

FLORIDA PUBLIC SERVICE COMMISSION

Fletcher Building
101 East Gaines Street
Tallahassee, Florida 32399-0850

M E M O R A N D U M

August 29, 1991

TO : DIRECTOR, DIVISION OF RECORDS AND REPORTING

FROM : DIVISION OF COMMUNICATIONS [CHECK] *[Handwritten initials]*
DIVISION OF LEGAL SERVICES [GREEN] *[Handwritten initials]*

RE : DOCKET NO. 910805-TL - PROPOSED TARIFF FILING ADDS OFFERINGS FOR TELECOMMUNICATIONS DEVICES FOR THE DEAF (TDD) USERS AND LOWERS RATES BY SOUTHERN BELL TELEPHONE AND TELEGRAPH COMPANY (T-91-311 FILED JUNE 28, 1991)

AGENDA: SEPTEMBER 10, 1991 - CONTROVERSIAL - PARTIES MAY PARTICIPATE

CRITICAL DATES: COMPANY REQUESTED EFFECTIVE DATE:
SEPTEMBER 16, 1991

SPECIAL INSTRUCTIONS: NONE

DISCUSSION OF ISSUES

ISSUE 1: Should Southern Bell Telephone and Telegraph Company's proposed tariff filing to 1) add offerings for Telecommunications Devices for the Deaf (TDD) users and to 2) obsolete (i.e., allow current customer's to continue to subscribe to the service while not allowing any new customers to subscribe) and to lower the monthly installment payment and the monthly lease rates for the Portable Communications Terminal be approved?

RECOMMENDATION: Yes. Southern Bell Telephone and Telegraph Company's proposed tariff filing to 1) add offerings for Telecommunications Devices for the Deaf (TDD) users and to 2) obsolete and to lower the monthly installment payment and the monthly lease rates should be approved. The effective date should be August 28, 1991. The Company should notify customers that the Portable Communications Terminal will become obsolete, with the anticipated elimination date to be September 1, 1994. This filing will become final if no hearing is requested by 21 days from the date of the final order.

STAFF ANALYSIS: On June 26, 1991, Southern Bell Telephone and Telegraph Company (Southern Bell) filed revisions to its General Subscriber Services Tariff to add new offerings for

DOCUMENT NUMBER-DATE

08686 AUG 29 1991

FPSC-RECORDS/REPORTING

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Telecommunication Devices for the Deaf (TDD) users. A TDD is a typewriter type piece of equipment whereby a hearing impaired person can communicate with another person. Southern Bell currently offers the Portable Communications Terminal to their hearing and speech impaired customers. This is an older piece of technology and the Company plans to replace the Portable Communications Terminal by offering the UltraTec #200 and the UltraTec #400, which use a more advanced technology.

The new products introduced by Southern Bell are as follows:

- (1) UltraTec Telecommunications Device for the Deaf #200
- (2) UltraTec Telecommunications Device for the Deaf #400
- (3) Walker Volume Control Handset
- (4) Walker Clarity Volume Control Telephone Set
- (5) Tel-Ease Telephone

The UltraTec Telecommunications Device for the Deaf #200 is the same as the previously tariffed Portable Communication Terminal for hearing and speech impaired individuals except that this new equipment has an enhanced software package which includes a voice announcer, 8K memory, and a nine message buffer. The portable Communications Terminal has only a 2K memory and a one message buffer.

The UltraTec Telecommunications Device for the Deaf #400 is a small light weight and portable TDD with both visual and printing capabilities. It can be connected to the telephone network to transmit a "conversation" to another person with a TDD. "Conversations" can be viewed on the screen and printed on a paper tape. This equipment includes an answering machine with remote message retrieval capability and the other enhancements mentioned above with the new TDD #200.

The Walker Volume Control Handset is a handset whereby a hearing impaired person can control the volume. This handset is compatible with both electric and electronic telephone sets.

The Walker Clarity Volume Control Telephone Set is hearing-aid adaptable and has volume/clarity control in the handset for the hearing impaired. It also has a visual/tone ringer for the hearing impaired.

The Clarity telephone and the Volume Control Handset are manufactured by Walker Equipment Corp. and distributed by John Oram Distribution Company. The TDD #200 and TDD #400 are manufactured and distributed by UltraTec.

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The Tel-Ease Telephone set has volume control in the handset for the hearing impaired, a visual/tone ringer also for the hearing impaired, and large button touchtone pads for the visually impaired. The Tel-Ease telephone set is manufactured and distributed by Communications Products and Equipment Company.

The company proposes to offer this equipment through the Special Assistance Bureau currently located in Florida. Customers will be able to reach this bureau toll free by voice by calling (800) 257-5400 or by TDD by calling (800) 432-4169. The representative will assist customers with inquiries on the equipment and answer any additional questions. The equipment will be provided at cost with no rate of return which is consistent with Docket No. 830202-TP, Order No, 13906, and will be available on an outright sale option which provides both a one-time payment price and a thirty-six month installment payment plan, or a month-to-month lease option. The month-to-month option is slightly higher than the monthly installment plan due to maintenance, capital cost factors, installation and removal of equipment factors.

