to public telephone terminal equipment, poles, buildings, aerial cable, operator

systems, buried cable, total cable and wireless facilities and underground cable, when applied to the investments determined by HAI R5.0a related to the same categories listed above, result in a forward-looking expense level related to these items of \$140 million compared with \$339 million as reported by ARMIS for 1996.

MCI and AT&T did not describe the basis upon which the expense factors used in HAI R5.0a were deemed to be reasonable.

It is unreasonable to assume that by making an assumption in HAI R5.0a, MCI and AT&T can effectively eliminate approximately \$199 million of expenses or, approximately 59% reduction averaged over the various categories listed above. It is even more interesting that MCI and AT&T make this adjustment without a single item of support that such an adjustment is appropriate. This adjustment results in a decrease in the estimate of the local loop cost of \$2.54 per loop per month, and the model does not even permit this item to be a user changeable input! How would the staff of the Florida Public Service Commission or the Florida Public Service Commission make an adjustment if either of them decided it was inappropriate to assume away a cost of \$2.54 per loop per month?

Although the expense ratios have not been presented as being a user changeable input, it is possible to go into the spreadsheet calculations and make these adjustments "offline," and we have done so. It is our recommendation that a reduction of 59% in the level of these expenses on a forward-looking basis is inappropriate. As we have recommended for inputs relating to the forward-looking network operations factor (B-186), the input for central office switching expense (B-187) and the input for the alternative circuit equipment factor (B-188), we believe that it would be reasonable to assume a productivity increase of 10% over the time period that rates from this proceeding are expected to be in effect. In addition, given that it was not our mission in this proceeding to evaluate and question the logic of HAI R5.0a, and given that the model in this proceeding produces a result that results in 70% of the lines being served by digital loop carrier (DLC), whereas at the current time approximately 38% of Florida-specific lines are served by DLC, we believe it would be reasonable to make a further adjustment to forward-looking expenses in the categories listed above. We recommend that an additional 10% adjustment be made. We recommend that for the expense items under consideration, a forward-looking factor of 0.8 be applied compared with the "hard wired" methodology employed by HAI R5.0a. This recommendation will result in a reduction in expenses of approximately \$29 million on a forward-looking basis which is equivalent to a reduction in the loop cost of approximately \$0.87 per loop per month.

GCG has developed the following alternative values for inputs B-181, B-183, B-186, B-187 and B-188:

Input B-181: Income Tax Rate

<u>Default</u>	<u>BST-FL Specific</u>
0.3925	0.3857

Input B-183: Other Taxes Factor

<u>Default</u>	<u>BST-FL Specific</u>
0.0500	0.0477

Input B-186: Forward-looking Network Operations Factor

<u>Default</u>	<u>BST-FL Specific</u>
0.500	0.900

Input B-187: Alternative Central Office Switching Expense Factor

<u>Default</u>	<u>BST-FL Specific</u>
0.0269	0.0585

Input B-188: Alternative Circuit Equipment Factor

<u>Default</u>	<u>BST-FL Specific</u>
0.0153	0.0170

	<u>ARMIS Expense</u>	<u>Default</u>	<u>BST-FL Specific</u>	<u>HAI R5.0a Expenses</u>	
				<u>Default % of Actual</u>	<u>BST-FL Specific % of Actual</u>
1996 Data	\$ 339,125	\$ 140,331	\$ 271,300	41.38%	80.0%
1997 Data	337,387	131,353	269,909	38.93%	80.0%

1996 ARMIS Expense Analysis from HM 5.0a Files
Network Operations Expense per Line

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
1.	SBFL*	BellSouth Telecommunications	233,131	1,732	234,863	6,520,381	3.00	98%	1.50
2.	PRCC	PRCC - CENTRAL	14,117	155	14,272	151,019	7.88	256%	3.94
3.	GTMC	Micronesian Telecommunications	1,331	121	1,452	18,203	6.65	216%	3.32
4.	PRPR	Puerto Rico Telephone Company	71,636	787	72,423	1,062,065	5.68	185%	2.84
5.	GTMN	GTMN+COMN+COTM	216	8	224	3,307	5.66	184%	2.83
6.	GCTM	GTMN+COMN+COTM	7,979	305	8,284	122,260	5.65	184%	2.82
7.	COMN	GTMN+COMN+COTM	7,763	297	8,060	118,953	5.65	184%	2.82
8.	CEVA	CENTEL OF VIRGINIA	16,859	214	17,073	272,125	5.23	170%	2.61
9.	SNCT	Southern New England Telephone	123,726	1,036	124,762	2,144,318	4.85	158%	2.42
10.	UTTX	UTC OF TEXAS, INC.	8,236	80	8,316	145,611	4.76	155%	2.38
11.	CEFL	CENTEL OF FLORIDA	20,990	281	21,271	384,804	4.61	150%	2.30
12.	COAZ	GTE California Incorporated	410	15	425	7,740	4.58	149%	2.29
13.	UTMO	UTC OF MISSOURI	14,162	128	14,290	260,254	4.58	149%	2.29
14.	GTHI	GTE Hawaiian Telephone Company	38,018	1,412	39,430	746,088	4.40	143%	2.20
15.	CWWV	Bell Atlantic	41,310	622	41,932	804,495	4.34	141%	2.17
16.	UTOH	UTC OF OHIO	31,744	378	32,122	625,838	4.28	139%	2.14
17.	NYTC	NYNY+NYCT	605,959	5,276	611,235	12,047,463	4.23	137%	2.11
18.	GNCA	GTE Northwest Incorporated	620	47	667	13,252	4.19	136%	2.10
19.	CEIL	CENTEL OF ILLINOIS	14,865	268	15,133	301,742	4.18	136%	2.09
20.	UTWA	UTOR+UTWA+UTNW	3,651	86	3,737	77,030	4.04	131%	2.02
21.	SUNW	UTOR+UTWA+UTNW	6,832	160	6,992	144,225	4.04	131%	2.02
22.	UTOR	UTOR+UTWA+UTNW	3,181	74	3,255	67,195	4.04	131%	2.02
23.	CONC	GTNC+CONC	6,396	175	6,571	136,713	4.01	130%	2.00
* SBFL - 1997			228,137	321	228,458	6,860,016	2.78	90%	1.39

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
24.	CENC	Centel Telephone System	11,788	187	11,975	251,093	3.97	129%	1.99
25.	MSWY	U S WEST Communications	12,091	133	12,224	256,354	3.97	129%	1.99
26.	UTNC	CAROLINA TEL. AND TELGPH. CO.	48,895	666	49,561	1,058,408	3.90	127%	1.95
27.	RTNY	Rochester Telephone Corporatio	24,350	338	24,688	534,908	3.85	125%	1.92
28.	GCNC	GTNC+CONC	16,292	446	16,738	366,794	3.80	124%	1.90
29.	GTAL	GTE South Incorporated	6,655	341	6,996	155,297	3.75	122%	1.88
30.	UTIN	UTC OF INDIANA, INC.	11,335	229	11,564	257,537	3.74	122%	1.87
31.	UTPA	UTC OF PENNSYLVANIA	16,630	165	16,795	377,320	3.71	121%	1.85
32.	GTNC	GTNC+CONC	9,896	271	10,167	230,081	3.68	120%	1.84
33.	UTNJ	UTC OF NEW JERSEY, INC.	8,477	67	8,544	193,657	3.68	120%	1.84
34.	PTNV	Nevada Bell	15,503	134	15,637	361,166	3.61	117%	1.80
35.	GTAR	GTE Southwest Incorporated	3,383	160	3,543	82,824	3.56	116%	1.78
36.	GTID	GTE Northwest Incorporated	5,076	239	5,315	124,952	3.54	115%	1.77
37.	SBSC	BellSouth Telecommunications	61,714	129	61,843	1,455,585	3.54	115%	1.77
38.	ALPA	ALLTEL Pennsylvania	8,872	265	9,137	215,811	3.53	115%	1.76
39.	NWNE	U S WEST Communications	29,583	250	29,833	706,386	3.52	114%	1.76
40.	NEMA	New England Telephone	188,227	3,441	191,668	4,567,306	3.50	114%	1.75
41.	COAL	Contel of the South, Inc.	4,401	173	4,574	110,487	3.45	112%	1.72
42.	CDDC	Bell Atlantic	44,429	12	44,441	1,079,162	3.43	112%	1.72
43.	MSCO	U S WEST Communications	127,385	1,443	128,828	3,155,240	3.40	111%	1.70
44.	CONV	GTE California Incorporated	1,229	53	1,282	31,578	3.38	110%	1.69
45.	SWKS	Southwestern Bell Telephone Co	58,555	630	59,185	1,474,549	3.34	109%	1.67
46.	CONM	GTNM+CONM	1,582	63	1,645	40,990	3.34	109%	1.67
47.	ALGC	ALLTEL GEORGIA COMMUNICATION C	10,545	345	10,890	272,034	3.34	108%	1.67
48.	GCNM	GTNM+CONM	3,313	132	3,445	86,176	3.33	108%	1.67
49.	SCMS	BellSouth Telecommunications	49,896	587	50,483	1,264,008	3.33	108%	1.66
50.	COWA	GTWA+COWA	3,376	106	3,481	87,211	3.33	108%	1.66
51.	GTNM	GTNM+CONM	1,731	69	1,800	45,186	3.32	108%	1.66
52.	SWAR	Southwestern Bell Telephone Co	40,830	457	41,287	1,036,671	3.32	108%	1.66
53.	GCWA	GTWA+CUWA	32,026	1,005	33,031	831,082	3.31	108%	1.66
54.	GTWA	GTWA+COWA	28,650	899	29,550	743,871	3.31	108%	1.66

