

ACCESS SERVICE

REGULATIONS, RATE, AND CHARGES
APPLYING TO THE PROVISION OF ACCESS SERVICES
FOR CONNECTION TO INTRASTATE COMMUNICATION
FACILITIES FOR INTRASTATE CUSTOMERS RELATED TO
THE PROVISION OF SWITCHED AND SPECIAL ACCESS SERVICES

Access Services are provided by means of wire, fiber optics, radio or any other suitable technology or a combination thereof.

ACCESS SERVICE

ISSUING CARRIER

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Mr. James Burnham
President & CEO
Climax Telephone Company (CTC) – OCN 8331
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ACCESS SERVICE CHECK SHEET

<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>
Title 1	Original	2-8	Original	2-46	Original
Title 2	8th	2-9	Original	2-47	Original
1*	22nd	2-10	Original	2-48	Original
1.1	3rd	2-11	Original	2-49	Original
1.2	2nd	2-12	Original	2-50	Original
1.3	14th	2-12.1	Original	2-51	Original
1.4*	11th	2-13	Original	2-52	Original
1.5	6th	2-14	Original	2-52.1	1st
2	Original	2-15	Original	2-53	Original
3	1st	2-16	Original	2-54	Original
4	Original	2-17	Original	2-55	Original
5	Original	2-18	Original	2-56	Original
6	Original	2-18.1	Original	2-57	Original
6.1	Original	2-19	Original	2-58	Original
7	Original	2-20	1st	2-59	Original
7.1	Original (Z)	2-21	Original	2-60	Original
8	Original	2-22	Original	2-61	Original
9	Original	2-23	Original	2-62	1st
10	Original	2-24	Original	2-62.1	Original
11	Original	2-25	1st	2-63	1st
12	Original	2-25.1	Original	2-64	1st
13	Original	2-25.2	Original	2-65	Original
14	Original	2-25.3	Original	2-65.1	1st
15	Original	2-25.4	Original	2-66	Original
16	Original	2-26	Original	2-67	1st
17	Original	2-27	Original	2-68	Original
18	Original	2-28	Original	2-69	Original
19	Original	2-29	Original	2-69.1	Original
20	Original	2-30	Original	2-70	Original
21	Original	2-31	Original	2-70.1	Original
42 (Z)	Original	2-32	Original	2-70.2	Original
43	1st	2-33	Original	2-71	1st
44	2nd	2-33.1	Original	2-72	1st
45 (Z)	Original	2-34	Original	2-73	Original
46 (Z)	Original	2-35	Original	2-74	1st
47 (Z)	Original	2-36	Original	2-75	1st
48 (Z)	Original	2-36.1	Original	2-75.1	Original
49 (Z)	Original	2-37	Original	2-76	1st
1-1	Original	2-38	Original	2-77	1st
2-1	Original	2-39	Original	2-77.1	Original (Z)
2-2	Original	2-40	Original	2-78	Original
2-3	Original	2-41	Original	2-78.1	1st
2-4	Original	2-42	Original	2-79	Original
2-5	Original	2-43	Original	2-80	Original
2-6	Original	2-44	Original		
2-7	Original	2-45	Original		

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<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>
3-1	1st	5-19	Original	6-34	Original
3-2	Original	5-20	Original	6-35	Original
3-3	Original	5-21	1st	6-36	Original
3-4	Original	5-22	Original	6-37	Original
3-5	Original	5-23	Original	6-38	Original
3-6	Original	5-24	Original	6-39	Original
3-7	Original	6-1	1st	6-40	Original
3-8	Original	6-2	Original	6-45	1st
3-9	Original	6-3	Original	6-46	Original
3-10	Original	6-4	Original	6-47	Original
3-11	Original	6-5	1st	6-48	Original
3-12	Original	6-6	Original	6-49	Original
3-13	Original	6-7	Original	6-50	Original
3-14	Original	6-7.1	Original	6-51	Original
3-15	Original	6-8	1st	6-51.1	Original
3-16	Original	6-8.1	Original	6-51.2	Original
3-17	Original	6-8.2	Original	6-52	Original
3-18	Original	6-8.3	Original	6-53	Original
3-19	Original	6-8.4	Original	6-54	Original
3-20	Original	6-8.5	Original	6-89	Original
3-21	Original	6-9	1st	6-90	Original
3-22	Original	6-9.1	Original	6-91	Original
3-23	Original	6-10	Original	6-92	Original
3-24	Original	6-11	Original	6-92.1	Original
4-1	Original	6-11.1	Original	6-93	Original
5-1	Original	6-12	1st	6-94	Original
5-2	Original	6-13	1st	6-95	Original
5-3	Original	6-14	1st	6-96	Original
5-4	Original	6-15	1st	6-96.1	Original
5-5	Original	6-15.1	1st	6-97	Original
5-5.1	Original	6-16	1st	6-98	Original
5-6	Original	6-17	1st	6-99	Original
5-7	Original	6-18	1st	6-100	Original
5-8	Original	6-18.1	1st	6-101	Original
5-9	Original	6-18.2	1st	6-104	Original
5-9.1	Original	6-19	Original	6-105	Original
5-10	Original	6-20	Original	6-106	Original
5-10.1	Original	6-21	Original		
5-10.2	Original	6-22	Original		
5-10.3	Original	6-23	Original		
5-11	Original	6-24	Original		
5-12	Original	6-25	Original		
5-12.1	Original	6-26	1st		
5-12.2	Original	6-27,	4pf		
5-13	Original	6-28	1st		
5-14	Original	6-28.1	Original		
5-15	Original	6-29	Original		
5-16	Original	6-30	Original		
5-17	Original	6-31	Original		
5-17.1	Original	6-32	Original		
5-17.1.1	Original	6-32.1	Original		
5-17.2	Original	6-32.2	Original		
5-18	Original	6-33	Original		

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CHECK SHEET

<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>
6-107	Original	7-23	Original	13-12	1 st
6-108	Original	7-24	Original	13-13	1 st
6-109	Original	7-25	Original	13-14	1 st
6-110	Original	7-26	Original	13-15	1 st
6-111	Original	7-26.1	Original	13-16	Original
6-111.1	Original	7-26.2	Original	13-17	Original
6-112	Original	7-27	Original	13-18	Original
6-113	Original	7-34	Original	13-19	Original
6-114	Original	7-35	Original	13-20	Original
6-115	Original	7-36	Original	13-21	1 st
6-116	Original	7-37	Original	13-22	1 st
6-117	Original	7-38	Original	13-23	1 st
6-117.1	Original	7-39	Original	13-24	Original
6-117.2	Original	7-40	Original	13-25	Original
6-117.3	Original	7-41	Original	13-26	1 st
6-117.4	Original	7-42	Original	13-27	1 st
6-117.5	Original	7-43	Original	13-28	1 st
6-118	Original	7-44	Original	14-1	Original
6-119	Original	7-45	Original	15-1	Original
6-120	Original	7-46	Original	15-2	Original
6-121	Original	7-46.1	Original	15-3	Original
6-122	Original	7-47	Original	15-4	Original
6-123	Original	7-48	Original	15-5	Original
6-124	Original	7-49	Original	15-6	Original
6-124.1	Original	7-50	Original	15-7	Original
6-125	Original	7-51	Original	15-8	Original
7-1	Original	7-51.1	Original	15-9	Original
7-2	Original	7-51.2	Original	15-10	Original
7-3	Original	7-52	Original	15-11	Original
7-4	Original	7-52.1	Original	15-12	Original
7-5	Original	7-53	Original	15-13	Original
7-6	Original	7-54	Original	15-14	Original
7-6.1	Original	7-54.1	Original	15-15	Original
7-7	Original	7-54.2	Original	15-16	Original
7-8	Original	7-54.3	Original		
7-9	Original	7-55	Original		
7-10	Original	8-1	Original		
7-10.1	Original	9-1	Original		
7-10.2	Original	10-1	Original		
7-11*	1 st	11-1*	1 st		
7-12	Original	12-1	Original		
7-13	Original	13-1	Original		
7-13.1	Original	13-2	Original		
7-14*	1 st	13-3	Original		
7-14.1*	1 st	13-4	Original		
7-15	Original	13-5	Original		
7-16	Original	13-6	Original		
7-17	Original	13-7	Original		
7-18	Original	13-8	Original		
7-19	Original	13-9	Original		
7-20	Original	13-10	Original		
7-21	Original	13-10.1	Original		
7-22	Original	13-11	Original		