The leased monthly sale price rate, 36 month installment plan rate, lease rate and their respective proposed costs are as follows:

Product	Sale Price Rate	Sale Price Cost	36 Month Installment Plan Rate	36 Month Installment Plan Cost	Lease Rate	Lease Cost
UltraTec TDD #200	\$ 365.90	\$ 365.90	\$ 10.16	\$ 10.16	\$ 8.83	\$ 8.83
UltraTec TDD #400	404.86	404.86	11.25	11.25	9.23	9.23
Walker Volume Control Handset	58.48	58.48	1.62	1.62	1.29	1.29
Walker Clarity Volume Control Telephone	114.73	114.73	3.19	3.19	2.83	2.83
Tel-Ease Telephone	84.13	84.13	2.34	2.34	2.43	2.43

Southern Bell's cost study provides costs for five products for hearing impaired customers. Southern Bell's cost study is similar to previous sale and lease studies. Leased items utilized the CAPCOST and GENCAP programs to develop monthly costs. These programs are long run incremental cost study programs. Southern Bell used a long run incremental cost methodology to develop the cost for the TDD equipment. Long run incremental cost is usually

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used by Southern Bell for developing rate elements. Incremental costs, in this instance, reflect the cost that will be incurred to provide the service.

Staff has no concerns regarding the costs of the TDD equipment. The life estimates of the new equipment is reasonable with the life of the Clarity Telephone, UltraTec TDD #200, and the UltraTec TDD #400 estimated to be at six years. The life estimates for the Volume Control Handset and the Tel-Ease Telephone is eight and five years, respectively. The month-to-month lease option is based upon the same material costs as the sale option, plus various loadings such as sales expense, shipping, and warranty expense which are not included in the sale price option. All material prices were provided by North Supply and are inflated with a three year (1991 through 1993) levelized factor of 1.0586. Sale item and lease item costs are developed on attached workpapers identified as Attachment A.

In addition to Southern Bell's proposed tariff filing adding additional offerings for TDD users, the filing also reduces the installment payment and the monthly lease rates for the Portable Communications Terminal. Since this equipment is no longer available from the vendor, the Company proposes to obsolete the service (i.e., not allowing any new customers to subscribe to the service but allowing existing customers to keep the service) effective August 28, 1991 and to totally eliminate the service by September 1, 1994. Therefore, the service will be discontinued when all current subscribers have completed their installment payments. Currently there are 314 customers subscribing to the Portable Communications Terminal: 156 customers on the 36 month installment plan and 158 customers on the month to month lease plan. These customers will continue to subscribe to the month-to-month lease option until September 1, 1994 when the Company proposes to eliminate the service.

Customers who are on the installment option will complete their installment plans at the reduced rates. Currently, customers are paying \$375.82 for the sale price on the Portable Communications Terminal, \$10.44 for the 36 month installment plan, and \$10.96 for the monthly lease option, plus a \$9.38 non-recurring charge. Under the Company's proposal to obsolete the service and to lower the installment plan and lease option rates, these rates would decrease and the customer would pay \$9.40 for the installment plan and \$9.97 for the lease plan. After the service becomes obsolete, no new customers will be able to subscribe and hence no customers will be able to purchase the old equipment.

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Staff has no concerns with the filing regarding the costs of the TDD equipment or obsoleting the old technology. As stated previously, the equipment will be provided at cost, consistent with Order No. 13906. Therefore, based on the information presented in the docket, staff recommends that Southern Bell's proposed tariff filing to add offerings for TDD users and to obsolete and to lower the monthly installment payment and the monthly lease rates for the Portable Communications Terminal should be approved on the basis submitted.

ISSUE 2 Should this docket be closed?

RECOMMENDATION: Yes, with the adoption of staff's recommendation in Issue 1, this docket should be closed.

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PRODUCTS FOR THE HANDICAPPED