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
55.	NEVT	New England Telephone	13,706	263	13,969	353,152	3.30	107%	1.65
56.	UTFL	UTC OF FLORIDA	57,149	586	57,735	1,460,289	3.29	107%	1.65
57.	COST	Frontier-MN	4,174	106	4,279	108,330	3.29	107%	1.65
58.	CCPA	C-TEC Corporation - PA	9,211	233	9,444	239,060	3.29	107%	1.65
59.	ATNC	Alltel Carolina - NC	6,864	174	7,038	178,165	3.29	107%	1.65
60.	ICO	North State Tel Co	4,306	109	4,416	111,774	3.29	107%	1.65
61.	UTMN	UTC Minnesota	5,398	137	5,535	140,110	3.29	107%	1.65
62.	ICO-ROLL	Independent companies	1,197,661	30,342	1,228,003	31,085,319	3.29	107%	1.65
63.	ATAK	Anchorage Tel Util	6,060	154	6,214	157,299	3.29	107%	1.65
64.	ROCA	Roseville Tel Co	3,986	101	4,087	103,468	3.29	107%	1.65
65.	CETX	CENTEL OF TEXAS	7,169	182	7,351	186,074	3.29	107%	1.65
66.	TUWA	Tel Util of WA Inc	5,964	151	6,115	154,804	3.29	107%	1.65
67.	ATOH	Alltel Ohio Inc	4,809	122	4,931	124,812	3.29	107%	1.65
68.	NWSD	U S WEST Communications	12,861	62	12,923	331,217	3.25	106%	1.63
69.	CTTR	CTRH+CTUP+CTWC+CTNY	10,523	0	10,523	271,339	3.23	105%	1.62
70.	NENH	New England Telephone	29,455	597	30,052	775,563	3.23	105%	1.61
71.	UTVA	UTTN+UTVA+UTIM	3,877	75	3,952	102,107	3.23	105%	1.61
72.	SWOK	Southwestern Bell Telephone Co	67,086	885	67,971	1,759,889	3.22	105%	1.61
73.	SCAL	BellSouth Telecommunications	73,837	1,684	75,521	1,968,210	3.20	104%	1.60
74.	SBNC	BellSouth Telecommunications	94,091	1,031	95,122	2,534,578	3.13	102%	1.56
75.	CVVA	Bell Atlantic	129,065	1,699	130,764	3,489,542	3.12	102%	1.56
76.	MSNM	U S WEST Communications	33,356	395	33,751	900,918	3.12	101%	1.56
77.	COIA	GTIA+COIA+COSI	2,927	101	3,028	80,832	3.12	101%	1.56
78.	G CIA	GTIA+COIA+COSI	9,911	343	10,254	275,112	3.11	101%	1.55
79.	GTIA	GTIA+COIA+COSI	4,287	148	4,435	119,018	3.11	101%	1.55
80.	COMO	GTMO+COCM+COEM+COMO	8,359	417	8,775	235,639	3.10	101%	1.55
81.	SUIM	UTTN+UTVA+UTIM	12,763	217	13,010	349,661	3.10	101%	1.55
82.	GCMO	GTMO+COCM+COEM+COMO	14,807	738	15,545	418,897	3.09	101%	1.55
83.	COSI	GTIA+COIA+COSI	2,698	93	2,791	75,263	3.09	100%	1.55

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
84.	SCLA	BellSouth Telecommunications	84,344	1,102	85,446	2,305,079	3.09	100%	1.54
85.	COCM	GTMO+COCM+COEM+COMO	1,946	97	2,043	55,166	3.09	100%	1.54
86.	COKY	GTKY+COKY	3,567	114	3,680	99,397	3.09	100%	1.54
87.	GTMO	GTMO+COCM+COEM+COMO	4,355	217	4,572	123,880	3.08	100%	1.54
88.	COTX	GTTX+COTX	8,479	269	8,748	237,458	3.07	100%	1.54
89.	MSMT	U S WEST Communications	15,093	159	15,252	414,417	3.07	100%	1.53
90.	SBGA	BellSouth Telecommunications	158,166	1,367	159,533	4,343,728	3.06	99%	1.53
91.	UTTN	UTTN+UTVA+UTIM	8,886	172	9,058	247,554	3.05	99%	1.52
92.	GTVA	GTVA+COVA	1,230	54	1,284	35,101	3.05	99%	1.52
93.	GCKY	GTKY+COKY	19,268	614	19,882	549,908	3.01	98%	1.51
94.	NWND	U S WEST Communications	12,407	(32)	12,375	342,854	3.01	98%	1.50
95.	GCVA	GTVA+COVA	19,279	843	20,122	557,496	3.01	98%	1.50
96.	COVA	GTVA+COVA	18,049	789	18,838	522,395	3.01	98%	1.50
97.	SCTN	BellSouth Telecommunications	94,849	881	\$ 95,730	2,846,289	\$ 2.80	91%	1.40
98.	GTKY	GTKY+COKY	15,701	500	16,202	450,511	3.00	97%	1.50
99.	GCTX	GTTX+COTX	66,503	2,110	68,613	1,909,825	2.99	97%	1.50
100.	COAR	COAR+COVA+COAT	3,413	144	3,558	99,363	2.98	97%	1.49
101.	GTTX	GTTX+COTX	58,024	1,841	59,865	1,672,367	2.98	97%	1.49
102.	GCAR	COAR+COVA+COAT	4,138	175	4,313	120,592	2.98	97%	1.49
103.	MSAZ	U S WEST Communications	101,614	2,262	103,876	2,905,642	2.98	97%	1.49
104.	COSA	COAR+COVA+COAT	725	31	755	21,229	2.96	96%	1.48
105.	COSC	GTSC+COSC	752	24	776	21,904	2.95	96%	1.48
106.	SWTX	Southwestern Bell Telephone Co	360,159	6,695	366,854	10,357,493	2.95	96%	1.48
107.	CMMO	Bell Atlantic	124,381	2,847	127,228	3,597,395	2.95	96%	1.47
108.	SWMO	Southwestern Bell Telephone Co	103,599	981	104,580	2,972,987	2.93	95%	1.47
109.	PAPA	Bell Atlantic	216,063	5,388	221,451	6,315,771	2.92	95%	1.46
110.	SCKY	BellSouth Telecommunications	43,076	934	44,010	1,255,189	2.92	95%	1.46
111.	GCSC	GTSC+COSC	6,687	215	6,902	197,191	2.92	95%	1.46
112.	GTSC	GTSC+COSC	5,935	191	6,126	175,287	2.91	95%	1.46

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
113.	NERI	New England Telephone	22,927	508	23,435	673,401	2.90	94%	1.45
114.	GTFL	GTE FLORIDA, INC.	76,094	(1,283)	74,811	2,161,945	2.88	94%	1.44
115.	PNWA	U S WEST Communications	95,215	1,155	96,370	2,788,269	2.88	94%	1.44
116.	NJNJ	Bell Atlantic	214,125	(1,080)	213,045	6,180,731	2.87	93%	1.44
117.	COCA	GTCA+COCA	11,223	465	11,688	340,390	2.86	93%	1.43
118.	ALWR	Western Reserve Tel	5,517	226	5,743	167,301	2.86	93%	1.43
119.	NEME	New England Telephone	23,277	664	23,941	702,484	2.84	92%	1.42
120.	DSDE	Bell Atlantic	18,367	387	18,754	550,371	2.84	92%	1.42
121.	GCCA	GTCA+COCA	144,631	5,987	150,618	4,423,106	2.84	92%	1.42
1.2.	GTCA	GTCA+COCA	133,408	5,522	138,930	4,082,716	2.84	92%	1.42
123.	NWMN	U S WEST Communications	90,227	796	91,023	2,689,913	2.82	92%	1.41
124.	GTOK	GTE Southwest Incorporated	3,525	190	3,715	110,421	2.80	91%	1.40
125.	SCTN	BellSouth Telecommunications	94,849	881	95,730	2,846,289	2.80	91%	1.40
126.	MSUT	U S WEST Communications	42,865	922	43,787	1,341,896	2.72	88%	1.36
127.	CENV	Centel Telephone System	28,319	261	28,580	878,141	2.71	88%	1.36
128.	MSID	Boc	17,012	227	17,239	537,848	2.67	87%	1.34
129.	USID	PNID+MSID	17,929	220	18,149	572,651	2.64	86%	1.32
130.	PTCA	PACIFIC BELL	630,027	8,471	638,498	20,159,681	2.64	86%	1.32
131.	GLIN	Contel of the South, Inc.	303	8	311	9,838	2.63	86%	1.32
132.	COIN	GTIN+COIN	5,593	158	5,751	184,012	2.60	85%	1.30
133.	GTMI	GTE North Incorporated	19,758	1,331	21,089	675,426	2.60	85%	1.30
134.	GTNE	GTE Midwest Incorporated	1,757	86	1,843	59,028	2.60	85%	1.30
135.	NWIA	U S WEST Communications	40,251	240	40,491	1,302,773	2.59	84%	1.30
136.	GCIN	GTIN+COIN	28,007	792	28,799	931,337	2.58	84%	1.29
137.	GTIN	GTIN+COIN	22,414	634	23,048	747,325	2.57	84%	1.29
138.	GLIL	GTIL+GLIL+COIL	1,283	41	1,324	43,327	2.55	83%	1.27
139.	COIL	GTIL+GLIL+COIL	5,673	182	5,855	191,817	2.54	83%	1.27
140.	OBOH	Ohio Bell	134,678	5,630	140,308	4,609,751	2.54	82%	1.27
141.	PNOR	U S WEST Communications	50,027	824	50,851	1,677,119	2.53	82%	1.26

		Network Oper	Support	Total Network (\$000s)	Total Lines	Monthly Expense per Line (\$)	% of Average	per month effect of 50% Reduction	
142.	GCIL	GTIL+GLIL+COIL	26,622	853	27,475	906,404	2.53	82%	1.26
143.	GTIL	GTIL+GLIL+COIL	19,666	630	20,296	671,260	2.52	82%	1.26
144.	GLMI	Contel of the South, Inc.	1,430	70	1,500	49,629	2.52	82%	1.26
145.	GTOR	GTE Northwest Incorporated	13,835	609	14,444	482,337	2.50	81%	1.25
146.	MBMI	Michigan Bell	165,137	10,094	175,231	5,877,596	2.48	81%	1.24
147.	CBKY	CBIN+CBKY+CBOH+CBTC	5,486	131	5,617	190,076	2.46	80%	1.23
148.	GTOH	GTE North Incorporated	23,994	489	24,483	840,940	2.43	79%	1.21
149.	CNTC	CBIN+CBKY+CBOH+CBTC	28,090	673	28,763	995,491	2.41	78%	1.20
150.	LBIL	Illinois Bell	213,539	7,685	221,224	7,664,356	2.41	78%	1.20
151.	CBOH	CBIN+CBKY+CBOH+CBTC	22,604	542	23,146	805,415	2.39	78%	1.20
152.	COQS	GTPA+COPA+COQS	1,158	43	1,202	42,113	2.38	77%	1.19
153.	GCPA	GTPA+COPA+COQS	17,212	64	17,855	638,586	2.33	76%	1.17
154.	GTPA	GTPA+COPA+COQS	14,313	535	14,848	531,076	2.33	76%	1.16
155.	COPA	GTPA+COPA+COQS	1,740	65	1,805	65,397	2.30	75%	1.15
156.	NBIN	Indiana Bell	60,003	1,956	61,959	2,348,475	2.20	71%	1.10
157.	PNID	Boc	917	(7)	910	34,773	2.18	71%	1.09
158.	GTWI	GTE North Incorporated	11,581	238	11,819	475,166	2.07	67%	1.04
159.	LTNE	ALIAN COMMUNICATIONS CO.	7,354	371	7,725	316,289	2.04	66%	1.07
160.	WTWI	Wisconsin Bell	56,705	3,676	60,381	2,497,887	2.01	65%	1.01
161.	Total		\$ 8,132,713	\$ 162,111	\$ 8,294,824	224,698,998	\$ 3.08	100%	\$ 1.54