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CHECK SHEET

<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>
15-17	Original	17-11.1	1st	17LECMI-10	4th
15-18	Original	17-12	1st	17LECMI-10.1	1st
15-19	Original	17-13	1st	17LECMI-10.2	1st
15-20	Original	17-14	1st	17LECMI-10.3	9th
15-21	Original	17-15	1st	17LECMI-10.4	6th
15-22	Original		(Z)	17LECMI-11	8th
15-23	Original		(Z)	17LECMI-11.1	1st
15-24	Original	17-30	1st	17LECMI-12	1st
15-25	Original	17-31	1st	17LECMI-13	1st
15-26	Original	17-32	1st	17LECMI-14	1st
15-27	Original	17-33	1st	17LECMI-15	1st
15-28	Original	17-34	1st		(Z)
15-29	Original	17-35	1st		(Z)
15-30	Original	17-36	1st	17LECMI-30	1st
15-31	Original	17-37	1st	17LECMI-31	1st
15-32	Original	17-37.1	1st	17LECMI-32	1st
15-33	Original	17-37.2	1st	17LECMI-33	1st
15-34	Original	17-38	1st	17LECMI-34	1st
15-35	Original	17-39	1st	17LECMI-35	1st
15-35.1	Original	17-40	1st	17LECMI-36	1st
15-36	Original	17GLC-1	Original	17LECMI-37	1st
15-37	Original	17GLC-2	Original	17LECMI-37.1	1st
15-38	Original	17GLC-3	Original	17LECMI-37.2	1st
15-39	Original	17GLC-10*	4th	17LECMI-38	1st
15-40	Original	17GLC-10.1*	2nd	17LECMI-39	1st
15-40.1	Original	17GLC-10.2*	2nd	17LECMI-40	1st
15-41	Original	17GLC-10.3*	6 th		
15-42	Original	17GLC-10.3.1*	Original		
15-43	Original	17GLC-10.3.2*	Original		
15-44	Original	17GLC-10.3.3*	Original		
15-45	Original	17GLC-10.3.4*	Original		
15-46	Original	17GLC-10.3.5*	Original		
15-47	Original	17GLC-10.3.6*	Original		
15-48	Original	17GLC-10.4*	6th		
15-49	Original	17GLC-11	3rd (Z)		
15-50	Original	17GLC-11.1	Original (Z)		
15-51	Original	17GLC-12	Original		
15-52	Original	17GLC-13	Original		
15-53	Original	17GLC-14	1st		
15-54	Original	17GLC-15	1st		
15-55	Original				
15-56	Original (Z)				
16-1	Original	17GLC-30	Original		
17-1	1st	17GLC-31	Original		
17-2	1st	17GLC-32	Original		
17-3	1st	17GLC-33	Original		
17-10	1st	17GLC-34	Original		
17-10.1	1st	17GLC-35	Original		
17-10.2	1st	17GLC-36	Original		
17-10.3	1st	17GLC-37	Original		
17-10.4	1st	17GLC-37.1	Original		
17-11	1st	17GLC-37.2	Original		
		17GLC-38	Original		
		17GLC-39	Original		
		17GLC-39.1*	Original		
		17GLC-40	Original		
		17LECMI-1	2nd		
		17LECMI-2	1st		
		17LECMI-3	1st		

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<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>	<u>Page</u>	Number of Revision Except as <u>Indicated</u>
17T2-1	3rd	17ALLBD-17	1st	17DS-14	1st
17T2-2	Original	17ALLBD-18	1st	17DS-15	1st
17T2-3	Original	17ALLBD-19	1st	17DS-30	1st
17T2-10	3rd	17ALLBD-20	1st	17DS-31	1st
17T2-10.1	Original	17ALLBD-21	1st	17DS-32	1st
17T2-10.2	Original	17ALLBD-22	1st	17DS-33	1st
17T2-10.3	3rd	17ALLBD-23	1st	17DS-34	1st
17T2-10.4	3rd	17ALLBD-24	1st	17DS-35	1st
17T2-11	3rd	17ALLBD-25	1st	17DS-36	1st
17T2-11.1	Original	17ALLBD-26	1st	17DS-37	1st
17T2-12	Original	17ALLBD-27	1st	17DS-37.1	1st
17T2-13	Original	17ALLBD-28	1st	17DS-37.2	1st
17T2-14	Original	17ALLBD-29	1st	17DS-38	1st
17T2-15	Original	17ALLBD-29.1	1st	17DS-39	1st
17T2-30	Original	17ALLBD-29.2	1st	17DS-40	1st
17T2-31	Original	17ALLBD-29.3	1st	17CL-1	Original
17T2-32	Original	17ALLBD-29.4	1st	17DFTC-1*	4th
17T2-33	Original	17ALLBD-30	1st	17DFTC-2	Original
17T2-34	Original	17ALLBD-31	1st	17DFTC-10	3rd
17T2-35	Original	17ALLBD-32	1st	17DFTC-10.1	Original
17T2-36	Original	17ALLBD-33	1st	17DFTC-10.2	Original
17T2-37	Original	17ALLBD-34	1st	17DFTC-10.3	4th
17T2-37.1	Original	17ALLBD-35	1st	17DFTC-10.4	4th
17T2-37.2	Original	17ALLBD-36	1st	17DFTC-11*	6th
17T2-38	Original	17ALLBD-37	1st	17DFTC-11.1	Original
17T2-39	Original	17ALLBD-37.1	1st	17DFTC-12	Original
17T2-40	Original	17ALLBD-37.2	1st	17DFTC-13	Original
17ALLBD-1	2nd	17ALLBD-38	1st	17DFTC-14	Original
17ALLBD-2	1st	17ALLBD-39	1st	17DFTC-15	Original
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17ALLBD-12	1st	17DS-10.4	3rd	17DFTC-37.1	Original
17ALLBD-13	1st	17DS-11	3rd	17DFTC-37.2	1st
17ALLBD-14	1st	17DS-11.1	1st	17DFTC-38	Original
17ALLBD-15	1st	17DS-12	1st	17DFTC-39	Original
17ALLBD-16	1st	17DS-13	1 st	17DFTC-40	Original

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ACCESS SERVICE**TABLE OF CONTENTS**

	<u>Page No.</u>
ISSUING CARRIERS	Title 2
CHECK SHEET	1
TABLE OF CONTENTS	2
CONCURRING CARRIERS	42
CONNECTING CARRIERS	42
OTHER PARTICIPATING CARRIERS	42
REGISTERED SERVICE MARKS REGISTERED TRADEMARKS	42
EXPLANATION OF SYMBOLS	43
EXPLANATION OF ABBREVIATIONS	43
REFERENCE TO OTHER TARIFFS	45
REFERENCE TO TECHNICAL PUBLICATIONS	45
1. Application of Tariff	1-1
2. General Regulations	2-1
2.1 Undertaking of the Telephone Company	2-1
2.1.1 Scope	2-1
2.1.2 Limitations	2-1
2.1.3 Liability	2-3
2.1.4 Provision of Services	2-7
2.1.5 Facility Terminations	2-7
2.1.6 Service Maintenance	2-7
2.1.7 Changes and Substitutions	2-8
2.1.8 Refusal and Discontinuance of Service	2-9
2.1.9 Notification of Service-Affecting Activities	2-12
2.1.10 Coordination with Respect to Network Contingencies	2-12
2.1.11 Provision and Ownership of Telephone Numbers	2-12
2.1.12 Special Construction	2-12.1