DEVELOPMENT OF SALES COSTS
ITEM 1:
CLARITY VOLUME CONTROL
TELEPHONE SET

COST STUDY 910674
COMPANY SOUTHERN BELL
WORKPAPER 10
PAGE 1 OF 5
DATE 5-6-91

ITEM	DESCRIPTION	SOURCE	AMOUNT
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1	MATERIAL PRICE	NORTH SUPPLY	\$93.75
2	SHIPPING	UPS	\$2.37
3	3 YR LEVELIZED INFLATION FACTOR FOR MATERIAL	WP 40 L11 (FEN)	1.0586
4	VENDOR BILLING (WITH INFLATION)	(L1+L2)*L3	\$101.75
5	ADMINISTRATION FACTOR	BSS P&E	0.0347
6	3 YR LEVELIZED INFLATION FACTOR FOR LABOR	WP 40 L11 (FER)	1.0694
7	ADMINISTRATIVE EXPENSE	(L1+L2)*L5*L6	\$3.57
8	WARRANTY EXPENSE	WP 30 L7	\$0.23
9	SPECIAL ASSISTANCE BUREAU (SAB) CONTACT TIME (HOURS)	SAB	0.25
10	SAB LABOR COST PER HOUR	BSS P&E	\$27.69
11	SALES EXPENSE	L6*L9*L10	\$7.40
12	OPERATING EXPENSE	L7+L8+L11	\$11.20
13	TOTAL EXCLUDING GRT	L4+L12	\$112.95
14	GROSS RECEIPTS TAX (GRT) FACTOR	BSS P&E	0.0158
15	MINIMUM SALES PRICE	L13+(L13*L14)	\$114.73

PRODUCTS FOR THE HANDICAPPED

DEVELOPMENT OF SALES COSTS
 ITEM 2:
 WALKER VOLUME CONTROL
 HANDSET

COST STUDY 910674
 STATE SOUTHERN BELL
 WORKPAPER 10
 PAGE 2 OF 5
 DATE 5-6-91

ITEM	DESCRIPTION	SOURCE	AMOUNT
1	MATERIAL PRICE	NORTH SUPPLY	\$43.75
2	SHIPPING	UPS	\$1.90
3	3 YR LEVELIZED INFLATION FACTOR FOR MATERIAL	WP 40 L11 (FEN)	1.0586
4	VENDOR BILLING (WITH INFLATION)	(L1+L2)*L3	\$48.33
5	ADMINISTRATION FACTOR	BSS P&E	0.0347
6	3 YR LEVELIZED INFLATION FACTOR FOR LABOR	WP 40 L11 (FER)	1.0694
7	ADMINISTRATIVE EXPENSE	(L1+L2)*L5*L6	\$1.69
8	WARRANTY EXPENSE	WP 30 L7	\$0.15
9	SPECIAL ASSISTANCE BUREAU (SAB) CONTACT TIME (HOURS)	SAB	0.25
10	SAB LABOR COST PER HOUR	BSS P&E	\$27.69
11	SALES EXPENSE	L6*L9*L10	\$7.40
12	OPERATING EXPENSE	L7+L8+L11	\$9.24
13	TOTAL EXCLUDING GRT	L4+L12	\$57.57
14	GROSS RECEIPTS TAX (GRT) FACTOR	BSS P&E	0.0158
15	MINIMUM SALES PRICE	L13+(L13*L14)	\$58.48

PRODUCTS FOR THE HANDICAPPED

DEVELOPMENT OF SALES COSTS

ITEM 3:
ULTRATEC
TDD 200

COST STUDY 910674
STATE SOUTHERN BELL
WORKPAPER 10
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DATE 5-6-91

ITEM	DESCRIPTION	SOURCE	AMOUNT
1	MATERIAL PRICE	NORTH SUPPLY	\$319.00
2	SHIPPING	UPS	\$2.78
3	3 YR LEVELIZED INFLATION FACTOR FOR MATERIAL	WP 40 L11 (FEN)	1.0586
4	VENDOR BILLING (WITH INFLATION)	(L1+L2)*L3	\$340.64
5	ADMINISTRATION FACTOR	BSS P&E	0.0347
6	3 YR LEVELIZED INFLATION FACTOR FOR LABOR	WP 40 L11 (FER)	1.0694
7	ADMINISTRATIVE EXPENSE	(L1+L2)*L5*L6	\$11.94
8	WARRANTY EXPENSE	WP 30 L7	\$0.23
9	SPECIAL ASSISTANCE BUREAU (SAB) CONTACT TIME (HOURS)	SAB	0.25
10	SAB LABOR COST PER HOUR	BSS P&E	\$27.69
11	SALES EXPENSE	L6*L9*L10	\$7.40
12	OPERATING EXPENSE	L7+L8+L11	\$19.57
13	TOTAL EXCLUDING GRT	L4+L12	\$360.21
14	GROSS RECEIPTS TAX (GRT) FACTOR	BSS P&E	0.0158
15	MINIMUM SALES PRICE	L13+(L13*L14)	\$365.90