1996 Digital Electronic Switching - by Company
(S000s)

			<u>Expense</u>	<u>Investment</u>	<u>Ratio</u>
1	SBFL ¹⁷	BellSouth Telecommunications	77,794	1,359,421	5.72%
2.	SNCT	Southern New England Telephone	68,139	598,247	11.39%
3.	DSDE	Bell Atlantic	11,383	131,150	8.68%
4.	SWKS	Southwestern Bell Telephone Co	27,663	319,496	8.66%
5.	SWOK	Southwestern Bell Telephone Co	31,971	388,853	8.22%
6.	SWTX	Southwestern Bell Telephone Co	146,819	1,842,640	7.97%
7.	UTNJ	UTC OF NEW JERSEY, INC.	5,168	65,189	7.93%
8.	WTWI	Wisconsin Bell	35,777	451,617	7.92%
9.	SWAR	Southwestern Bell Telephone Co	22,083	279,082	7.91%
10.	CEIL	CENTEL OF ILLINOIS	8,672	110,412	7.85%
11.	LBIL	Illinois Bell	123,364	1,599,390	7.71%
12.	SWMO	Southwestern Bell Telephone Co	42,980	567,133	7.58%
13.	CEVA	CENTEL OF VIRGINIA	7,722	105,952	7.29%
14.	NBIN	Indiana Bell	38,402	529,798	7.26%
15.	NJNJ	Bell Atlantic	102,364	1,430,262	7.16%
16.	PAPA	Bell Atlantic	101,400	1,436,724	7.06%
17.	GTVA	GTVA+COVA	1,066	15,255	6.99%
18.	GCVA	GTVA+COVA	16,704	239,111	6.99%
19.	COVA	GTVA+COVA	15,638	223,856	6.99%
20.	MBMI	Michigan Bell	86,804	1,267,725	6.85%
21.	CVVA	Bell Atlantic	61,907	905,423	6.84%
22.	OBOH	Ohio Bell	68,621	1,017,857	6.74%
23.	LTNE	ALIAN COMMUNICATIONS CO.	8,347	126,244	6.61%
24.	CENC	Centel Telephone System	6,674	100,972	6.61%
25.	CWVW	Bell Atlantic	19,242	291,839	6.59%
26.	PRPR	Puerto Rico Telephone Company	25,016	339,548	6.42%
27.	PRCC	PRTC - CENTRAL	4,930	76,767	6.42%
28.	UTNC	CAROLINA TEL. AND TELGPH. CO.	26,763	417,705	6.41%
29.	CEFL	CENTEL OF FLORIDA	12,421	196,014	6.34%
30.	GCIN	GTIN+COIN	25,488	406,522	6.27%
31.	GTIN	GTIN+COIN	20,398	325,340	6.27%
32.	COIN	GTIN+COIN	5,090	81,182	6.27%
33.	SCLA	BellSouth Telecommunications	36,645	585,240	6.26%
34.	UTFL	UTC OF FLORIDA	34,523	556,795	6.20%
35.	GTFL	GTE FLORIDA, INC.	54,211	874,553	6.20%
36.	PTNV	Nevada Bell	5,775	93,408	6.18%
37.	UTPA	UTC OF PENNSYLVANIA	7,923	129,517	6.12%
38.	GTOR	GTE Northwest Incorporated	12,169	204,365	5.95%
39.	CENV	Centel Telephone System	16,061	270,252	5.94%
40.	PTCA	PACIFIC BELL	238,645	4,038,964	5.91%
41.	GTMI	GTE North Incorporated	14,361	243,799	5.89%
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	¹⁷ SBFL - 1997		94,787	1,458,938	6.50%

			Expense	Investment	Ratio
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42.	CNTC	CBIN+CBKY+CBOH+CBTC	17,115	296,906	5.76%
43.	CBOH	CBIN+CBKY+CBOH+CBTC	13,772	238,920	5.76%
44.	CBKY	CBIN+CBKY+CBOH+CBTC	3,343	57,986	5.76%
45.	SCKY	BellSouth Telecommunications	19,866	345,725	5.75%
46.	CMMD	Bell Atlantic	60,789	1,058,122	5.74%
47.	SCTN	BellSouth Telecommunications	\$ 44,000	\$ 774,482	5.68%
48.	GTIA	GTIA+COIA+COSI	3,303	57,957	5.70%
49.	COIA	GTIA+COIA+COSI	2,255	39,572	5.70%
50.	GCIA	GTIA+COIA+COSI	7,636	134,005	5.70%
51.	COSI	GTIA+COIA+COSI	2,079	36,476	5.70%
52.	ATNC	Alltel Carolina - NC	4,221	74,182	5.69%
53.	TUWA	Tel Util of WA Inc	3,667	64,455	5.69%
54.	UTMN	UTC Minnesota	3,319	58,337	5.69%
55.	ICOs	Independent companies	736,435	12,942,830	5.69%
56.	CETX	CENTEL OF TEXAS	4,408	77,475	5.69%
57.	CCPA	C-TEC Corporation - PA	5,664	99,536	5.69%
58.	ATOH	Alltel Ohio Inc	2,957	51,967	5.69%
59.	ATAK	Anchorage Tel Util	3,727	65,494	5.69%
60.	FRMN	Frontier-MN	2,566	45,105	5.69%
61.	NSNC	North State Tel Co	2,648	46,539	5.69%
62.	ROCA	Roseville Tel Co	2,451	43,080	5.69%
63.	SCTN	BellSouth Telecommunications	44,000	774,482	5.68%
64.	COMO	GTMO+COCM+COEM+COMO	7,161	126,912	5.64%
65.	GCMO	GTMO+COCM+COEM+COMO	12,686	224,822	5.64%
66.	COCM	GTMO+COCM+COEM+COMO	1,667	29,542	5.64%
67.	GTMO	GTMO+COCM+COEM+COMO	3,731	66,120	5.64%
68.	UTTX	UTC OF TEXAS, INC.	2,254	40,172	5.61%
69.	COAL	Contel of the South, Inc.	2,693	48,021	5.61%
70.	UTWA	UTOR+UTWA+UTNW	1,850	32,986	5.61%
71.	UTOR	UTOR+UTWA+UTNW	1,611	28,739	5.61%
72.	SUNW	UTOR+UTWA+UTNW	3,461	61,725	5.61%
73.	CCAR	COAR+COSA+COAT	2,485	44,396	5.60%
74.	COSA	COAR+COSA+COAT	527	9,424	5.60%
75.	GCAR	COAR+COSA+COAT	3,012	53,820	5.60%
76.	GTTX	GTTX+COTX	46,017	823,164	5.59%
77.	COTX	GTTX+COTX	6,725	120,290	5.59%
78.	GCTX	GTTX+COTX	52,742	943,454	5.59%
79.	GTOH	GTE North Incorporated	18,183	326,362	5.57%
80.	GTPA	GTPA+COPA+COQS	12,070	218,401	5.53%
81.	COQS	GTPA+COPA+COQS	977	17,675	5.53%
82.	GCPA	GTPA+COPA+COQS	14,514	262,628	5.53%
83.	COPA	GTPA+COPA+COQS	1,467	26,552	5.53%
84.	SBGA	BellSouth Telecommunications	58,464	1,058,927	5.52%
85.	GLIL	GTIL+GLIL+COIL	1,156	21,177	5.46%
86.	COIL	GTIL+GLIL+COIL	5,112	93,629	5.46%
87.	GCIL	GTIL+GLIL+COIL	23,991	439,365	5.46%
88.	GTIL	GTIL+GLIL+COIL	17,722	324,559	5.46%
89.	GTID	GTE Northwest Incorporated	3,324	61,512	5.40%

			Expense	Investment	Ratio
90.	GTAL	GTE South Incorporated	4,228	79,449	5.32%
91.	MSWY	U S WEST Communications	3,333	62,740	5.31%
92.	GTAR	GTE Southwest Incorporated	2,258	43,214	5.23%
93.	UTTN	UTTN+UTVA+UTIM	5,420	103,734	5.22%
94.	UTVA	UTTN+UTVA+UTIM	2,365	45,267	5.22%
95.	SUIM	UTTN+UTVA+UTIM	7,785	149,001	5.22%
96.	GTHI	GTE Hawaiian Telephone Company	21,159	407,940	5.19%
97.	SBNC	BellSouth Telecommunications	41,836	812,741	5.15%
98.	GTWA	GTWA+COWA	19,298	387,896	4.98%
99.	COWA	GTWA+COWA	2,274	45,701	4.98%
100.	GCWA	GTWA+COWA	21,572	433,597	4.98%
101.	SBSC	BellSouth Telecommunications	24,610	494,959	4.97%
102.	ALGC	ALLTEL GEORGIA COMMUNICATION C	5,714	116,098	4.92%
103.	SCAL	BellSouth Telecommunications	30,881	630,327	4.90%
104.	GCNC	GTNC+CONC	9,507	194,138	4.90%
105.	GTNC	GTNC+CONC	5,775	117,919	4.90%
106.	CONC	GTNC+CONC	3,732	76,219	4.90%
107.	CONM	GTNM+CONM	1,036	21,274	4.87%
108.	GCNM	GTNM+CONM	2,171	44,562	4.87%
109.	GTNM	GTNM+CONM	1,135	23,288	4.87%
110.	NYTC	NYNY+NYCT	194,770	4,028,701	4.83%
111.	GLMI	Contel of the South, Inc.	1,053	21,960	4.80%
112.	GTOK	GTE Southwest Incorporated	2,112	54,539	4.79%
113.	CDDC	Bell Atlantic	11,055	231,825	4.77%
114.	SCMS	BellSouth Telecommunications	21,439	452,068	4.74%
115.	GTNE	GTE Midwest Incorporated	1,434	30,300	4.73%
116.	NWND	U S WEST Communications	3,765	79,910	4.71%
117.	GCCA	GTCA+COCA	90,476	1,923,743	4.70%
118.	GTCA	GTCA+COCA	83,455	1,774,461	4.70%
119.	COCA	GTCA+COCA	7,021	149,282	4.70%
120.	MSID	Boc	4,897	105,617	4.64%
121.	USID	PNID+MSID	5,026	109,744	4.58%
122.	PNOR	U S WEST Communications	14,367	316,992	4.53%
123.	ALPA	ALLTEL Pennsylvania	4,167	93,889	4.44%
124.	RTNY	Rochester Telephone Corporatio	10,251	234,327	4.37%
125.	COAZ	GTE California Incorporated	175	4,089	4.28%
126.	GTSC	GTSC+COSC	4,283	101,118	4.24%
127.	COSC	GTSC+COSC	543	12,818	4.24%
128.	GCSC	GTSC+COSC	4,826	113,936	4.24%
129.	GCTM	GTMN+COMN+COTM	5,380	129,039	4.17%
130.	COMN	GTMN+COMN+COTM	5,234	125,542	4.17%
131.	GTMN	GTMN+COMN+COTM	146	3,497	4.17%
132.	MSAZ	U S WEST Communications	25,245	605,998	4.17%
133.	NWIA	U S WEST Communications	12,128	293,245	4.14%
134.	CONV	GTE California Incorporated	644	15,671	4.11%
135.	GNCA	GTE Northwest Incorporated	274	6,685	4.10%
136.	GTWI	GTE North Incorporated	8,977	219,629	4.09%
137.	PNWA	U S WEST Communications	25,617	629,882	4.07%