ACCESS SERVICE**TABLE OF CONTENTS (Cont'd)**

	<u>Page No.</u>	
2. General Regulations (Cont'd)		
2.2 Use	2-13	
2.2.1 Interference or Impairment	2-13	
2.2.2 Unlawful and Abusive Use	2-13	
2.3 Obligations of the Customer	2-14	
2.3.1 Damages	2-14	
2.3.2 Ownership of Facilities and Theft	2-14	
2.3.3 Equipment Space and Power	2-15	
2.3.4 Availability for Testing	2-15	
2.3.5 Limitation of Use of Metallic Facilities	2-15	
2.3.6 Balance	2-16	
2.3.7 Design of Customer Services	2-16	
2.3.8 References to the Telephone Company	2-16	
2.3.9 Claims and Demands for Damages	2-17	
2.3.10 Coordination with Respect to Network Contingencies	2-18	
2.3.11 Jurisdictional Report and Certification Requirements	2-18	
2.3.12 Determination of Intrastate Charges for Mixed Interstate and Intrastate Switched Access Service	2-25	
2.3.13 Identification and Rating of VoIP-PSTN Traffic	2-25	(N)
2.4 Payment Arrangements and Credit Allowances	2-26	
2.4.1 Payment of Rates, Charges and Deposits	2-26	
2.4.2 Minimum Periods	2-33	
2.4.3 Cancellation of an Order for Service	2-34	
2.4.4 Credit Allowance for Service Interruptions	2-34	
2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence	2-41	
2.4.6 Title or Ownership Rights	2-42	
2.4.7 Access Services Provided By More Than One Telephone Company	2-42	
2.5 Connections	2-60	

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TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. General Regulations (Cont'd)	
2.6 Definitions	2-61
800 Data Base Access Service	2-61
800 Series	2-61
Access Code	2-61
Access Minutes	2-61
Access Tandem	2-61
Add/ Drop Multiplexing	2-62
Answer/ Disconnect Supervision	2-62
Attenuation Distortion	2-62.1
Balance (100 Type) Test Line	2-62.1
Bit	2-62.1
Business Day	2-63
Busy Hour Minutes of Capacity (BHMC)	2-63
Call	2-63
Carrier Identification Code	2-63
Carrier or Common Carrier	2-63
CCS	2-64
Central Office	2-64
Central Office Maintenance Technician	2-64
Central Office Prefix	2-64
Channel(s)	2-64
Channel Service Unit	2-64
Channelize	2-64
Clear Channel Capability	2-65
C-Message Noise	2-65
C-Notched Noise	2-65
Common Channel Signaling	2-65
Common Line	2-65
Communications System	2-65.1
Customer(s)	2-65.1
Customer Designated Premises	2-66
Customer Node	2-65.1
Data Transmission (107 Type) Test Line	2-66
Decibel	2-66
Detail Billing	2-66
Direct-Trunked Transport	2-67
Directory Assistance (Intrastate)	2-67

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. General Regulations (Cont'd)	
2.6 Definitions (Cont'd)	
Echo Control	2-67
Echo Path Loss	2-67
Echo Return Loss	2-67
End Office	2-68
End User	2-68
Entrance Facility	2-69
Entry Switch	2-69
Envelope Delay Distortion	2-69
Equal Level Echo Path Loss	2-69
Exchange	2-69.1
Exit Message	2-69.1
Expected Measured Loss	2-70
Extended Area Service	2-70
Frequency Shift	2-70.1
Host Central Office	2-70.2
Hub	2-70.2
Immediately Available Funds	2-71
Impulse Noise	2-71
Individual Case Basis	2-71
Individual Contract Basis	2-71
Initial Address Message	2-71
Inserted Connection Loss	2-71
Installation and Repair Technician	2-72
Interexchange Carrier (IC) or Interexchange Common Carrier	2-72
Intermediate Hub	2-72
Intermodulation Distortion	2-72
Interstate Communications	2-72
Intrastate Communications	2-72
Legal Holiday	2-73
Local Access and Transport Area (LATA)	2-73
Loss Deviation	2-73

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. General Regulations (Cont'd)	
2.6 Definitions (Cont'd)	
Major Fraction Thereof	2-73
Message	2-73
Milliwatt (102 Type) Test Line	2-74
North American Numbering Plan	2-74
Off-hook	2-74
On-hook	2-75
Open Circuit Test Line	2-75
Optical Carrier Channel	2-75
Optical Carrier Rate (OC-N)	2-75
Optical Carrier Rate Concatenated	2-75
Optical Line Termination (OLT)	2-75
Originating Direction	2-75
Pay Telephone	2-75.1
Payphone Service Provider	2-76
Phase Jitter	2-76
Point of Termination	2-76
Premises	2-76
Release Message	2-76
Remote Switching Modules/ Systems	2-76
Return Loss	2-76
Service Access Code	2-77
Service Switching Point (SSP)	2-77
Serving Wire Center	2-77
Shortage of Facilities or Equipment	2-77
Short Circuit Test Line	2-77.1
Signal-To-C-Notched Noise Ratio	2-77.1
Signaling Point (SP)	2-77.1
Signaling Point of Interface (SPOI)	2-77.1
Signaling Return Loss	2-77.1
Signaling System 7 (SS7)	2-77.1
Signaling Transfer Point (STP)	2-77.1
Signaling Transfer Point (STP) Port	2-77.1
Subtending End Office of an Access Tandem	2-78
Super Intermediate Hub	2-78
Synchronous Optical Network (SONET)	2-78
Synchronous Test Line	2-78.1
Synchronous Transport Signal (STS)	2-78.1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
2. General Regulations (Cont'd)	
2.6 Definitions (Cont'd)	
Tandem Switched Transport	2-78.1
Terminating Direction	2-78.1
Terminus Hub	2-78.1
Throughput	2-78.1
Transmission Measuring (105 Type) Test Line/ Responder	2-78.1
Transmission Path	2-79
Trunk	2-79
Trunk Group	2-79
Trunk Side Connection	2-79
Two-Wire to Four-Wire Conversion	2-79
V and H Coordinates Method	2-80
Wire Center	2-80
Wireless Switching Center	2-80

ACCESS SERVICE

TABLE OF CONTENTS (Cont d)

	<u>Page No.</u>	
3. <u>Carrier Common Line Access Service</u>	3-1	(C)
3.1 <u>General Description</u>	3-1	(N)
3.2 <u>Limitations</u>	3-2	
3.2.1 Exclusions	3-2	
3.2.2 Access Groups	3-2	
3.2.3 Held for Future Use	3-2	
3.3 <u>Undertakings of the Telephone Company</u>	3-3	
3.3.1 Provision of Service	3-3	
3.3.2 Interstate and Intrastate Use	3-3	
3.4 <u>Obligations of the Customer</u>	3-3	
3.4.1 Switched Access Service Requirement	3-3	
3.4.2 Supervision	3-3	
3.5 <u>Determination of Usage Subject to Carrier Common Line Access Charges</u>	3-4	
3.5.1 Determination of Jurisdiction	3-4	
3.5.2 Held for Future Use	3-4	
3.5.3 Held for Future Use	3-4	(N)

ACCESS SERVICE

TABLE OF CONTENTS (Cont d)

	<u>Page No.</u>	(N)
3. <u>Carrier Common Line Access Service</u> (Cont d)		
3.6 Held for Future Use	3-5	
3.7 Held for Future Use	3-17	
3.8 <u>Rate Regulations</u>	3-20	
3.8.1 Billing of Charges	3-20	
3.8.2 Measuring and Recording of Call Detail	3-20	
3.8.3 Held for Future Use	3-21	
3.8.4 Percent Intrastate Use (PIaU)	3-21	
3.8.5 Determination of Charges	3-22	(N)

ACCESS SERVICE

Held for Future Use

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ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

Page No.