PRODUCTS FOR THE HANDICAPPED

**DEVELOPMENT OF SALES COSTS
 ITEM 4:
 ULTRATEC
 TDD 400**

**COST STUDY 910674
 STATE SOUTHERN BELL
 WORKPAPER 10
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ITEM	DESCRIPTION	SOURCE	AMOUNT
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1	MATERIAL PRICE	NORTH SUPPLY	\$354.00
2	SHIPPING	UPS	\$2.78
3	3 YR LEVELIZED INFLATION FACTOR FOR MATERIAL	WP 40 L11 (FEN)	1.0586
4	VENDOR BILLING (WITH INFLATION)	(L1+L2)*L3	\$377.69
5	ADMINISTRATION FACTOR	BSS P&E	0.0347
6	3 YR LEVELIZED INFLATION FACTOR FOR LABOR	WP 40 L11 (FER)	1.0694
7	ADMINISTRATIVE EXPENSE	(L1+L2)*L5*L6	\$13.24
8	WARRANTY EXPENSE	WP 30 L7	\$0.23
9	SPECIAL ASSISTANCE BUREAU (SAB) CONTACT TIME (HOURS)	SAB	0.25
10	SAB LABOR COST PER HOUR	BSS P&E	\$27.69
11	SALES EXPENSE	L6*L9*L10	\$7.40
12	OPERATING EXPENSE	L7+L8+L11	\$20.87
13	TOTAL EXCLUDING GRT	L4+L12	\$398.56
14	GROSS RECEIPTS TAX (GRT) FACTOR	BSS P&E	0.0158
15	MINIMUM SALES PRICE	L13+(L13*L14)	\$404.86

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PRODUCTS FOR THE HANDICAPPED

DEVELOPMENT OF SALES COSTS
 ITEM 5:
 TEL-EASE TELEPHONE
 SET

COST STUDY 910674
 STATE SOUTHERN BELL
 WORKPAPER 10
 PAGE 5 OF 5
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ITEM	DESCRIPTION	SOURCE	AMOUNT
1	MATERIAL PRICE	NORTH SUPPLY	\$66.25
2	SHIPPING	UPS	\$2.37
3	3 YR LEVELIZED INFLATION FACTOR FOR MATERIAL	WP 40 L11 (FEN)	1.0586
4	VENDOR BILLING (WITH INFLATION)	(L1+L2)*L3	\$72.64
5	ADMINISTRATION FACTOR	BSS P&E	0.0347
6	3 YR LEVELIZED INFLATION FACTOR FOR LABOR	WP 40 L11 (FER)	1.0694
7	ADMINISTRATIVE EXPENSE	(L1+L2)*L5*L6	\$2.55
8	WARRANTY EXPENSE	WP 30 L7	\$0.23
9	SPECIAL ASSISTANCE BUREAU (SAB) CONTACT TIME (HOURS)	SAB	0.25
10	SAB LABOR COST PER HOUR	BSS P&E	\$27.69
11	SALES EXPENSE	L6*L9*L10	\$7.40
12	OPERATING EXPENSE	L7+L8+L11	\$10.18
13	TOTAL EXCLUDING GRT	L4+L12	\$82.82
14	GROSS RECEIPTS TAX (GRT) FACTOR	BSS P&E	0.0158
15	MINIMUM SALES PRICE	L13+(L13*L14)	\$84.13

PRODUCTS FOR THE HANDICAPPED

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GENCAP OUTPUTS: LEASE OPTION
ITEM 1
CLARITY VOLUME CONTROL
TELEPHONE SET

COST STUDY 910674
COMPANY SOUTHERN BELL
WORKPAPER 20
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INVESTMENT		
VENDOR BILLING	\$101.75	(1)
TELCO INST. ENGR. AND LABOR COSTS	\$7.33	(2)
TELCO REMOVAL ENGR. AND LABOR COSTS	\$7.33	(3)
VENDOR AND OTHER REMOVAL CHARGES	\$2.51	(4)
MISC. COMMON EQUIP. & POWER	\$0.00	(5)
SALES TAX	\$5.22	(6)
SUPPLY EXPENSE	\$0.00	(7)
STOCK EXPENSE	\$0.00	(8)
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TOTAL ADJUSTED INVESTMENT	\$124.14	(9)
ANNUAL OPERATING COSTS		
MAINTENANCE	\$1.34	(10)
ADMINISTRATIVE EXPENSE	\$4.35	(11)
AD VALOREM & 'OTHER TAXES'	\$1.50	(12)
LAND ANNUAL COST	\$0.00	(13)
BUILDING ANNUAL COST	\$0.00	(14)
OUTSIDE VENDOR EXPENSE	\$0.00	(15)
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TOTAL ANNUAL OPERATING COSTS	\$7.20	(16)
CAPITAL COSTS		
DEPRECIATION	\$20.69	(17)
COST OF MONEY (RETURN)	\$11.83	(18)
INCOME TAX	\$5.36	(19)
OTHER (GRT&LC, ETC.)	\$0.71	(20)
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TOTAL ANNUAL CAPITAL COSTS	\$38.60	(21)
MONTHLY TOTALS		
TOTAL MONTHLY CAPITAL COSTS	\$3.22	(22)
TOTAL MONTHLY OPERATING COSTS	\$0.60	(23)
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TOTAL MONTHLY COSTS	\$3.82	(24)
NONRECURRING COSTS		
NONRECURRING EXPENSES	\$0.00	
MONTHLY EQUIV. OF NONRECURRING COSTS	\$0.00	(25)
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TOTAL EQUIVALENT MONTHLY COSTS	\$3.82	(26)
MAINTENANCE CALCULATIONS		
calculated with maintenance factor	\$0.00	
calculated with Telco annual maint. hours	\$1.34	