		Expense	Investment	Ratio	
		-----	-----	-----	
138.	GTKY	GTKY+COKY	9,524	236,116	4.03%
139.	COKY	GTKY+COKY	2,163	53,632	4.03%
140.	GCKY	GTKY+COKY	11,687	289,748	4.03%
141.	UTMO	UTC OF MISSOURI	3,357	83,302	4.03%
142.	MSUT	U S WEST Communications	10,723	271,712	3.95%
143.	GLIN	Contel of the South, Inc.	193	4,923	3.92%
144.	UTOH	UTC OF OHIO	10,696	275,220	3.89%
145.	NWSD	U S WEST Communications	3,487	90,405	3.86%
146.	MSMT	U S WEST Communications	5,294	137,406	3.85%
147.	NEMA	New England Telephone	57,170	1,485,614	3.85%
148.	NWMN	U S WEST Communications	23,001	637,382	3.61%
149.	MSNM	U S WEST Communications	8,351	237,769	3.51%
150.	NERJ	New England Telephone	7,154	206,725	3.46%
151.	ALWR	Western Reserve Tel	3,170	96,165	3.30%
152.	MSCO	U S WEST Communications	21,255	646,577	3.29%
153.	UTIN	UTC OF INDIANA, INC.	3,731	116,825	3.19%
154.	PNID	Boc	129	4,127	3.13%
155.	NWNE	U S WEST Communications	6,299	211,170	2.98%
156.	NEME	New England Telephone	8,300	281,789	2.95%
157.	CTTR	CTRH+CTUP+CTWC+CTNY	4,049	144,998	2.79%
158.	GTMC	Micronesian Telecommunications	427	15,782	2.71%
159.	NEVT	New England Telephone	3,819	151,488	2.52%
160.	NENH	New England Telephone	6,622	268,389	2.47%
			-----	-----	
161.	Total		\$ 3,904,956	\$ 68,512,978	5.70%

1996 Circuit Equipment - by Company

(\$000s)

		Expense	Investment	Ratio	
		-----	-----	-----	
1	SBFL*	BellSouth Telecommunications	44,597	2,272,447	1.96%
2	PRPR	Puerto Rico Telephone Company	15,313	254,771	6.01%
3	PRCC	PRTC - CENTRAL	3,018	50,207	6.01%
4	LTNE	ALIANI COMMUNICATIONS CO.	2,193	47,740	4.59%
5	CEFL	CENTEL OF FLORIDA	4,790	104,348	4.59%
6	GTMC	Micronesian Telecommunications	134	3,153	4.25%
7	CNTC	CBIN+CBKY+CBOH+CBTC	10,574	267,418	3.95%
8	CBOH	CBIN+CBKY+CBOH+CBTC	8,509	215,191	3.95%
9	CBKY	CBIN+CBKY+CBOH+CBTC	2,065	52,227	3.95%
10	SWOK	Southwestern Bell Telephone Co	15,374	487,106	3.16%
11	PTNV	Nevada Bell	2,077	68,827	3.02%
12	CEIL	CENTEL OF ILLINOIS	1,374	45,794	3.00%
13	UTPA	UTC OF PENNSYLVANIA	2,893	101,161	2.86%
14	NYTC	NYNY+NYCT	102,968	3,731,749	2.76%
15	UTFL	UTC OF FLORIDA	11,114	411,790	2.70%
16	UTIN	UTC OF INDIANA, INC.	1,426	53,505	2.67%
17	NERI	New England Telephone	4,419	167,057	2.65%
18	SNCT	Southern New England Telephone	22,097	844,039	2.62%
19	UTTX	UTC OF TEXAS, INC.	1,877	72,615	2.58%
20	ALWR	Western Reserve Tel	979	38,110	2.57%
21	SWAR	Southwestern Bell Telephone Co	9,366	372,916	2.51%
22	CMMD	Bell Atlantic	28,586	1,140,652	2.51%
23	SBNC	BellSouth Telecommunications	22,930	933,891	2.46%
24	N/NJ	Bell Atlantic	45,174	1,876,302	2.41%
25	UTOH	UTC OF OHIO	3,529	146,634	2.41%
26	DSDE	Bell Atlantic	4,199	176,133	2.38%
27	LBIL	Illinois Bell	36,770	1,545,085	2.38%
28	UTMO	UTC OF MISSOURI	1,641	69,248	2.37%
29	NEMA	New England Telephone	36,560	1,547,919	2.36%
30	MSAZ	U S WEST Communications	22,348	958,325	2.33%
31	RTNY	Rochester Telephone Corporatio	2,168	93,281	2.32%
32	SCLA	BellSouth Telecommunications	19,126	828,274	2.31%
33	PTCA	PACIFIC BELL	101,039	4,385,338	2.30%
34	SBGA	BellSouth Telecommunications	39,473	1,722,696	2.29%
35	SWTX	Southwestern Bell Telephone Co	74,971	3,352,612	2.24%
36	UTNJ	UTC OF NEW JERSEY, INC.	1,016	45,548	2.23%
37	PNOR	U S WEST Communications	10,309	462,577	2.23%
38	WTWI	Wisconsin Bell	10,926	490,310	2.23%
39	NENH	New England Telephone	6,646	298,457	2.23%
40	SWMO	Southwestern Bell Telephone Co	19,641	897,016	2.17%
41	ALPA	ALLTEL Pennsylvania	1,261	57,989	2.17%

* SBFL - 1997

46,898

2,484,330

1.89%

		Expense	Investment	Ratio	
42	MSMT	U S WEST Communications	2,786	129,017	2.16%
43	UTWA	UTOR+UTWA+UTNW	412	22,271	2.12%
44	SUNW	UTOR+UTWA+UTNW	884	41,675	2.12%
45	UTOR	UTOR+UTWA+UTNW	412	19,404	2.12%
46	NWMN	U S WEST Communications	14,430	680,314	2.12%
47	NWND	U S WEST Communications	1,770	83,795	2.11%
48	MSWY	U S WEST Communications	2,578	122,631	2.10%
49	PAPA	Bell Atlantic	39,213	1,872,872	2.09%
50	SWKS	Southwestern Bell Telephone Co	9,712	466,519	2.08%
51	NBIN	Indiana Bell	11,396	552,810	2.06%
52	NWSD	U S WEST Communications	1,986	96,620	2.06%
53	CVVA	Bell Atlantic	27,073	1,319,060	2.05%
54	NWNE	U S WEST Communications	5,503	269,488	2.04%
55	GNCA	GTE Northwest Incorporated	114	5,666	2.01%
56	CEVA	CENTEL OF VIRGINIA	1,547	77,008	2.01%
57	CENC	Centel Telephone System	1,243	62,003	2.00%
58	SCAL	BellSouth Telecommunications	14,822	742,314	2.00%
59	MSCO	U S WEST Communications	21,688	1,087,190	1.99%
60	SCKY	BellSouth Telecommunications	8,733	452,172	1.97%
61	SCTN	BellSouth Telecommunications	\$ 20,522	\$ 1,070,351	1.92%
62	CDDC	Bell Atlantic	5,308	272,026	1.95%
63	SBSC	BellSouth Telecommunications	11,027	570,642	1.93%
64	SCTN	BellSouth Telecommunications	20,522	1,070,351	1.92%
65	MBMI	Michigan Bell	30,994	1,630,892	1.90%
66	MSUT	U S WEST Communications	6,928	370,822	1.87%
67	CWWV	Bell Atlantic	5,471	303,432	1.80%
68	SCMS	BellSouth Telecommunications	10,027	565,325	1.77%
69	PNWA	U S WEST Communications	16,699	960,679	1.74%
70	MSNM	U S WEST Communications	5,457	324,331	1.68%
71	NEME	New England Telephone	4,684	278,676	1.68%
72	CTTR	CTRH+CTUP+CTWC+CTNY	979	59,112	1.66%
73	CCPA	C-TEC Corporation - PA	1,115	68,576	1.63%
74	UTMN	UTC Minnesota	654	40,191	1.63%
75	ATNC	Alltel Carolina - NC	831	51,108	1.63%
76	TUWA	Tel Util of WA Inc	722	44,407	1.63%
77	ICOs	Independent companies	145,022	8,917,032	1.63%
78	ROCA	Roseville Tel Co	483	29,680	1.63%
79	CETX	CENTEL OF TEXAS	868	53,377	1.63%
80	ATOH	Alltel Ohio Inc	582	35,803	1.63%
81	ATAK	Anchorage Tel Util	734	45,122	1.63%
82	FRMN	Frontier-MN	505	31,075	1.63%
83	NSNC	North State Tel Co	521	32,063	1.63%
84	NEVT	New England Telephone	2,345	144,352	1.62%
85	GTHI	GTE Hawaiian Telephone Company	4,965	305,936	1.62%
86	OBOH	Ohio Bell	19,079	1,192,494	1.60%
87	NWIA	U S WEST Communications	5,580	350,201	1.59%
88	MSID	Boc	2,662	168,326	1.58%
89	GLIN	Contel of the South, Inc.	34	2,189	1.55%
90	USID	PNID+MSID	2,781	179,658	1.55%