4. Held for Future Use

4-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
5. Access Ordering	5-1
5.1 General	5-1
5.1.1 Service Installation	5-2
5.1.2 Expedited Orders	5-3
5.1.3 Selection of Facilities for Access Orders	5-4
5.1.4 Constructive Ordering of Switched Access Service	5-4
5.2 Ordering Requirements	5-5
5.2.1 Switched Access Service	5-5
5.2.2 Special Access Service	5-10
5.2.3 Held for Future Use	5-11
5.2.4 Mixed Use Facilities -Switched and Special Access	5-11
5.2.5 Miscellaneous Services	5-12
5.2.6 Held for Future Use	5-12.1
5.3 Access Orders for Services Provided by More Than One Telephone Company	5-13
5.3.1 Held for Future Use	5-13
5.3.2 Meet Point Billing Ordering	5-15
5.4 Charges Associated with Access Ordering	5-17
5.4.1 Access Order Charge	5-17
5.4.2 Miscellaneous Service Order Charge	5-17.2
5.4.3 Access Order Change Charges	5-18
5.5 Minimum Periods and Cancellations	5-21
5.5.1 Minimum Periods	5-21
5.5.2 Development of Minimum Period Charges	5-21
5.5.3 Cancellation of an Access Order	5-22
5.5.4 Partial Cancellation Charge	5-24

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>	
6. Switched Access Service	6-1	
6.1 General	6-1	
6.1.1 Description and Provision of Switched Access Service Arrangements	6-2	
6.1.2 Ordering Options and Conditions	6-5	
6.1.3 Rate Categories	6-5	
6.1.4 Special Facilities Routing	6-19	6-19
6.1.5 Design Layout Report	6-19	
6.2 Undertaking of the Telephone Company	6-19	
6.2.1 Network Management	6-19	
6.2.2 Transmission Specifications	6-20	
6.2.3 Provision of Service Performance Data	6-21	
6.2.4 Testing	6-21	
6.2.5 Determination of Number of Transmission Paths	6-23	
6.2.6 Trunk Group Measurement Reports	6-24	
6.3 Obligations of the Customer	6-25	
6.3.1 Report Requirements	6-25	
6.3.2 Trunk Group Measurement Reports	6-26	
6.3.3 Supervisory Signaling	6-26	
6.3.4 Short Duration Mass Calling Requirements	6-26	

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
6. Switched Access Service (Cont'd)	
6.4 Rate Regulations	6-27
6.4.1 Description and Application of Rates and Charges	6-27
6.4.2 Minimum Monthly Charge	6-45
6.4.3 Held for Future Use	6-46
6.4.4 Moves	6-47
6.4.5 Local Information Delivery Services	6-47
6.4.6 Mileage Measurement	6-48
6.4.7 Mixed Use	6-52
6.4.8 Held for Future Use	6-52
6.4.9 Held for Future Use	6-53
6.5 Held for Future Use	6-54
6.6 Held for Future Use	6-54
6.7 Held for Future Use	6-54

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
6. Switched Access Service (Cont'd)	
6.8 Description and Provision of Feature Group D (FGD)	6-89
6.8.1 Description	6-89
6.8.2 Optional Features	6-93
6.8.3 Design and Traffic Routing	6-95
6.8.4 Measuring Access Minutes	6-96
6.8.5 Design Blocking Probability	6-97
6.8.6 Network Blocking Charge	6-99
6.8.7 Testing Capabilities	6-100
6.9 Interim Access	6-101
6.10 Chargeable and Nonchargeable Optional Features	6-104
6.10.1 Common Switching Nonchargeable Optional Features	6-105
6.10.2 Transport Termination Nonchargeable Optional Features	6-118
6.10.3 Chargeable Optional Features	6-120

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
7. Special Access Service	7-1
7.1 General	7-1
7.1.1 Channel Types	7-1
7.1.2 Service Descriptions	7-4
7.1.3 Service Configurations	7-6
7.1.4 Alternate Use	7-11
7.1.5 Special Facilities Routing	7-11
7.1.6 Design Layout Report	7-11
7.1.7 Acceptance Testing	7-12
7.1.8 Ordering Options and Conditions	7-12
7.2 Rate Regulations	7-13
7.2.1 Rate Categories	7-13
7.2.2 Types of Rates and Charges	7-16
7.2.3 Moves	7-20
7.2.4 Minimum Periods	7-21
7.2.5 Mileage Measurement	7-22
7.2.6 Facility Hubs	7-23
7.2.7 Mixed Use	7-26
7.2.8 Held for Future Use	7-27

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
7. Special Access Service (Cont'd)	
7.3 Held for Future Use	7-27
7.4 Held for Future Use	7-27
7.5 Held for Future Use	7-27
7.6 Voice Grade Service	7-34
7.6.1 Basic Channel Description	7-34
7.6.2 Technical Specifications Packages and Network Channel Interfaces	7-34
7.6.3 Optional Features and Functions	7-34
7.7 Held for Future Use	7-42
7.8 Held for Future Use	7-43

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
7. Special Access Service (Cont'd)	
7.9 Digital Data Service	7-45
7.9.1 Basic Channel Description	7-45
7.9.2 Technical Specifications Packages and Network Channel Interfaces	7-45
7.9.3 Optional Features and Functions	7-46
7.10 High Capacity Service	7-47
7.10.1 Basic Channel Description	7-47
7.10.2 Technical Specifications Packages and Network Channel Interfaces	7-48
7.10.3 Optional Features and Functions	7-49
7.11 Synchronous Optical Channel Service	7-52
7.11.1 Basic Channel Description	7-52
7.11.2 Network Channel Interfaces	7-53
7.11.3 Optional Features and Functions	7-53
7.12 Individual Case Filings	7-55
8. Held for Future Use	8-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

Page No.

9. Held for Future Use

9-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
10. Held for Future Use	10-1
11 Special Facilities Routing of Access Services	11-1
11.1 Description	11-1
11.1.1 Diversity	11-1
11.1.2 Avoidance	11-1
11.1.3 Diversity and Avoidance Combined	11-1
11.1.4 Cable-Only Facilities	11-1
12. Held for Future Use	12-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont d)

	<u>Page No.</u>	
13. Additional Engineering, Additional Labor and Miscellaneous Services	13-1	
13.1 Additional Engineering	13-1	
13.2 Additional Labor	13-2	
13.2.1 Overtime Installation	13-2	
13.2.2 Overtime Repair	13-2	
13.2.3 Stand by	13-2	
13.2.4 Testing and Maintenance with Other Telephone Companies	13-2	
13.2.5 Other Labor	13-2	
13.3 Miscellaneous Services	13-3	
13.3.1 Testing Services	13-3	
13.3.2 Maintenance of Service	13-10	
13.3.3 Telecommunications Service Priority - TSP	13-10	
13.3.4 Held for Future Use	13-11	
13.4 Presubscription	13-12	(C)
13.5 Held for Future Use	13-15	
13.6 Held for Future Use	13-18	
13.7 Held for Future Use	13-18	
13.8 Held for Future Use	13-19	
13.9 Billing Name and Address Service	13-21	(C)
13.9.1 General Description	13-21	(C)
13.9.2 Undertaking of the Telephone Company	13-21	(C)
13.9.3 Obligations of the Customer	13-22	(C)
13.9.4 Rate Regulations	13-23	(C)
13.10 Held for Future Use	13-23	