PRODUCTS FOR THE HANDICAPPED

T-91-311

GENCAP INPUTS: LEASE OPTION
 ITEM 1
 CLARITY VOLUME CONTROL
 TELEPHONE SET

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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Telco Installation Rate	0	Telco Clerical Rate	27.69
Telco C.O. & Test Rate	0	Telco Removal Rate	0
Telco Maintenance Rate	0	Telco Engineering Rate	0
Sales Tax Factor	0.0513	Other Tax Factor	0.0121
Gross Receipts Factor	0.0158	Cost of Money	0.1352
Discount Rate	0.1352	Misc. Common Eq. & Pwr	0
Account	2311C	Supply Expense Factor	0
Administration Factor	0.0347	Outside Vend Exp Factor	0
Land Loading Factor	0	Building Loading Factor	0
Land Annual Cost Factor	0	Bldg Annual Cost Factor	0
Utilization Factor	1	Maintenance Factor	0

INSTALLATION

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.37
Telco Engineering Hours	0		

REMOVAL

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.37
Telco Engineering Hours	0		

ANNUAL MAINTENANCE

Telco Field Hours	0	Telco Clerical Hours	0.01
Telco C.O. & Test Hours	0	Maintenance Material	0.98

OTHER

Material Cost	93.75	# Years to Spread Costs	1
Stock Factor	0	Non-Recurring Expense	0
Lvlzd Infl. Factor from FER		1.0694	
Lvlzd Infl. Factor from FEN		1.0586	

CAPCOST FACTORS

Investment Depreciation	16.67
Investment Income Tax	4.32
Investment Cost of Money	9.53

PRODUCTS FOR THE HANDICAPPED

T-91-311

GENCAP OUTPUTS: LEASE OPTION
 ITEM 2
 WALKER VOLUME CONTROL
 HANDSET

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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INVESTMENT

VENDOR BILLING	\$48.33	(1)
TELCO INST. ENGR. AND LABOR COSTS	\$7.33	(2)
TELCO REMOVAL ENGR. AND LABOR COSTS	\$7.33	(3)
VENDOR AND OTHER REMOVAL CHARGES	\$2.01	(4)
MISC. COMMON EQUIP. & POWER	\$0.00	(5)
SALES TAX	\$2.48	(6)
SUPPLY EXPENSE	\$0.00	(7)
STOCK EXPENSE	\$0.00	(8)
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TOTAL ADJUSTED INVESTMENT	\$67.47	(9)

ANNUAL OPERATING COSTS

MAINTENANCE	\$0.61	(10)
ADMINISTRATIVE EXPENSE	\$2.37	(11)
AD VALOREM & 'OTHER TAXES'	\$0.82	(12)
LAND ANNUAL COST	\$0.00	(13)
BUILDING ANNUAL COST	\$0.00	(14)
OUTSIDE VENDOR EXPENSE	\$0.00	(15)
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TOTAL ANNUAL OPERATING COSTS	\$3.79	(16)

CAPITAL COSTS

DEPRECIATION	\$8.43	(17)
COST OF MONEY (RETURN)	\$6.66	(18)
INCOME TAX	\$3.02	(19)
OTHER (GRT&LC, ETC.)	\$0.35	(20)
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TOTAL ANNUAL CAPITAL COSTS	\$18.46	(21)

MONTHLY TOTALS

TOTAL MONTHLY CAPITAL COSTS	\$1.54	(22)
TOTAL MONTHLY OPERATING COSTS	\$0.32	(23)
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TOTAL MONTHLY COSTS	\$1.85	(24)

NONRECURRING COSTS

NONRECURRING EXPENSES	\$0.00	
MONTHLY EQUIV. OF NONRECURRING COSTS	\$0.00	(25)
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TOTAL EQUIVALENT MONTHLY COSTS	\$1.85	(26)

MAINTENANCE CALCULATIONS

calculated with maintenance factor	\$0.00
calculated with Telco annual maint. hours	\$0.61

PRODUCTS FOR THE HANDICAPPED

T-91-311

GENCAP INPUTS: LEASE OPTION
 ITEM 2
 WALKER VOLUME CONTROL
 HANDSET

COST STUDY 910674
 COMPANY SOUTHERN BELL
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Telco Installation Rate	0	Telco Clerical Rate	27.69
Telco C.O. & Test Rate	0	Telco Removal Rate	0
Telco Maintenance Rate	0	Telco Engineering Rate	0
Sales Tax Factor	0.0513	Other Tax Factor	0.0121
Gross Receipts Factor	0.0158	Cost of Money	0.1352
Discount Rate	0.1352	Misc. Common Eq. & Pwr	0
Account	2311C	Supply Expense Factor	0
Administration Factor	0.0347	Outside Vend Exp Factor	0
Land Loading Factor	0	Building Loading Factor	0
Land Annual Cost Factor	0	Bldg Annual Cost Factor	0
Utilization Factor	1	Maintenance Factor	0