		Expense	Investment	Ratio	
		-----	-----	-----	
91	CENV	Centel Telephone System	1,577	102,523	1.54%
92	COMN	GTMN+COMN+COTM	928	63,770	1.46%
93	GTMN	GTMN+COMN+COTM	26	1,776	1.46%
94	GCTM	GTMN+COMN+COTM	954	65,546	1.46%
95	GCIN	GTIN+COIN	3,892	268,582	1.45%
96	GTIN	GTIN+COIN	3,115	214,946	1.45%
97	COIN	GTIN+COIN	777	53,636	1.45%
98	UTNC	CAROLINA TEL. AND TELGPH. CO.	4,713	327,517	1.44%
99	GTPA	GTPA+COPA+COQS	1,739	125,922	1.38%
100.	COPA	GTPA+COPA+COQS	211	15,309	1.38%
101.	COQS	GTPA+COPA+COQS	141	10,191	1.38%
102.	GCPA	GTPA+COPA+COQS	2,091	151,421	1.38%
103.	UTTN	UTTN+UTVA+UTIM	800	60,398	1.32%
104.	SUIM	UTTN+UTVA+UTIM	1,149	86,754	1.32%
105	UTVA	UTTN+UTVA+UTIM	349	26,356	1.32%
106.	ALGC	ALLTEL GEORGIA COMMUNICATION CL	700	133,831	1.27%
107	COAL	Contel of the South, Inc.	340	29,221	1.16%
108.	GCAR	COAR+COSA+COAT	357	30,706	1.16%
109.	COAR	COAR+COSA+COAT	294	25,329	1.16%
110.	COSA	COAR+COSA+COAT	63	5,377	1.16%
111	GTAL	GTE South Incorporated	648	55,916	1.16%
112	GTWA	GTWA+COWA	3,065	264,941	1.16%
113	COWA	GTWA+COWA	361	31,215	1.16%
114	GCWA	GTWA+COWA	3,426	296,156	1.16%
115	COMO	GTMO+COCM+COEM+COMO	721	63,090	1.14%
116.	GCMO	GTMO+COCM+COEM+COMO	1,278	111,762	1.14%
117.	COCM	GTMO+COCM+COEM+COMO	168	14,686	1.14%
118.	GTMO	GTMO+COCM+COEM+COMO	376	32,869	1.14%
119	G CIA	GTIA+COIA+COSI	940	83,604	1.12%
120	COSI	GTIA+COIA+COSI	256	22,757	1.12%
121	GTIA	GTIA+COIA+COSI	407	36,159	1.12%
122.	COIA	GTIA+COIA+COSI	278	24,688	1.12%
123	GTOR	GTE Northwest Incorporated	1,466	132,282	1.11%
124	PNID	Boc	119	11,332	1.05%
125	GTFL	GTE FLORIDA, INC.	5,222	510,908	1.02%
126	GLIL	GTIL+GLIL+COIL	118	11,601	1.02%
127.	GCIL	GTIL+GLIL+COIL	2,455	240,678	1.02%
128.	GTIL	GTIL+GLIL+COIL	1,814	177,789	1.02%
129	COIL	GTIL+GLIL+COIL	523	51,288	1.02%
130	CONV	GTE California Incorporated	82	8,048	1.02%
131.	GLMI	Contel of the South, Inc.	130	13,270	0.98%
132	GTNM	GTNM+CONM	108	11,173	0.97%
133.	CONM	GTNM+CONM	99	10,207	0.97%
134	GCNM	GTNM+CONM	207	21,380	0.97%
135	GTOH	GTE North Incorporated	2,395	252,265	0.95%
136.	GTTX	GTTX+COTX	4,845	512,978	0.94%
137	COTX	GTTX+COTX	708	74,962	0.94%

		Expense	Investment	Ratio	
		-----	-----	-----	
138.	GCTX	GTTX+COTX	5,553	587,940	0.94%
139.	GTWI	GTE North Incorporated	1,488	167,757	0.89%
140.	GTSC	GTSC+COSC	402	46,470	0.87%
141.	COSC	GTSC+COSC	51	5,891	0.87%
142.	GCSC	GTSC+COSC	453	52,360	0.87%
143.	GTOK	GTE Southwest Incorporated	247	29,257	0.84%
144.	GTKY	GTKY+COKY	1,218	150,937	0.81%
145.	COKY	GTKY+COKY	277	34,284	0.81%
146.	GCKY	GTKY+COKY	1,495	185,221	0.81%
147.	GTID	GTE Northwest Incorporated	458	57,204	0.80%
148.	GTMI	GTE North Incorporated	1,943	250,715	0.77%
149.	GTNE	GTE Midwest Incorporated	136	18,257	0.74%
150.	COAZ	GTE California Incorporated	19	2,624	0.72%
151.	GTAR	GTE Southwest Incorporated	221	30,598	0.72%
152.	GTNC	GTNC+CONC	523	77,858	0.67%
153.	GCNC	GTNC+CONC	861	128,182	0.67%
154.	CONC	GTNC+CONC	338	50,324	0.67%
155.	GTVA	GTVA+COVA	61	9,868	0.62%
156.	GCVA	GTVA+COVA	963	154,672	0.62%
157.	COVA	GTVA+COVA	902	144,804	0.62%
158.	GTCA	GTCA+COCA	5,581	1,173,127	0.48%
159.	GCCA	GTCA+COCA	6,031	1,271,820	0.48%
160.	COCA	GTCA+COCA	470	98,693	0.48%
		-----	-----		
161	Total	\$ 1,316,718	\$ 66,497,141	1.98%	

Exhibit __ (GCG-15)
Sensitive Input Group XIII: Cost of Capital

EXHIBIT __ (GCG-15)
SENSITIVE INPUT GROUP XIII: COST OF CAPITAL

This Sensitive Input Group encompasses the following related user-adjustable inputs:

- B-178 Cost of Capital:
 - Cost of Debt
 - Debt Percent
 - Cost of Equity
 - Weighted Average Cost of Capital

A description of each of these UAIs can be found in the HAI Model Release 5.0a Inputs Portfolio, which was provided by MCI and AT&T in discovery in this case.

AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

For each of the inputs required by HAI R5.0a for B-178, we have reflected the position of the BST witness that deals with the cost of capital and rate of return issues. These recommendations are as follows:

<u>Input B-178: Cost of Capital</u>	<u>Default⁹</u>	<u>BST Position</u>
	-----	-----
Cost of Debt	6.65%	6.50%
Debt Percent	38.50%	40.00%
Cost of Equity	<u>9.65%</u>	<u>14.40%</u>
Total Weighted Cost of Capital (After Tax)	<u>8.44%</u>	<u>11.24%</u>

⁹ These values for cost of capital represent those filed by Mr. Wood in Florida.

Exhibit __ (GCG-16)
Sensitive Input Group XIV: Depreciation

EXHIBIT __ (GCG-16)
SENSITIVE INPUT GROUP XIV: DEPRECIATION

This Sensitive Input Group encompasses the following related user-adjustable inputs:

- B-179 Depreciation Lives by Plant Type
- B-179 Net Salvage Percentage by Plant Type

A description of each of these UAIs can be found in the HA! Model Release 5.0a Inputs Portfolio, which was provided by MCI and AT&T in discovery in this case.

AVAILABILITY OF COST AND OTHER
FORWARD-LOOKING DATA SPECIFIC TO BELLSOUTH-FLORIDA

For the specific inputs required by HAI R5.0a for B-179, depreciation lives and net salvage percentages by plant type, we have reflected the BST position on this issue. BST's position is as follows:

Input B-179: Depreciation Lives

	Default ¹⁰	BST Position
	-----	-----
1. Motor Vehicles	7.50	8.00
2. Garage Work Equip	12.00	12.00
3. Other Work Equip	15.00	15.00
4. Buildings	5.00	45.00
5. Furniture	11.00	15.00
6. Office Support Equipment	10.50	11.50
7. Corp Comm Equipment	7.00	7.00
8. Computers	4.40	5.00
9. Digital Electronic Switching	16.00	10.00
10. Operator Systems	10.00	10.00
11. Digital Circuit Equipment	10.50	9.00
12. Public Telephone Terminal Equipment	7.00	6.00
13. Poles	35.00	34.00
14. Aerial Cable - Metallic	18.00	14.00
15. Aerial Cable - Non-Metallic	25.00	20.00
16. Underground Cable - Metallic	23.00	12.00
17. Underground Cable - Non-Metallic	25.00	20.00
18. Buried cable - Metallic	18.00	14.00
19. Buried cable - Non-Metallic	25.00	20.00
20. Introbuiding Network-Metal	20.00	20.00
21. Introbuiding Network-Non-Metallic	20.00	20.00
22. Conduit Systems	55.00	55.00

¹⁰ These values for depreciation lives represent those filed by Mr. Wood in Florida.

Input B-179: Net Salvage Percentage

	Default ¹¹	BST Position
	-----	-----
	%	%
1. Motor Vehicles	10.00	16.00
2. Garage Work Equipment	0.00	0.00
3. Other Work Equipment	1.00	0.00
4. Buildings	4.00	0.00
5. Furniture	14.00	10.00
6. Office Support Equipment	10.00	5.00
7. Corp Comm Equipment	10.00	10.00
8. Computers	0.00	0.00
9. Digital Electronic Switch	0.00	0.00
10. Operator Systems	0.00	0.00
11. Digital Circuit Equipment	0.00	0.00
12. Public Telephone Terminal Equipment	3.00	5.00
13. Poles	(75.00)	(50.00)
14. Aerial Cable - Metallic	(11.00)	(14.00)
15. Aerial Cable - Non-Metallic	(11.00)	(14.00)
16. Underground Cable - Metallic	(7.00)	(8.00)
17. Underground Cable - Non-Metallic	(6.00)	(8.00)
18. Buried Cable - Metallic	(8.00)	(7.00)
19. Buried Cable - Non-Metallic	0.00	(7.00)
20. Introbuiding Network-Metallic	(12.00)	(10.00)
21. Introbuiding Network-Non-Metallic	(12.00)	(10.00)
22. Conduit Systems	(7.00)	(10.00)

¹¹ These values for net salvage represent those filed by Mr. Wood in Florida.

Exhibit __ (GCG-17)
Sensitive Input Group XV: Universal Service Support

FL (FLSDA) - Wood Run WCC

Florida
Southern Bell FL

% of Lines Assigned for USF 100%
 % of Lines Assigned for USF 100%
 Quarterly Local DSL usage ratio: 110%
 Monthly Support Benchmark: \$31.88 \$8.88 \$51.00 \$8.88 \$8.88 \$8.88