ACCESS SERVICE

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)	
13.11 Held for Future Use	13-24
13.12 Held for Future Use	13-24
13.13 Held for Future Use	13-25
13.14 Local Number Portability Services	13-26
13.14.1 Held for Future Use	13-26
13.14.2 Local Number Portability Query Service	13-27
14. Held for Future Use	14-1
15. Access Service Interfaces and Transmission Specifications	15-1
15.1 Switched Access Service	15-1
15.1.1 Local Transport Interface Groups	15-1
15.1.2 Standard Transmission Specifications	15-11
15.1.3 Data Transmission Parameters	15-20
15.2 Special Access Service	15-24
15.2.1 Network Channel (NC) Codes	15-27
15.2.2 Network Channel Interface (NCI) Codes	15-36
15.3 Held for Future Use	15-56
16.1 Held for Future Use	16-1

ACCESS SERVICE

TABLE OF CONTENTS (Cont d)

	<u>Page No.</u>	
Each Participating Carrier has its own Rates and Charges Section that follows the following format.		(C)
17. Rates and Charges	17-1	
17.1 Common Line Access Service	17-1	(C)
17.1.1 Carrier Common Line Access Service	17-1	(C)
17.2 Switched Access Service	17-10	
17.2.1 Nonrecurring Charges	17-10	
17.2.2 Local Transport	17-10.1	
17.2.3 End Office	17-11	
17.2.4 Held for Future Use	17-11.1	
17.2.5 Held for Future Use	17-12	
17.2.6 Held for Future Use	17-13	
17.2.7 Held for Future Use	17-13	
17.3 Special Access Service	17-14	
17.4 Other Services	17-30	
17.4.1 Access Ordering	17-30	
17.4.2 Additional Engineering	17-31	
17.4.3 Additional Labor	17-32	
17.4.4 Miscellaneous Services	17-34	
17.4.5 Held for Future Use	17-38	
17.4.6 Special Facilities Routing of Access Services	17-39	
17.4.7 Held for Future Use	17-40	

ACCESS SERVICE

CONCURRING CARRIERS

NO CONCURRING CARRIERS

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

NO OTHER PARTICIPATING CARRIERS

REGISTERED SERVICE MARKS

NONE

REGISTERED TRADEMARKS

NONE

ACCESS SERVICE

EXPLANATION OF SYMBOLS

C - to signify changed regulation.
D - to signify discontinued rate or regulation.
I - to signify increase to a rate or charge.
M - to signify matter relocated without change.
N - to signify new rate or regulation.
R - to signify reduction to a rate or charge.
S - to signify matter reissued without change.
T - to signify a change in text but no change in rate or regulation.
Z - to signify a correction.

EXPLANATION OF ABBREVIATIONS

ADM - Add/Drop Multiplexing
ANI - Automatic Number Identification
BHMC - Busy Hour Minutes of Capacity
CCS - Common Channel Signaling
CDP - Customer Designated Premises
CI - Channel Interface
CN - Charge Number
CNP - Charge Number Parameter
CO - Central Office
Cont'd - Continued
CPE - Customer Provided Equipment
CPN - Calling Party Number
CSP - Carrier Selection Parameter
DA - Directory Assistance
dB - decibel
dBmC - Decibel Reference Noise C-Message Weighting
dBmCO - Decibel Reference Noise C-Message Weighted O
DDD - Direct Distance Dialing
DSL - Digital Subscriber Line
EAS - Extended Area Service
EML - Expected Measured Loss
EPL - Echo Path Loss
ERL - Echo Return Loss
f - frequency
F.C.C. - Federal Communications Commission

(N)

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ACCESS SERVICEEXPLANATION OF ABBREVIATIONS (Cont'd)

HC - High Capacity
Hz - Hertz
IC - Interexchange Carrier
ICB - Individual Case Basis
kbps - kilobits per second
kHz - kilohertz
LATA - Local Access and Transport Area
LNP - Local Number Portability
LRN - Location Routing Number
ma - milliamperes
Mbps - Megabits per second
MHZ - Megahertz
NPA - Numbering Plan Area
NXX - Three-Digit Central Office Prefix
OC - Optical Carrier
OCN – Operating Company Number
POT - Point of Termination
PSTN – Public Switched Telephone Network
SNAL - Signaling Network Access Line
SONET - Synchronous Optical Network)
SP - Signaling Point
SPOI - Signaling Point of Interface
SRL - Singing Return Loss
SSP - Service Switching Point
SS7 - Signaling System 7
STP - Signal Transfer Point
STS - Synchronous Transport Signal
SWC - Serving Wire Center
TDM – Time Division Multiplexing
VG - Voice Grade
V & H - Vertical & Horizontal
WSC - Wireless Switching Center

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ACCESS SERVICE

REFERENCE TO OTHER TARIFFS

Whenever reference is made in this tariff to other tariffs of the Telephone Company, the reference is to the tariffs in force as of the effective date of this tariff, and to amendments thereto and successive issues thereof.

The following tariffs are referenced in this tariff and may be obtained from the Federal Communications Commission's commercial contractor:

National Exchange Carrier
Association, Inc.
Wire Center Information
Tariff F.C.C. No. 4

REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this tariff and may be obtained from Telcordia Technologies Inc. (formerly Bell Communications Research, Inc. – Bellcore), Direct Sales, 8 Corporate Place, Piscataway, NJ 08854-4156 (www.telcordia.com).

Technical Reference:

GR-253-CORE Issue 2 Synchronous Optical Network (SONET)
Transport Systems: Common Generic Criteria
Issued: December 1995

GR-1374-CORE Issue 1 SONET Inter-Carrier Interface Physical
Layer Generic Criteria for Carriers
Issued: December 1994

PUB 41004 (MDP-326-584) Data Communications Using Voiceband
Private Line Channels
Issued: October 1973

PUB 62310 (MDP-326-726) Digital Data System Channel Interface
Specification
Issued: September 1983

TR-NPL-000258 Compatibility Information for Feature Group D
Switched Access Service
Issued: October 1985

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

GR-334-CORE Issue 1 Switched Access Service:
Transmission Parameter Limits and Interface Combinations
Issued: June 1994

TR-NWT-000335, Issue 3 Voice Grade Special Access Service -
Transmission Parameter Limits and Interface Combinations
Issued: May 1993

TR-NWT-000341 Digital Data Special Access Service - Transmission
Parameter Limits and Interface Combinations
Issued: Issue 2, February 1993

GR-342-CORE, Issue 1 High Capacity Digital Special Access Service
– Transmission Parameters Limits and Interface Combinations
Issued: December 1995

NC/NCI (Network Channel/Network Channel Interface) Decoder
Issued: June 2001

GR-506-CORE, Issue 1 LATA Switching Systems Generic Requirements (LSSGR)
Issued: June 1996

GR-54-CORE, Issue 1 DS1 High Capacity Digital Service
End User Metallic Interface Specifications
Issued: December 1995

GR-905-CORE, Issue 4 Common Channel Signaling Network Interface Specification
Available: December 2000

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

GR-2936-CORE Issue 3 Local Number Portability (LNP) Capability Specification
Service Provider Portability
Issued: November 1997

Telecommunications Transmission Engineering
Volume 3 - Networks and Services (Chapters 6 and 7)
Third Edition, 1980
Issued: August 1989

The following technical publication is referenced in this tariff and may be obtained from the Federal Communications Commission's commercial contractor.

PUB AS No. 1, Issue II Access Service
Issued: May 1984
Addendum: March 1987

The following publications are referenced in this tariff and may be obtained from the Government Printing Office, Superintendent of Documents, Document Control Branch, 941 N. Capital St., N.E., Washington, D.C. 20401.

Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook, National Communications System (NCSH 3-1-2).

Issued: July 1990
Available: August 1990

Telecommunication Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service User Manual, National Communications System (NCSM 3-1-1).

Issued: July 1990
Available: August 1990

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following technical publications are referenced in this tariff and may be obtained from American National Standards Institute, 1430 Broadway, New York, New York 10018.

ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.