INSTALLATION

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	1.9
Telco Engineering Hours	0		

REMOVAL

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	1.9
Telco Engineering Hours	0		

ANNUAL MAINTENANCE

Telco Field Hours	0	Telco Clerical Hours	0.01
Telco C.O. & Test Hours	0	Maintenance Material	0.29

OTHER

Material Cost	43.75	# Years to Spread Costs	1
Stock Factor	0	Non-Recurring Expense	0
Lvlzd Infl. Factor from FER		1.0694	
Lvlzd Infl. Factor from FEN		1.0586	

CAPCOST FACTORS

Investment Depreciation	12.5
Investment Income Tax	4.47
Investment Cost of Money	9.87

PRODUCTS FOR THE HANDICAPPED

T-91-311

GENCAP OUTPUTS: LEASE OPTION
 ITEM 3
 ULTRATEC
 TDD 200

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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INVESTMENT

VENDOR BILLING	\$340.64	(1)
TELCO INST. ENGR. AND LABOR COSTS	\$7.33	(2)
TELCO REMOVAL ENGR. AND LABOR COSTS	\$7.33	(3)
VENDOR AND OTHER REMOVAL CHARGES	\$2.94	(4)
MISC. COMMON EQUIP. & POWER	\$0.00	(5)
SALES TAX	\$17.47	(6)
SUPPLY EXPENSE	\$0.00	(7)
STOCK EXPENSE	\$0.00	(8)
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TOTAL ADJUSTED INVESTMENT	\$375.71	(9)

ANNUAL OPERATING COSTS

MAINTENANCE	\$1.81	(10)
ADMINISTRATIVE EXPENSE	\$13.17	(11)
AD VALOREM & 'OTHER TAXES'	\$4.55	(12)
LAND ANNUAL COST	\$0.00	(13)
BUILDING ANNUAL COST	\$0.00	(14)
OUTSIDE VENDOR EXPENSE	\$0.00	(15)
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TOTAL ANNUAL OPERATING COSTS	\$19.53	(16)

CAPITAL COSTS

DEPRECIATION	\$62.63	(17)
COST OF MONEY (RETURN)	\$35.80	(18)
INCOME TAX	\$16.23	(19)
OTHER (GRT&LC, ETC.)	\$2.12	(20)
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TOTAL ANNUAL CAPITAL COSTS	\$116.79	(21)

MONTHLY TOTALS

TOTAL MONTHLY CAPITAL COSTS	\$9.73	(22)
TOTAL MONTHLY OPERATING COSTS	\$1.63	(23)
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TOTAL MONTHLY COSTS	\$11.36	(24)

NONRECURRING COSTS

NONRECURRING EXPENSES	\$0.00	
MONTHLY EQUIV. OF NONRECURRING COSTS	\$0.00	(25)
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TOTAL EQUIVALENT MONTHLY COSTS	\$11.36	(26)

MAINTENANCE CALCULATIONS

calculated with maintenance factor	\$0.00
calculated with Telco annual maint. hours	\$1.81

PRODUCTS FOR THE HANDICAPPED

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**GENCAP INPUTS: LEASE OPTION
 ITEM 3
 ULTRATEC
 TDD 200**

**COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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 DATE 5-6-91**

Telco Installation Rate	0	Telco Clerical Rate	27.69
Telco C.O. & Test Rate	0	Telco Removal Rate	0
Telco Maintenance Rate	0	Telco Engineering Rate	0
Sales Tax Factor	0.0513	Other Tax Factor	0.0121
Gross Receipts Factor	0.0158	Cost of Money	0.1352
Discount Rate	0.1352	Misc. Common Eq. & Pwr	0
Account	2311C	Supply Expense Factor	0
Administration Factor	0.0347	Outside Vend Exp Factor	0
Land Loading Factor	0	Building Loading Factor	0
Land Annual Cost Factor	0	Bldg Annual Cost Factor	0
Utilization Factor	1	Maintenance Factor	0

INSTALLATION

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.78
Telco Engineering Hours	0		

REMOVAL

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.78
Telco Engineering Hours	0		

ANNUAL MAINTENANCE

Telco Field Hours	0	Telco Clerical Hours	0.01
Telco C.O. & Test Hours	0	Maintenance Material	1.42

OTHER

Material Cost	319	# Years to Spread Costs	1
Stock Factor	0	Non-Recurring Expense	0
Lvlzd Infl. Factor from FER		1.0694	
Lvlzd Infl. Factor from FEN		1.0586	

CAPCOST FACTORS

Investment Depreciation	16.67
Investment Income Tax	4.32
Investment Cost of Money	9.53

PRODUCTS FOR THE HANDICAPPED

T-91-311

GENCAP OUTPUTS: LEASE OPTION
 ITEM 4
 ULTRATEC
 TDD 400

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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 DATE 5-6-91