City	Avg monthly cost per line	Residence	Business	Annual support for primary residence lines	Annual support for secondary business lines	Annual support for engine lines	Annual support for meters	Annual support for public lines	Total Annual support for Types	Allocation		Support Granted Totals
										(20%) Federal	(70%) State	
ALCOA	40.20	40.16	40.54	201,623	0	0	0	0	201,623	62,488	138,217	0
ALCOA	11.88	11.72	11.90	0	0	0	0	0	0	0	0	0
ALCOA	11.94	11.84	12.00	0	0	0	0	0	0	0	0	0
ALCOA	13.49	13.70	13.00	0	0	0	0	0	0	0	0	0
ALCOA	29.81	29.81	30.20	0	0	0	0	0	0	0	0	0
ALCOA	23.72	23.65	23.65	0	0	0	0	0	0	0	0	0
ALCOA	26.64	26.58	26.99	82,648	0	0	0	0	82,648	22,162	60,486	0
ALCOA	19.46	19.37	19.66	0	0	0	0	0	0	0	0	0
ALCOA	41.79	41.75	42.10	415,680	0	0	0	0	415,680	103,520	311,750	0
ALCOA	48.70	48.68	49.12	427,525	0	0	0	0	427,525	108,884	320,651	0
ALCOA	13.63	13.60	13.84	0	0	0	0	0	0	0	0	0
ALCOA	20.78	20.38	20.78	0	0	0	0	0	0	0	0	0
ALCOA	12.23	12.26	12.51	0	0	0	0	0	0	0	0	0
ALCOA	66.59	66.42	68.21	248,044	0	1,829	0	0	250,873	62,710	188,155	0
ALCOA	44.77	44.73	45.05	652,807	0	0	0	0	652,807	163,202	489,605	0
ALCOA	25.91	25.86	26.19	250,582	0	0	0	0	250,582	62,641	187,922	0
ALCOA	22.78	22.72	24.00	0	0	0	0	0	0	0	0	0
ALCOA	16.56	16.52	16.77	0	0	0	0	0	0	0	0	0
ALCOA	15.67	15.60	15.88	0	0	0	0	0	0	0	0	0
ALCOA	69.16	69.16	69.68	776,681	0	0	0	0	776,681	194,170	582,511	0
ALCOA	16.26	16.25	16.32	0	0	0	0	0	0	0	0	0
ALCOA	17.89	17.84	18.12	0	0	0	0	0	0	0	0	0
ALCOA	16.49	16.41	16.60	0	0	0	0	0	0	0	0	0
ALCOA	12.18	12.14	12.40	0	0	0	0	0	0	0	0	0
ALCOA	11.69	11.62	11.86	0	0	0	0	0	0	0	0	0
ALCOA	26.07	26.02	26.28	215,202	0	0	0	0	215,202	52,826	162,372	0
ALCOA	12.15	12.11	12.64	0	0	0	0	0	0	0	0	0
ALCOA	12.47	12.28	12.84	0	0	0	0	0	0	0	0	0
ALCOA	13.31	13.23	13.56	0	0	0	0	0	0	0	0	0
ALCOA	13.02	13.83	13.17	0	0	0	0	0	0	0	0	0
ALCOA	18.29	18.23	18.47	0	0	0	0	0	0	0	0	0
ALCOA	13.86	13.85	14.25	0	0	0	0	0	0	0	0	0
ALCOA	14.22	14.18	14.44	0	0	0	0	0	0	0	0	0
ALCOA	14.20	14.14	14.28	0	0	0	0	0	0	0	0	0
ALCOA	12.87	12.82	13.18	0	0	0	0	0	0	0	0	0
ALCOA	20.24	20.28	20.82	0	0	0	0	0	0	0	0	0
ALCOA	22.43	22.28	22.72	0	0	0	0	0	0	0	0	0
ALCOA	18.53	18.47	18.73	0	0	0	0	0	0	0	0	0
ALCOA	53.86	53.83	55.11	117,234	0	0	0	0	117,234	28,320	87,808	0
ALCOA	10.65	10.79	11.00	0	0	0	0	0	0	0	0	0
ALCOA	10.65	10.63	10.56	0	0	0	0	0	0	0	0	0
ALCOA	12.87	12.81	13.16	0	0	0	0	0	0	0	0	0
ALCOA	11.34	11.23	11.49	0	0	0	0	0	0	0	0	0
ALCOA	11.48	11.41	11.64	0	0	0	0	0	0	0	0	0
ALCOA	12.49	12.40	12.64	0	0	0	0	0	0	0	0	0
ALCOA	11.56	11.73	11.79	0	0	0	0	0	0	0	0	0
ALCOA	14.40	14.34	14.60	0	0	0	0	0	0	0	0	0
ALCOA	17.82	17.75	18.00	0	0	0	0	0	0	0	0	0

Line Type	Support Granted Totals
Primary residence lines	\$13,044,828
Secondary residence lines	30
Single line business lines	\$18,071
Multiple business lines	30
Public lines	0
All number lines	\$13,062,929

FL (F L50a) - Wood Run W/C

Florida
 Schedule Board #1

% of Lump Assigned for USF 100%
 % of Fund Assigned for USF 100%
 Quarterly board O&M charge ratio: 1.00%
 Monthly Support Benchmark: \$11.00 \$0.00 \$11.00 \$0.00 \$0.00 \$0.00

US	Avg monthly cost per line	① Insurance	② Business	Annual support						Total annual support for specified line types	Federal allocation	State allocation	Line Type	Avg point to cost
				for primary	for secondary	for multiple business lines	for residential business lines	for public lines	for other					
OCNFTLCA	27.62	27.56	27.63	0	0	0	0	0	0	0	0	0	0	0
OCNFTLBA	50.14	50.10	50.68	641,026	0	0	0	0	0	641,026	160,256	480,769	0	0
OCNFTLMA	20.87	20.81	20.76	172,533	0	0	0	0	0	172,533	43,133	129,400	0	0
OCNFTLBC	17.49	17.43	17.69	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.47	15.25	15.60	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.16	15.09	15.20	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	20.70	20.60	20.70	283,519	0	0	0	0	0	283,519	73,380	210,139	0	0
OCNFTLMA	18.43	18.41	18.71	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	26.29	26.33	26.62	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	10.26	10.20	10.46	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	11.30	11.47	11.68	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	12.43	12.26	12.61	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	19.42	19.54	19.67	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.65	15.59	15.95	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	46.94	46.92	46.49	670,869	0	0	0	0	0	670,869	167,867	503,001	0	0
OCNFTLMA	22.29	22.42	22.68	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	56.87	56.87	57.24	720,800	0	0	0	0	0	744,419	186,103	558,316	0	0
OCNFTLMA	16.22	16.19	16.48	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	13.37	13.21	13.56	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	17.68	17.61	17.89	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	12.95	12.88	13.13	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.02	14.95	15.21	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	11.00	10.88	11.11	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	12.67	12.62	12.89	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	21.31	21.56	21.46	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	8.33	8.07	8.33	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	16.29	16.24	16.50	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.34	15.26	15.50	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	18.77	18.70	18.95	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	12.10	12.03	12.24	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	10.74	10.61	10.85	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.04	15.00	15.25	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	14.81	14.94	14.18	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	30.75	30.71	31.06	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	14.81	14.82	14.81	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	18.59	18.53	18.82	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	13.27	13.13	13.43	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	20.57	20.52	20.81	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	15.44	15.31	15.58	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	20.10	20.06	20.33	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	54.34	54.32	54.93	465,265	0	0	0	0	0	465,265	118,457	346,807	0	0
OCNFTLMA	26.94	26.91	27.18	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	10.21	10.11	10.30	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	11.00	10.89	11.14	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	12.60	12.46	12.71	0	0	0	0	0	0	0	0	0	0	0
OCNFTLMA	10.41	10.33	10.54	0	0	0	0	0	0	0	0	0	0	0

FL (FL504) - CCG AB Exhibits (DISC-5)

Florida
Southern Bell FL

% of 1 rep Assigned for USF: 100%
 % of 1 rep Assigned for USF: 100%
 Budgets based on USF average rates: 100%
 Budgets based on USF average rates: 100%
 Budgets based on USF average rates: 100%
 Budgets based on USF average rates: 100%

US	Avg monthly cost per line	Residence		Business		Total annual		Residence		Business		Total annual		Line Type	Support Grant
		request for primary	request for secondary	request for primary	request for secondary	request for primary	request for secondary	request for primary	request for secondary	request for primary	request for secondary	request for primary	request for secondary		
ACORFLA	76.37	21.69	21.40	76.78	1,393,428	0	0	13,856	0	0	0	1,387,214	350,808	590,427	607,839,243
ACORFLA	20.15	20.03	20.34	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	24.19	24.14	24.47	0	0	0	0	149	0	0	0	0	0	0	50
ACORFLA	53.29	53.29	54.02	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	43.48	43.40	43.74	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	76.47	76.20	76.92	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	37.82	37.71	38.08	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	84.49	83.63	84.44	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	81.63	81.63	84.20	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	23.90	23.82	24.15	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.60	20.42	20.85	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	21.75	21.66	22.00	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	134.49	134.25	136.46	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	91.23	91.18	91.80	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	74.15	74.00	74.51	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	45.46	45.20	45.76	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.04	20.00	20.20	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.00	20.00	20.23	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	147.90	147.80	148.88	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	31.67	31.63	31.20	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	34.05	33.50	34.37	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	30.77	30.67	31.00	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	22.60	22.55	22.89	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.63	20.73	21.05	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	52.31	52.24	52.72	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	65.19	65.14	65.55	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	21.20	21.24	21.47	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	25.77	25.65	26.11	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	23.20	23.15	23.46	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.43	20.37	20.68	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	25.17	25.13	25.54	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	23.29	23.20	23.53	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	26.37	26.29	26.61	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	23.79	23.70	24.01	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	41.69	41.43	41.87	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	34.69	34.77	35.12	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	100.00	100.00	101.53	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	18.67	18.55	18.87	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	18.30	18.23	18.53	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	22.50	22.42	22.74	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	19.37	19.23	19.56	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	19.74	19.65	19.90	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	21.60	21.50	21.80	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	22.00	21.78	22.12	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	20.57	20.49	20.83	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	23.77	23.70	24.04	0	0	0	0	0	0	0	0	0	0	0	50
ACORFLA	32.18	32.11	32.43	0	0	0	0	0	0	0	0	0	0	0	50

Line Type	Support Grant
Primary residence lines	607,839,243
Secondary residence lines	50
Single line business lines	5,001,469
Multiple business lines	50
Public lines	50
All unclassified lines	208,340,891

FL (FL59a) - OCC All Exhibits (DISC-5)

Florida
Southern Bell FL

% of Lump Assigned for USF: 100%
 % of Lump Assigned for USF: 100%
 % of Lump Assigned for USF: 100%
 Budgets based on OCC average rates:
 Monthly Budget Benchmarks:
 \$1,100 \$1,100 \$1,100 \$1,100 \$1,100 \$1,100

Account	%	Avg monthly cost per line	Residence	Business	Annual support for primary	Annual support for secondary	Annual support for single line	Annual support for multiple lines	Annual support for public lines	Annual support for special access lines	Total annual support for special access lines	Federal allocation		State allocation		Line Type	Support Group	
												27%	3%	27%	3%			
ACCOUNT BIC	5	18.33	5	18.19	5	18.32	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT BSN	5	16.07	5	15.98	5	16.29	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT CA	5	22.46	5	22.42	5	22.75	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT FL	5	17.98	5	17.88	5	18.27	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT GA	5	13.74	5	13.48	5	13.79	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT IL	5	20.77	5	20.16	5	20.49	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT IN	5	19.06	5	18.89	5	19.23	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT ILC	5	19.20	5	19.09	5	19.48	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LME	5	16.52	5	16.26	5	16.68	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.18	5	19.08	5	19.42	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	20.64	5	20.53	5	20.85	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	21.84	5	21.82	5	22.14	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.33	5	19.18	5	19.49	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	16.02	5	17.75	5	18.05	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	21.58	5	21.44	5	21.76	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	16.82	5	16.52	5	16.83	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	21.18	5	21.08	5	21.39	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	20.80	5	20.80	5	21.18	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.27	5	19.14	5	19.45	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	45.28	5	45.27	5	45.27	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	28.81	5	28.82	5	29.14	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	41.49	5	41.41	5	41.75	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.37	5	19.22	5	19.58	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	48.51	5	48.50	5	49.15	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	245.28	5	245.24	5	246.70	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	34.29	5	34.19	5	34.59	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.81	5	19.72	5	19.86	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	22.43	5	22.33	5	22.66	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	19.89	5	19.79	5	19.72	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	18.11	5	18.03	5	18.23	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	37.42	5	37.26	5	37.42	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	31.23	5	31.27	5	31.29	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	69.94	5	69.92	5	69.94	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	81.41	5	81.26	5	82.02	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	123.02	5	123.02	5	123.02	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	28.37	5	28.31	5	28.64	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	21.21	5	21.08	5	21.29	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	18.25	5	18.06	5	18.27	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	23.74	5	23.61	5	23.91	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	23.43	5	23.28	5	23.17	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	27.89	5	27.81	5	28.15	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	27.55	5	27.50	5	27.85	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	35.89	5	35.83	5	36.13	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	44.50	5	44.45	5	44.82	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	38.07	5	38.06	5	38.34	5	0	5	0	0	0	0	0	0	0	0	0
ACCOUNT LMD	5	29.27	5	29.18	5	29.50	5	0	5	0	0	0	0	0	0	0	0	0