ANSI T1.105-1995, Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following technical publications are referenced in this tariff and may be obtained from the Alliance for Telecommunications Industry Solutions (ATIS), 1200 G Street N.W., Suite 500, Washington, DC 20005 (www.atis.org).

Multiple Exchange Carrier Access Billing (MECAB) Guidelines
Issued: February 2001

Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines
Issued: March 2000

ACCESS SERVICE

1. APPLICATION OF TARIFF

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of Switched Access, Special Access, and other miscellaneous services hereinafter referred to collectively as service(s). These services are provided to customers by the Issuing Carrier of this tariff, hereinafter the Telephone Company. This tariff also contains Access Ordering regulations and charges that are applicable when these services are ordered or modified by the customer.
- 1.2 The provision of such service by the Telephone Company as set forth in this tariff does not constitute a joint undertaking with the customer for the furnishing of any service.

ACCESS SERVICE**2. General Regulations****2.1 Undertaking of the Telephone Company****2.1.1 Scope**

- (A) The Telephone Company does not undertake to transmit messages under this tariff.
- (B) The Telephone Company will be responsible only for the installation, operation and maintenance of the services it provides.
- (C) The Telephone Company will, for maintenance purposes, test its service only to the extent necessary to detect and/or clear troubles.
- (D) Services are provided 24 hours daily, seven days per week, except as set forth in other applicable sections of this tariff.
- (E) The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.

2.1.2 Limitations**(A) Assignment or Transfer of Services**

The customer may assign or transfer the use of services provided under this tariff only where there is no interruption of use or relocation of the services. Such assignment or transfer may be made to:

- (1) another customer, whether an individual, partnership, association or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.2 Limitations (Cont'd)(A) Assignment or Transfer of Services (Cont'd)

- (2) a court-appointed receiver, trustee or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any. In all cases of assignment or transfer, the written acknowledgment of the Telephone Company is required prior to such assignment or transfer. This acknowledgment will be made within 15 days from the receipt of notification. All regulations and conditions contained in this tariff will apply to such assignee or transferee. The assignment or transfer of services does not relieve or discharge the assignor or transferor from remaining jointly or severally liable with the assignee or transferee for any obligations existing at the time of the assignment or transfer.

(B) Use and Restoration of Services

The use and restoration of services will be in accordance with Part 64, Subpart D, Appendix A, of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.2 Limitations (Cont'd)(C) Sequence of Provisioning

Subject to compliance with the rules mentioned in (B) preceding, the services offered herein will be provided to customers on a first-come, first-served basis.

The first-come, first-served sequence will be based upon the received time and date recorded, by stamp or other notation, by the Telephone Company on customer access orders. These orders must contain all the information as required for each respective service as delineated in other sections of this tariff. Customer orders will not be deemed to have been received until such information is provided. Should questions arise which preclude order issuance due to missing information or the need for clarification, the Telephone Company will attempt to seek such missing information or clarification on a verbal basis.

2.1.3 Liability(A) Limits of Liability

The Telephone Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by a customer or by any others, for damages associated with the installation, provision, termination, maintenance, repair or restoration of service, and subject to the provisions of (B) through (G) following, the Telephone Company's liability if any, will not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages will be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(B) Acts or Omissions

The Telephone Company will not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor will the Telephone Company for its own act or omission hold liable any other carrier or customer providing a portion of a service.

(C) Damages to Customer Premises

The Telephone Company is not liable for damages to the customer premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Telephone Company's negligence.

(D) Indemnification of Telephone Company(1) By the End User

The Telephone Company will be indemnified, defended and held harmless by the end user against any claim, loss or damage arising from the end user's use of services offered under this tariff, involving:

- (A) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(D) Indemnification of Telephone Company (Cont'd)(1) By the End User (Cont'd)

- (B) Claims for patent infringement arising from the end user's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end users or customer or;
- (C) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this tariff.

(2) By the Customer

The Telephone Company will be indemnified, defended and held harmless by the customer against any claim, loss or damage arising from the customer's use of services offered under this tariff, involving:

- (A) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the customer's own communications;
- (B) Claims for patent infringement arising from the customer's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end user or customer or;
- (C) All other claims arising out of any act or omission of the customer in the course of using services provided pursuant to this tariff.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(E) Explosive Atmospheres

The Telephone Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Telephone Company will be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.

(F) No License Granted

No license under patents (other than the limited license to use) is granted by the Telephone Company or will be implied or arise by estoppel, with respect to any service offered under this tariff. The Telephone Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

(G) Circumstances Beyond the Telephone Company's Control

The Telephone Company's failure to provide or maintain services under this tariff will be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Telephone Company, acts of God and other circumstances beyond the Telephone Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.4 following.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.4 Provision of Services

The Telephone Company will provide to the customer, upon reasonable notice, services offered in other applicable sections of this tariff at rates and charges specified therein. Services will be made available to the extent that such services are or can be made available with reasonable effort, and after provision has been made for the Telephone Company's telephone exchange services.

2.1.5 Facility Terminations

The services provided under this tariff will include any entrance cable or drop wiring and wire or intrabuilding cable to that point where provision is made for termination of the Telephone Company's outside distribution network facilities at a suitable location inside a customer-designated premise. Such wiring or cable will be installed by the Telephone Company to the Point of Termination. Moves of the Point of Termination at the customer designated premises will be as set forth in 6.4.4 and 7.2.3 following. Technical parameters of services provided under this tariff shall be measured at a Point of Termination.

2.1.6 Service Maintenance

The services provided under this tariff will be maintained by the Telephone Company. The customer or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by the Telephone Company, other than by connection or disconnection to any interface means used, except with the written consent of the Telephone Company.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.7 Changes and Substitutions

Except as provided for equipment and systems subject to FCC Part 68 Regulations at 47 C. F. R. Section 68.110(B), the Telephone Company may, where such action is reasonably required in the operation of its business, substitute, change or rearrange any facilities used in providing service under this tariff. Such actions may include, without limitation:

- substitution of different metallic facilities,
- substitution of carrier or derived facilities for metallic facilities used to provide other than metallic facilities,
- substitution of metallic facilities for carrier or derived facilities used to provide other than metallic facilities,
- substitution of fiber or optical facilities,
- change of minimum protection criteria,
- change of operating or maintenance characteristics of facilities, or
- change of operations or procedures of the Telephone Company.

In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in Section 15. following. The Telephone Company will not be responsible if any such substitution, change or rearrangement renders any customer furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the Telephone Company will provide reasonable notification to the customer in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics. The Telephone Company will work cooperatively with the customer to determine reasonable notification procedures.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.1 Undertaking of the Telephone Company (Cont'd)****2.1.8 Refusal and Discontinuance of Service**

- (A) If a customer fails to comply with 2.1.6 preceding (Service Maintenance) or 2.3.1, 2.3.4, 2.3.6, 2.4.1 or 2.5 following (respectively, Damages, Availability for Testing, Balance, Payment Arrangements, Connections) including any customers failure to make payments on the date and times therein specified, the Telephone Company may, on thirty (30) days written notice to the customer by Certified U. S. Mail, take the following actions:

- refuse additional applications for service and/or refuse to complete any pending orders for service, and/or
- discontinue the provision of service to the customer.

In the case of discontinuance all applicable charges, including termination charges, will become due.

- (B) If a customer fails to comply with 2.2.2 following (Unlawful and Abusive Use), the Telephone Company may, upon written request from a customer, or another exchange carrier, terminate service to any subscriber or customer identified as having utilized service provided under this tariff in the completion of abusive or unlawful telephone calls. Service will be terminated by the Telephone Company as provided for in its general and/or local exchange service tariffs.

In such instances when termination occurs the Telephone Company will be indemnified, defended and held harmless by any customer or Exchange Carrier requesting termination of service against any claim, loss or damage arising from the Telephone Company's actions in terminating such service, unless caused by the Telephone Company's negligence.