INVESTMENT

VENDOR BILLING	\$377.69	(1)
TELCO INST. ENGR. AND LABOR COSTS	\$7.33	(2)
TELCO REMOVAL ENGR. AND LABOR COSTS	\$7.33	(3)
VENDOR AND OTHER REMOVAL CHARGES	\$2.94	(4)
MISC. COMMON EQUIP. & POWER	\$0.00	(5)
SALES TAX	\$19.38	(6)
SUPPLY EXPENSE	\$0.00	(7)
STOCK EXPENSE	\$0.00	(8)

TOTAL ADJUSTED INVESTMENT \$414.67 (9)

ANNUAL OPERATING COSTS

MAINTENANCE	\$1.81	(10)
ADMINISTRATIVE EXPENSE	\$14.54	(11)
AD VALOREM & 'OTHER TAXES'	\$5.02	(12)
LAND ANNUAL COST	\$0.00	(13)
BUILDING ANNUAL COST	\$0.00	(14)
OUTSIDE VENDOR EXPENSE	\$0.00	(15)

TOTAL ANNUAL OPERATING COSTS \$21.37 (16)

CAPITAL COSTS

DEPRECIATION	\$69.12	(17)
COST OF MONEY (RETURN)	\$39.52	(18)
INCOME TAX	\$17.91	(19)
OTHER (GRT&LC, ETC.)	\$2.34	(20)

TOTAL ANNUAL CAPITAL COSTS \$128.89 (21)

MONTHLY TOTALS

TOTAL MONTHLY CAPITAL COSTS	\$10.74	(22)
TOTAL MONTHLY OPERATING COSTS	\$1.78	(23)

TOTAL MONTHLY COSTS \$12.52 (24)

NONRECURRING COSTS

NONRECURRING EXPENSES.	\$0.00	
MONTHLY EQUIV. OF NONRECURRING COSTS	\$0.00	(25)

TOTAL EQUIVALENT MONTHLY COSTS \$12.52 (26)

MAINTENANCE CALCULATIONS

calculated with maintenance factor	\$0.00
calculated with Telco annual maint. hours	\$1.81

T-91-311

PRODUCTS FOR THE HANDICAPPED

GENCAP INPUTS: LEASE OPTION
 ITEM 4
 ULTRATEC
 TDD 400

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
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 DATE 5-6-91

Telco Installation Rate	0	Telco Clerical Rate	27.69
Telco C.O. & Test Rate	0	Telco Removal Rate	0
Telco Maintenance Rate	0	Telco Engineering Rate	0
Sales Tax Factor	0.0513	Other Tax Factor	0.0121
Gross Receipts Factor	0.0158	Cost of Money	0.1352
Discount Rate	0.1352	Misc. Common Eq. & Pwr	0
Account	2311C	Supply Expense Factor	0
Administration Factor	0.0347	Outside Vend Exp Factor	0
Land Loading Factor	0	Building Loading Factor	0
Land Annual Cost Factor	0	Bldg Annual Cost Factor	0
Utilization Factor	1	Maintenance Factor	0

INSTALLATION

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.78
Telco Engineering Hours	0		

REMOVAL

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.78
Telco Engineering Hours	0		

ANNUAL MAINTENANCE

Telco Field Hours	0	Telco Clerical Hours	0.01
Telco C.O. & Test Hours	0	Maintenance Material	1.42

OTHER

Material Cost	354	# Years to Spread Costs	1
Stock Factor	0	Non-Recurring Expense	0
Lvlzd Infl. Factor from FER		1.0694	
Lvlzd Infl. Factor from FEN		1.0586	

CAPCOST FACTORS

Investment Depreciation	16.67
Investment Income Tax	4.32
Investment Cost of Money	9.53