FL (FL50a) - OGD AIR EXHIB 1a (05/23/15)

Florida
Southern Bell FL

% of Long Assigned for USF: 100%
 % of Post Assigned for USF: 100%
 Budgetary Total OGD: \$11.00
 Budgetary Support Branches: \$11.00

CB	Avg monthly cost per line	① Residence	② Business	Avg monthly cost per line	residence lines	business lines	Total annual support for specified line types	Total annual support for specified line types		Federal education	State education	Line Type	Support Grant Totals
								Annual support for primary	Annual support for secondary				
FLCSTLMA	\$	48.42	\$	48.73	\$	2,871,978	\$	0	\$	18,431	\$	48,292	
FLDORFLCS	\$	27.25	\$	27.16	\$	0	\$	0	\$	717,504	\$	2,152,983	
FLDORFLFE	\$	21.30	\$	21.19	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	20.97	\$	20.69	\$	0	\$	0	\$	0	\$	0	
FLDORFLVA	\$	20.81	\$	20.79	\$	0	\$	0	\$	0	\$	0	
FLDORFLWA	\$	79.37	\$	79.37	\$	1,307,430	\$	0	\$	326,867	\$	982,572	
FLDORFLCA	\$	28.68	\$	28.63	\$	0	\$	0	\$	124,641	\$	377,923	
FLDORFLMA	\$	26.32	\$	26.22	\$	0	\$	0	\$	0	\$	0	
FLDORFLWA	\$	22.61	\$	22.49	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	25.97	\$	25.88	\$	0	\$	0	\$	0	\$	0	
FLDORFLCA	\$	40.81	\$	40.73	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	44.88	\$	44.82	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	29.28	\$	29.33	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	32.56	\$	32.50	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	27.02	\$	26.91	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	101.80	\$	101.79	\$	1,082,678	\$	0	\$	200,672	\$	1,442,017	
FLDORFLMA	\$	33.28	\$	33.23	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	28.29	\$	28.20	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	101.11	\$	101.56	\$	776,265	\$	0	\$	187,544	\$	562,831	
FLDORFLMA	\$	25.92	\$	25.82	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	68.98	\$	68.88	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	20.73	\$	20.65	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	30.54	\$	30.49	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	37.24	\$	37.13	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	34.26	\$	34.19	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	29.29	\$	29.28	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	198.08	\$	198.03	\$	2,028,900	\$	0	\$	772,110	\$	818,331	
FLDORFLMA	\$	97.42	\$	97.37	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	20.80	\$	20.83	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	148.55	\$	148.55	\$	2,287,772	\$	0	\$	508,605	\$	1,524,015	
FLDORFLMA	\$	26.07	\$	26.00	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	20.15	\$	20.04	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	80.98	\$	80.90	\$	1,344,428	\$	0	\$	326,107	\$	1,028,321	
FLDORFLMA	\$	18.45	\$	18.29	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	23.95	\$	23.89	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	25.58	\$	25.06	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	21.55	\$	21.43	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	21.82	\$	21.74	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	32.09	\$	32.01	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	26.10	\$	26.04	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	31.75	\$	31.71	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	100.89	\$	100.89	\$	0	\$	0	\$	0	\$	0	
FLDORFLMA	\$	117.17	\$	117.68	\$	1,620,333	\$	0	\$	418,335	\$	1,435,004	
FLDORFLMA	\$	64.11	\$	64.09	\$	1,122,161	\$	0	\$	283,236	\$	848,706	

FL (FL50a) - CCG Air Exhibits (A/leap)

Florida
Southern Bell FL

% of Leap Assigned for USF: 100%
 % of Leap Assigned for USF: 100%
 Number of CCG usage units: 1376
 Monthly Support Benchmark: \$11.00
 Entry of \$0.00 indicates that Line Type is not to be Supported

Line	Agency	Residence	Business	Annual support for primary	Annual support for secondary	Annual support for business lines	Annual support for residence lines	Annual support for public lines	Total Annual support for Types	Estimated @20% adoration	Estimated @25% adoration	Support Grant Totals
ADJUTANT	76.02	76.02	77.26	1,310,137	0	0	0	14,119	1,324,256	331,064	502,192	\$126,000,715
BOCER1A	22.47	22.29	22.61	0	0	0	0	0	0	0	0	0
BOCER1B	21.69	21.56	21.67	0	0	0	0	0	0	0	0	0
BOCER1C	25.87	25.91	26.24	0	0	0	0	0	0	0	0	0
BOCER1D	54.70	54.69	55.43	820,011	0	0	0	718	820,729	200,657	600,171	8320,000
BOCER1E	46.82	46.54	46.99	3,628,910	0	0	0	10,981	3,639,891	909,719	2,730,172	90
BOCER1F	78.23	78.14	78.68	578,422	0	0	0	10,981	589,403	144,289	432,800	0
BOCER1G	28.68	28.58	28.94	578,520	0	0	0	14,565	593,085	144,289	432,800	0
BOCER1H	64.91	64.80	65.32	2,081,803	0	0	0	8,128	2,089,931	524,807	1,572,001	0
BOCER1I	83.77	83.75	84.32	1,517,121	0	0	0	0	1,517,121	381,562	1,144,667	0
BOCER1J	25.57	25.50	25.82	0	0	0	0	0	0	0	0	0
BOCER1K	20.88	20.26	20.68	0	0	0	0	0	0	0	0	0
BOCER1L	23.14	23.05	23.11	0	0	0	0	0	0	0	0	0
BOCER1M	133.83	133.83	135.83	721,388	0	0	0	8,611	730,000	172,000	2,100,000	0
BOCER1N	91.28	91.83	92,803,800	0	0	0	0	27,883	2,803,783	560,766	1,602,878	0
BOCER1O	74.65	74.58	75.03	2,240,805	0	0	0	17,983	2,258,788	560,766	1,602,878	0
BOCER1P	48.55	48.46	48.84	1,168,816	0	0	0	0	1,168,816	292,194	876,622	0
BOCER1Q	48.55	48.46	48.84	1,168,816	0	0	0	0	1,168,816	292,194	876,622	0
BOCER1R	31.82	31.54	31.86	228,085	0	0	0	0	228,085	57,016	171,069	0
BOCER1S	20.28	20.20	20.53	0	0	0	0	0	0	0	0	0
BOCER1T	147.20	147.20	147.80	2,384,877	0	0	0	0	2,384,877	591,219	1,772,658	0
BOCER1U	33.04	33.04	33.50	315,587	0	0	0	0	315,587	78,882	236,875	0
BOCER1V	20.53	20.53	20,511	0	0	0	0	0	20,511	42,639	217,880	0
BOCER1W	31.74	31.74	32.07	175,784	0	0	0	0	175,784	43,941	131,823	0
BOCER1X	24.00	23.95	24.29	0	0	0	0	0	0	0	0	0
BOCER1Y	22.18	22.08	22.40	0	0	0	0	0	0	0	0	0
BOCER1Z	53.00	52.94	53.41	873,648	0	0	0	1,341	875,000	143,797	431,280	0
BOCER2A	68.26	68.23	68.64	3,585,891	0	0	0	20,283	3,606,174	897,791	2,723,244	0
BOCER2B	22.67	22.57	23.00	0	0	0	0	0	0	0	0	0
BOCER2C	26.87	26.86	26.81	0	0	0	0	0	0	0	0	0
BOCER2D	24.66	24.54	24.85	0	0	0	0	0	0	0	0	0
BOCER2E	31.88	31.81	32.13	348,898	0	0	0	0	348,898	82,244	188,842	0
BOCER2F	28.48	28.44	28.64	0	0	0	0	0	0	0	0	0
BOCER2G	27.12	27.07	27.41	0	0	0	0	0	0	0	0	0
BOCER2H	27.89	27.81	27.81	0	0	0	0	0	0	0	0	0
BOCER2I	25.33	25.27	25.62	0	0	0	0	0	0	0	0	0
BOCER2J	60.70	60.82	61.00	1,608,842	0	0	0	21,218	1,630,060	407,815	1,221,845	0
BOCER2K	43.87	43.87	44.50	475,216	0	0	0	0	475,216	118,804	306,412	0
BOCER2L	28.29	28.21	28.50	710,032	0	0	0	0	710,032	178,508	530,524	0
BOCER2M	101.13	102.68	102.89	288,897	0	0	0	1,002	289,900	69,328	242,815	0
BOCER2N	19.78	19.78	20.00	0	0	0	0	0	0	0	0	0
BOCER2O	19.09	19.40	19.60	0	0	0	0	0	0	0	0	0
BOCER2P	19.25	19.40	19.60	0	0	0	0	0	0	0	0	0
BOCER2Q	24.14	24.14	24.46	0	0	0	0	0	0	0	0	0
BOCER2R	20.83	20.49	20.82	0	0	0	0	0	0	0	0	0
BOCER2S	20.98	20.90	21.22	0	0	0	0	0	0	0	0	0
BOCER2T	23.28	23.27	23.58	0	0	0	0	0	0	0	0	0
BOCER2U	22.84	22.84	22.88	0	0	0	0	0	0	0	0	0
BOCER2V	21.74	21.68	21.81	0	0	0	0	0	0	0	0	0
BOCER2W	27.37	27.30	27.63	0	0	0	0	0	0	0	0	0
BOCER2X	33.81	33.72	34.05	1,307,028	0	0	0	0	1,307,028	328,780	980,279	0

Line Type	Support Grant Totals
Primary residence lines	\$126,000,715
Secondary residence lines	80
Single line business lines	80
Multiple business lines	80
Public lines	80
All excluded lines	\$110,216,804

FL (FL504) - CCC Air Exhibits (Riderpan)