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.8 Refusal and Discontinuance of Service (Cont'd)

- (C) Except as provided for equipment or systems subject to the FCC Part 68 Rules in 47 C. F. R. Section 68.108, if the customer fails to comply with 2.2.1 following (Interference or Impairment), the Telephone Company will, where practicable, notify the customer that temporary discontinuance of the use of a service may be required; however, where prior notice is not practicable, the Telephone Company may temporarily discontinue service forthwith if such action is reasonable in the circumstances. In case of such temporary discontinuance, the customer will be notified promptly and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in 2.4.4 following is not applicable.
- (D) When access service is provided by more than one Telephone Company, the companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Telephone Company(s) affected by the nonpayment is incapable of effecting discontinuance of service without cooperation from the other joint providers of Switched Access Service, such other Telephone Company(s) will, if technically feasible, assist in denying the joint service to the customer. Service denial for such joint service will only include calls originating or terminating within, or transiting, the facilities of the Telephone Companies initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Telephone Company will apply for joint service discontinuance.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.8 Refusal and Discontinuance of Service (Cont'd)

- (E) If the Telephone Company does not refuse additional applications for service and/or does not discontinue the provision of the services as specified for herein, and the customer's noncompliance continues, nothing contained herein will preclude the Telephone Company's right to refuse additional applications for service and/or to discontinue the provision of the services to the noncomplying customer without further notice.

ACCESS SERVICE**2. General Regulations (Cont'd)****2.1 Undertaking of the Telephone Company (Cont'd)****2.1.9 Notification of Service-Affecting Activities**

The Telephone Company will provide the customer reasonable notification of service-affecting activities that may occur in the normal operation of its business. Such activities may include, but are not limited to the following:

- equipment or facilities additions,
- removals or rearrangements,
- routine preventative maintenance, and
- major switching machine change-out.

Generally, such activities are not individual customer service specific, but may affect many customer services. No specific advance notification period is applicable to all service activities. The Telephone Company will work cooperatively with the customer to determine reasonable notification requirements.

2.1.10 Coordination with Respect to Network Contingencies

The Telephone Company intends to work cooperatively with the customer to develop network contingency plans in order to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.1.11 Provision and Ownership of Telephone Numbers

The Telephone Company reserves the reasonable right to assign, designate or change telephone numbers, any other call number designations associated with Access Services, or the Telephone Company serving central office prefixes associated with such numbers, when necessary in the conduct of its business. Should it become necessary to make a change in such number(s), the Telephone Company will furnish to the customer six (6) months notice, by Certified U. S. Mail, of the effective date and an explanation of the reason(s) for such change(s).

ACCESS SERVICE2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.12 Special Construction

- (A) Subject to the arrangement of the Company and to all of the regulations contained in this tariff, special construction of facilities may be undertaken on a reasonable efforts basis at the request of the Customer. Special construction is that construction undertaken and characterized by one or more of the following:
- (1) where facilities are not presently available and there is no other requirement for the facilities so constructed;
 - (2) of a type other than that which the Company would normally utilize in the furnishing of its services;
 - (3) where facilities are to be installed over a route other than that which the Company would normally utilize in the furnishing of its services;
 - (4) where facilities are requested in a quantity greater than that which the Company would normally construct;
 - (5) where installation is on an expedited basis;
 - (6) on a temporary basis until permanent facilities are available;
 - (7) installation involving abnormal costs; or
 - (8) in advance of its normal construction schedules.
- (B) Prior to construction, the Company and the Customer will enter into a contract for construction of these facilities. This contract will, among other things, indicate the amounts the Customer will owe the Company (recurring and non-recurring) for installation of this construction and cancellation charges.
- (C) The Company will retain ownership of all such facilities construction under this section.

ACCESS SERVICE2. General Regulations (Cont'd)2.2 Use2.2.1 Interference or Impairment

The characteristics and methods of operation of any circuits, facilities or equipment provided by other than the Telephone Company and associated with the facilities utilized to provide services under this tariff will not:

- interfere with or impair service over any facilities of the Telephone Company, its affiliated companies, or its connecting and concurring carriers involved in its services,
- cause damage to their plant,
- impair the privacy of any communications carried over their facilities, or
- create hazards to the employees of any of them or the public.

2.2.2 Unlawful and Abusive Use

- (A) The service provided under this tariff will not be used for an unlawful purpose or used in an abusive manner.

Abusive use includes:

- (1) The use of the service of the Telephone Company for a call or calls, anonymous or otherwise, in a manner reasonably expected to frighten, abuse, torment, or harass another;
- (2) The use of the service in such a manner as to interfere unreasonably with the use of the service by one or more other customers.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer2.3.1 Damages

The customer will reimburse the Telephone Company for damages to Telephone Company facilities utilized to provide services under this tariff caused by the negligence or willful act of the customer or resulting from the customer's improper use of the Telephone Company facilities, or due to malfunction of any facilities or equipment provided by other than the Telephone Company. Nothing in the foregoing provision will be interpreted to hold one customer liable for another customer's actions. The Telephone Company will, upon reimbursement for damages, cooperate with the customer in prosecuting a claim against the person causing such damage and the customer will be subrogated to the right of recovery by the Telephone Company for the damages to the extent of such payment.

2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Telephone Company to provide service under the provisions of this tariff will remain the property of the Telephone Company. Such facilities will be returned to the Telephone Company by the customer, whenever requested, within a reasonable period. The equipment will be returned in as good condition as reasonable wear will permit.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.3 Equipment Space and Power

The customer will furnish or arrange to have furnished to the Telephone Company, at no charge, equipment space and electrical power required by the Telephone Company to provide services under this tariff at the points of termination of such services. The selection of AC or DC power will be mutually agreed to by the customer and the Telephone Company. The customer will also make necessary arrangements in order that the Telephone Company will have access to such spaces at reasonable times for installing, testing, repairing or removing Telephone Company facilities used to provide services.

2.3.4 Availability for Testing

Access to facilities used to provide services under this tariff will be available to the Telephone Company at times mutually agreed upon in order to permit the Telephone Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments will be completed within a reasonable time. As set forth in 2.4.4(C)(4) following, no credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Limitation of Use of Metallic Facilities

Signals applied to a metallic facility will conform to the limitations set forth in Technical Reference PUB AS No. 1.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.6 Balance

All signals for transmission over the facilities used to provide services under this tariff will be delivered by the customer balanced to ground.

2.3.7 Design of Customer Services

Subject to the provisions of 2.1.7 preceding (Changes and Substitutions), the customer will be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Telephone Company, minimum protection criteria or operating or maintenance characteristics of the facilities.

2.3.8 References to the Telephone Company

The customer may advise end users that certain services are provided by the Telephone Company in connection with the service the customer furnishes to end users; however, the customer will not represent that the Telephone Company jointly participates in the customer's services.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.9 Claims and Demands for Damages

- (A) With respect to claims of patent infringement made by third persons, the customer will defend, indemnify, protect and save harmless the Telephone Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the customer.
- (B) The customer will defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses and damages, including punitive damages, attorney fees and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the customer's circuits, facilities, or equipment connected to the Telephone Company's services provided under this tariff including, without limitation, Worker's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the customer's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the customer to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification will not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortuous conduct of the customer, its officers, agents or employees.
- (C) The customer will defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the customer or third parties arising out of any act of omission of the customer in the course of using services provided under this tariff.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Coordination with Respect to Network Contingencies

The customer will, in cooperation with the Telephone Company, coordinate in planning the actions to be taken to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.3.11 Jurisdictional Report and Certification Requirements(A) Certification Requirements -Special Access

When the customer orders Special Access Service and the customer certifies to the Telephone Company in writing that less than 10% (ten percent) of the traffic is interstate, the service is considered to be intrastate and is provided under this Tariff.