T-91-311

PRODUCTS FOR THE HANDICAPPED

**GENCAP OUTPUTS: LEASE OPTION
ITEM 5
TEL-EASE
TELEPHONE SET**

**COST STUDY 910674
COMPANY SOUTHERN BELL
WORKPAPER 20
PAGE 9 OF 10
DATE 5-6-91**

INVESTMENT		
VENDOR BILLING	\$73.02	(1)
TELCO INST. ENGR. AND LABOR COSTS	\$7.33	(2)
TELCO REMOVAL ENGR. AND LABOR COSTS	\$7.33	(3)
VENDOR AND OTHER REMOVAL CHARGES	\$2.89	(4)
MISC. COMMON EQUIP. & POWER	\$0.00	(5)
SALES TAX	\$3.75	(6)
SUPPLY EXPENSE	\$0.00	(7)
STOCK EXPENSE	\$0.00	(8)
	<hr/>	
TOTAL ADJUSTED INVESTMENT	\$94.32	(9)
ANNUAL OPERATING COSTS		
MAINTENANCE	\$1.31	(10)
ADMINISTRATIVE EXPENSE	\$3.31	(11)
AD VALOREM & 'OTHER TAXES'	\$1.14	(12)
LAND ANNUAL COST	\$0.00	(13)
BUILDING ANNUAL COST	\$0.00	(14)
OUTSIDE VENDOR EXPENSE	\$0.00	(15)
	<hr/>	
TOTAL ANNUAL OPERATING COSTS	\$5.76	(16)
CAPITAL COSTS		
DEPRECIATION	\$18.86	(17)
COST OF MONEY (RETURN)	\$8.73	(18)
INCOME TAX	\$3.96	(19)
OTHER (GRT&LC, ETC.)	\$0.59	(20)
	<hr/>	
TOTAL ANNUAL CAPITAL COSTS	\$32.15	(21)
MONTHLY TOTALS		
TOTAL MONTHLY CAPITAL COSTS	\$2.68	(22)
TOTAL MONTHLY OPERATING COSTS	\$0.48	(23)
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TOTAL MONTHLY COSTS	\$3.16	(24)
NONRECURRING COSTS		
NONRECURRING EXPENSES	\$0.00	
MONTHLY EQUIV. OF NONRECURRING COSTS	\$0.00	(25)
	<hr/>	
TOTAL EQUIVALENT MONTHLY COSTS	\$3.16	(26)
MAINTENANCE CALCULATIONS		
calculated with maintenance factor	\$0.00	
calculated with Telco annual maint. hours	\$1.31	

PRODUCTS FOR THE HANDICAPPED

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GENCAP INPUTS: LEASE OPTION
 ITEM 5
 TEL-EASE
 TELEPHONE SET

COST STUDY 910674
 COMPANY SOUTHERN BELL
 WORKPAPER 20
 PAGE 10 OF 10
 DATE 5-6-91

Telco Installation Rate	0	Telco Clerical Rate	27.69
Telco C.O. & Test Rate	0	Telco Removal Rate	0
Telco Maintenance Rate	0	Telco Engineering Rate	0
Sales Tax Factor	0.0513	Other Tax Factor	0.0121
Gross Receipts Factor	0.0158	Cost of Money	0.1352
Discount Rate	0.1352	Misc. Common Eq. & Pwr	0
Account	2311C	Supply Expense Factor	0
Administration Factor	0.0347	Outside Vend Exp Factor	0
Land Loading Factor	0	Building Loading Factor	0
Land Annual Cost Factor	0	Bldg Annual Cost Factor	0
Utilization Factor	1	Maintenance Factor	0

INSTALLATION

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.73
Telco Engineering Hours	0		

REMOVAL

Telco Field Hours	0	Vendor Labor Charge	0
Telco C.O. & Test Hours	0	Vendor Engr. Charge	0
Telco Clerical Hours	0.25	Other Costs	2.73
Telco Engineering Hours	0		

ANNUAL MAINTENANCE

Telco Field Hours	0	Telco Clerical Hours	0.01
Telco C.O. & Test Hours	0	Maintenance Material	0.95

OTHER

Material Cost	66.25	# Years to Spread Costs	1
Stock Factor	0	Non-Recurring Expense	0
Lvlzd Infl. Factor from FER		1.0694	
Lvlzd Infl. Factor from FEN		1.0586	

CAPCOST FACTORS

Investment Depreciation	20
Investment Income Tax	4.2
Investment Cost of Money	9.26

PRODUCTS FOR THE HANDICAPPED

SUMMARY OF RESULTS

COST STUDY 910674
COMPANY SOUTHERN BELL
PAGE 1 OF 1
DATE 5-6-91

ITEM -----	DESCRIPTION -----	LEASED MONTHLY COST -----	SALE TOTAL COST -----
1	Clarity Volume Control Telephone Set	\$3.82	\$114.73
2	Walker Volume Control Handset	\$1.85	\$58.48
3	UltraTec TDD #200	\$11.36	\$365.90
4	UltraTec TDD #400	\$12.52	\$404.86
5	Tel-Ease (Big Button) Telephone Set	\$3.16	\$84.13

NOTE 1. The above costs are based on three year (1991 through 1993) levelized material prices.

NOTE 2. The above "Leased Monthly Cost" include cost of money as shown below by item.

ITEM -----		COST OF MONEY
1	Clarity Volume Control Telephone Set	\$0.99
2	Walker Volume Control Handset	\$0.56
3	UltraTec TDD #200	\$2.98
4	UltraTec TDD #400	\$3.29
5	Tel-Ease (Big Button) Telephone Set	\$0.73

PRODUCTS FOR THE HANDICAPPED

Study No. 900925.2
Page 1 of 1
Date: January 21, 1991

Summary of Results - Southern Bell

Description	Lease Monthly Cost	Sale Total Costs
Portable Communications Terminal for Deaf or Speech Impaired	\$9.97	\$338.33

NOTE: The above "Lease Monthly Cost" includes a cost of money component of \$2.79.