% of Long Assigned for USF: 100%
 % of Post Assigned for USF: 100%
 Breakdown based on USF usage code: 110%

Turkula
 Savannah Blvd FL

Boundary Request Breakdown:
 Entry of 80.00 indicates that Law Type to that to be Requested
 \$11.00 \$0.00 \$11.00 \$0.00 \$11.00 \$0.00 \$11.00 \$0.00 \$11.00

City	Avg monthly cost per line	Residence	Business	Annual primary	Annual secondary	Annual night	Annual weekend	Annual public	Total annual	0375% Federal	0375% State	Law Type	Request Count
		usage per line	usage per line	residence lines	business lines	business lines	business lines	business lines	specified line types	allocations	allocations		Totals
MOORETLC	18.69	18.54	18.89	0	0	0	0	0	0	0	0		0
MOORETLM	16.74	16.63	16.90	0	0	0	0	0	0	0	0		0
MOORETLC	23.90	23.83	24.17	0	0	0	0	0	0	0	0		0
MOORETFL	18.64	18.50	18.85	0	0	0	0	0	0	0	0		0
MOORETLC	14.01	13.75	14.08	0	0	0	0	0	0	0	0		0
MOORETLC	21.83	21.82	22.15	0	0	0	0	0	0	0	0		0
MOORETLC	19.89	19.82	20.26	0	0	0	0	0	0	0	0		0
MOORETLC	19.25	19.14	19.53	0	0	0	0	0	0	0	0		0
MOORETLC	17.14	16.98	17.30	0	0	0	0	0	0	0	0		0
MOORETLC	19.84	19.74	20.09	0	0	0	0	0	0	0	0		0
MOORETLC	22.42	22.01	22.34	0	0	0	0	0	0	0	0		0
MOORETLC	20.29	20.15	20.46	0	0	0	0	0	0	0	0		0
MOORETLC	19.94	19.67	19.87	0	0	0	0	0	0	0	0		0
MOORETLC	22.71	22.57	22.89	0	0	0	0	0	0	0	0		0
MOORETLC	21.08	20.88	21.29	0	0	0	0	0	0	0	0		0
MOORETLC	22.35	22.21	22.58	0	0	0	0	0	0	0	0		0
MOORETLC	22.17	22.02	22.47	0	0	0	0	0	0	0	0		0
MOORETLC	20.23	20.20	20.52	0	0	0	0	0	0	0	0		0
MOORETLC	41.17	40.98	40.88	0	0	0	0	0	0	0	0		0
MOORETLC	30.89	30.80	30.92	0	0	0	0	0	0	0	0		0
MOORETLC	42.89	42.73	43.08	0	0	0	0	0	0	0	0		0
MOORETLC	19.57	19.42	19.80	0	0	0	0	0	0	0	0		0
MOORETLC	27.97	27.89	28.21	0	0	0	0	0	0	0	0		0
MOORETLC	49.37	49.22	49.71	0	0	0	0	0	0	0	0		0
MOORETLC	244.12	243.89	245.44	1,032,508	0	0	0	0	798,231	192,273	578,958		0
MOORETLC	36.24	36.14	36.54	415,032	0	0	0	0	1,102,541	274,893	827,648		0
MOORETLC	99.14	99.04	99.75	1,098,482	0	0	0	0	478,882	192,283	276,605		0
MOORETLC	21.00	20.91	21.23	0	0	0	0	0	1,104,209	276,602	827,607		0
MOORETLC	23.93	23.84	24.16	0	0	0	0	0	0	0	0		0
MOORETLC	21.17	21.07	21.40	0	0	0	0	0	0	0	0		0
MOORETLC	19.60	19.52	19.25	0	0	0	0	0	0	0	0		0
MOORETLC	28.28	28.02	29.20	81,802	0	0	0	0	81,802	20,473	61,329		0
MOORETLC	32.88	32.81	33.14	608,822	0	0	0	0	608,822	152,406	456,416		0
MOORETLC	69.22	69.19	69.73	1,733,433	0	0	0	0	1,771,009	442,755	1,328,254		0
MOORETLC	62.20	62.23	62.88	1,282,867	0	0	0	0	1,279,689	317,823	961,866		0
MOORETLC	124.38	124.28	124.88	2,882,051	0	0	0	0	2,882,051	693,513	1,988,538		0
MOORETLC	27.89	27.87	28.20	0	0	0	0	0	0	0	0		0
MOORETLC	22.42	22.29	22.81	0	0	0	0	0	0	0	0		0
MOORETLC	18.08	18.09	18.20	0	0	0	0	0	0	0	0		0
MOORETLC	24.89	24.88	25.18	0	0	0	0	0	0	0	0		0
MOORETLC	25.53	25.44	25.76	0	0	0	0	0	0	0	0		0
MOORETLC	24.89	24.85	25.15	0	0	0	0	0	0	0	0		0
MOORETLC	29.53	29.45	29.78	0	0	0	0	0	0	0	0		0
MOORETLC	29.18	29.10	29.45	0	0	0	0	0	0	0	0		0
MOORETLC	27.22	27.25	27.56	1,304,774	0	0	0	0	1,304,774	326,194	978,580		0
MOORETLC	46.23	46.20	46.57	1,794,493	0	0	0	0	1,794,493	428,114	1,376,380		0
MOORETLC	40.49	40.24	40.82	292,121	0	0	0	0	292,121	73,020	219,101		0
MOORETLC	30.61	30.57	30.85	0	0	0	0	0	0	0	0		0

FL (PL 804) - CCG AB E Subbits (B/S/Spec)

Funds
Business Fund 41

% of 1 emp Assigned for USF: 100%
 % of Post Assigned for USF: 100%
 Business Fund OCM average cost: 110%
 Monthly Budget: \$11,000
 Every \$ 50.00 indicates that Line Types in Blue to be Suspended \$1.00

Line Type	Avg monthly cost per line	Residence	Business	Annual request for primary	Annual request for secondary	Annual request for single line	Annual request for multiple business lines	Annual request for multiple public lines	Total annual request for specialized line types	Funds		Budgeted Funds
										077% Federal	077% State	
PL 071/00A	51.13	33.00	33.43	218,213	0	0	0	0	218,213	79,553	238,866	
PL 071/01A	49.05	49.99	49.96	2,078,272	0	0	0	0	2,078,272	708,018	2,307,290	
PL 071/02A	23.46	23.26	23.77	0	0	0	0	0	0	0	0	
PL 071/03A	22.83	22.72	23.05	0	0	0	0	0	0	0	0	
PL 071/04A	22.32	22.22	22.55	0	0	0	0	0	0	0	0	
PL 071/05A	22.27	22.32	22.66	0	0	0	0	0	0	0	0	
PL 071/06A	79.71	79.71	80.29	1,318,683	0	0	0	0	1,318,683	229,171	987,512	
PL 071/07A	38.24	38.21	38.59	628,523	0	0	0	0	628,523	158,881	479,643	
PL 071/08A	27.79	27.66	27.67	0	0	0	0	0	0	0	0	
PL 071/09A	23.93	23.81	24.12	0	0	0	0	0	0	0	0	
PL 071/10A	27.47	27.26	27.64	0	0	0	0	0	0	0	0	
PL 071/11A	42.87	42.81	43.18	1,098,820	0	0	0	0	1,098,820	272,455	817,365	
PL 071/12A	47.83	48.00	47.40	888,279	0	0	0	0	888,279	223,820	671,459	
PL 071/13A	31.23	31.00	31.51	61,424	0	0	0	0	61,424	18,289	48,135	
PL 071/14A	34.06	34.00	34.34	498,488	0	0	0	0	498,488	104,124	212,273	
PL 071/15A	28.09	28.59	29.00	0	0	0	0	0	0	0	0	
PL 071/16A	107.91	107.79	102.28	1,488,883	0	0	0	0	1,482,809	288,777	1,142,182	
PL 071/17A	34.87	34.77	35.11	1,270,497	0	0	0	0	1,270,497	308,274	958,123	
PL 071/18A	29.27	29.68	30.02	0	0	0	0	0	0	0	0	
PL 071/19A	102.20	102.17	102.75	747,770	0	0	0	0	742,020	180,798	572,272	
PL 071/20A	37.69	37.64	37.99	888,188	0	0	0	0	848,183	212,048	578,137	
PL 071/21A	69.60	69.56	71.10	1,138,188	0	0	0	0	1,137,478	284,289	625,187	
PL 071/22A	32.51	32.46	32.82	487,228	0	0	0	0	487,228	101,909	308,478	
PL 071/23A	38.19	38.07	38.20	1,108,884	0	0	0	0	1,108,884	314,188	842,685	
PL 071/24A	30.29	30.68	30.84	814,220	0	0	0	0	814,220	129,884	288,951	
PL 071/25A	20.77	20.87	20.99	0	0	0	0	0	0	0	0	
PL 071/26A	198.24	198.21	197.03	2,029,229	0	0	0	0	2,024,294	508,588	1,524,888	
PL 071/27A	87.11	87.08	87.49	2,681,082	0	0	0	0	2,680,178	672,644	2,048,132	
PL 071/28A	32.49	32.32	32.68	408,883	0	0	0	0	408,883	102,748	209,237	
PL 071/29A	148.27	148.27	148.08	2,284,311	0	0	0	0	2,284,311	568,079	1,808,233	
PL 071/30A	27.20	27.18	27.55	0	0	0	0	0	0	0	0	
PL 071/31A	31.80	31.82	31.84	200,671	0	0	0	0	200,671	50,188	150,823	
PL 071/32A	61.80	61.80	62.23	1,208,887	0	0	0	0	1,208,887	228,772	1,079,215	
PL 071/33A	19.87	19.41	19.72	0	0	0	0	0	0	0	0	
PL 071/34A	25.87	25.80	26.83	0	0	0	0	0	0	0	0	
PL 071/35A	26.57	26.42	26.74	0	0	0	0	0	0	0	0	
PL 071/36A	23.11	22.99	23.32	0	0	0	0	0	0	0	0	
PL 071/37A	23.20	23.13	23.44	0	0	0	0	0	0	0	0	
PL 071/38A	23.14	23.01	23.33	0	0	0	0	0	0	0	0	
PL 071/39A	34.54	34.48	34.78	1,318,983	0	0	0	0	1,318,703	328,178	987,527	
PL 071/40A	29.07	28.61	28.28	1,028,810	0	0	0	0	1,028,810	259,877	778,932	
PL 071/41A	33.51	33.47	33.81	691,175	0	0	0	0	691,175	222,794	688,281	
PL 071/42A	100.29	100.21	100.57	1,203,505	0	0	0	0	1,203,521	448,880	1,346,641	
PL 071/43A	117.00	117.07	117.87	1,888,887	0	0	0	0	1,818,815	478,284	1,434,781	
PL 071/44A	68.52	68.51	68.99	1,271,491	0	0	0	0	1,218,923	303,883	911,990	