Following initial certification, should the jurisdictional nature of the customer's Special Access the customer should inform the Telephone Company in writing of the change. The effective date of the change will be the date the Telephone Company receives the customer's notice of change. No charge applies for the jurisdictional change.

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)(B) Disputes Involving Jurisdictional Certification -Special Access

If a dispute arises concerning the certification of projected interstate traffic as described in (A) above, the Telephone Company will ask the customer to provide the data the customer used to determine that less than 10% of the traffic is interstate. The customer will supply the data within thirty (30) days of the Telephone Company request. If the reply results in a jurisdictional change of a Special Access Service, the effective date of the change will be the date the Telephone Company receives the customer's reply. There is no charge when the customer's reply results in a jurisdictional change in the Special Access.

(C) Jurisdictional Reports -Switched Access

For Switched Access Service, the Telephone Company cannot in all cases determine the jurisdictional nature of customer traffic and its related access minutes. In such cases the customer may be called upon to provide a projected estimate of its traffic, split between the interstate and intrastate jurisdictions. The following regulations govern such estimates, their reporting by the customer and cases where the Telephone Company will develop jurisdictional percentages.

(1) General

Except where Telephone Company measured access minutes are used as set forth following, the customer will report the percentage of intrastate use as set forth in (2) or (3) following and such reports will be used for

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report Requirements (Cont'd)(C) Jurisdictional Reports -Switched Access (Cont'd)(1) General (Cont'd)

billing purposes until the customer reports a different projected intrastate percentage for an in-service end office group. When the customer adds BHMC, lines or trunks to an existing end office group, the customer will furnish a revised projected intrastate percentage that applies to the total BHMC, lines or trunks.

When the customer discontinues BHMC, lines or trunks from an existing group, the customer will furnish a revised projected intrastate percentage for the remaining BHMC, lines or trunks in the end office group. The revised report will serve as the basis for future billing and will be effective on the next bill date. No prorating or back billing will be done based on the report.

Effective on the first of January, April, July and October of each year the customer will update the interstate and intrastate jurisdictional report. The customer will forward to the Telephone Company, to be received no later than fifteen (15) days after the first of each such month, a revised report showing the interstate and intrastate percentage of use for the past three months ending the last day of December, March, June and September, respectively, for each service arranged for intrastate use.

ACCESS SERVICE2. General Regulations (Cont d)2.3 Obligations of the Customer (Cont d)2.3.11 Jurisdictional Report Requirements (Cont d)(C) Jurisdictional Reports -Switched Access (Cont d)(1) General (Cont d)

Except where the Telephone Company is billing according to actuals by jurisdiction, the revised report will serve as the basis for the next three months billing and will be effective on the bill date for that service. No prorating or back billing will be done based on the report.

If the customer does not supply the reports, the Telephone Company, then the projected PIaU will be set on a default basis at 50% (e.g. 50 percent of the switched usage will be charged based on this tariff (intrastate) and 50 percent of the switched usage will be charged based on the interstate access tariff of the Telephone Company. (C)

Pursuant to Federal Communications Commission Order FCC 85-145 released April 16, 1985, interstate usage is to be developed as though every call that enters a customer network at a point within the same state as that in which the called station (as designated by the called station telephone number) is situated is an intrastate communication and every call for which the point of entry is a state other than that where the called station (as designated by the called station telephone number) is situated is an interstate communication.

The PIaUs described in (2) through (4) following are applied to usage rated Carrier Common Line, Information Surcharge, Local Switching, Tandem Switched Transport and Transport Interconnection charges. (C)
(C)
(C)
Separate PIaUs are required for flat rated Entrance Facilities, Direct Trunked Transport and Multiplexers.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report Requirements (Cont'd)

(C) Jurisdictional Reports -Switched Access (Cont'd)

(2) Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report Requirements (Cont'd)

(C) Jurisdictional Reports -Switched Access (Cont'd)

(3) Feature Group D

When a customer orders Feature Group D Switched Access Service(s) the customer may provide the projected intrastate usage for each end office in its order. Alternatively the Telephone Company, where the jurisdiction can be determined from the call detail, will determine the projected intrastate percentage as follows:

ACCESS SERVICE2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.11 Jurisdictional Report Requirements (Cont'd)(C) Jurisdictional Reports -Switched Access (Cont'd)(3) Feature Group D (Cont'd)

For originating access minutes, the projected intrastate percentage will be developed on a monthly basis by end office where the Feature Group D Switched Access Service access minutes are measured by dividing the measured intrastate originating access minutes (the access minutes where the calling number is in one state and the called number is in another state) by the total originating access minutes, when the call detail is adequate to determine the appropriate jurisdiction.

For terminating access minutes, the data used by the Telephone Company to develop the projected intrastate percentage for originating access minutes will be used to develop the projected intrastate percentage for such terminating access minutes.

When originating call details are insufficient to determine the jurisdiction for the call, the customer will supply the projected intrastate percentage or authorize the Telephone Company to use the Telephone Company developed percentage. This percentage will be used by the Telephone Company as the projected intrastate percentage for originating and terminating access minutes. The projected intrastate percentage of use will be obtained by subtracting the projected interstate percentage for originating and terminating minutes from 100 (intrastate percentage = 100 - interstate percentage).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report Requirements (Cont'd)

(D) Billing Disputes Involving Jurisdictional Reports - Switched Access

For Switched Access, if a billing dispute arises concerning the projected intrastate percentage, the Telephone Company will ask the customer to provide the data the customer uses to determine the projected intrastate percentage. The Telephone Company will not request such data more than once a year. The customer will supply the data within thirty (30) days of the Telephone Company request.

ACCESS SERVICE**2 General Regulations (Cont'd)****23 Obligations of the Customer (Cont'd)****2.3.12 Determination of Intrastate Charges for Mixed
Interstate and Intrastate Switched Access Service**

When mixed interstate and intrastate Switched Access Service is provided, all charges (i.e., nonrecurring, monthly and/or usage) including optional features charges, will be prorated between interstate and intrastate. The percentage determined as set forth in 2.3.11 preceding will serve as the basis for prorating the charges unless the Telephone Company is billing according to actuals by jurisdiction. The percentage of an Access Service to be charged as intrastate is applied in the following manner:

- (A) Monthly and Nonrecurring Charges for monthly and nonrecurring chargeable rate elements, multiply the percent intrastate use times the quantity of chargeable elements times the stated tariff rate.
- (B) Usage Sensitive Charges for usage sensitive (i.e., access minutes and calls) chargeable rate elements, multiply the percent intrastate use times actual use (i.e., measured or Telephone Company assumed average use) times the stated tariff rate.

The intrastate percentage may change as revised usage reports are submitted as set forth in 2.3.11 preceding.

2.3.13 Identification and Rating of VoIP-PSTN Traffic

VoIP-PSTN Traffic is defined as traffic exchanged between a Telephone Company end user and the customer in Time Division Multiplexing ("TDM") format that originates and/or terminates in Internet Protocol ("IP") format. This section governs the identification of VoIP-PSTN Traffic that is required to be compensated at interstate access rates, unless the parties have agreed otherwise, by the Federal Communications Commission in its Report and Order in WC Docket Nos. 10-90, etc., FCC Release No. 11- 161 (November 18, 2011) ("FCC Order"), as reconsidered, amended, revised, or changed. Specifically this section establishes the method of separating VoIP-PSTN Traffic from the customer's traditional intrastate access traffic, so that VoIP-PSTN Traffic can be billed in accordance with the FCC Order.

- (A) VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Telephone Company's applicable tariffed interstate switched access rate as specified in GLC's Tariff F.C.C. No. 20 Section 17.
- (B) Calculation and Application of Percent-VoIP-Usage Factors

Telephone Company will determine the number of VoIP-PSTN Traffic minutes of use ("MOU") to which interstate rates will be applied under (B) preceding, by applying an originating Percent VoIP Usage ("PVU") factor to the total intrastate access MOU originated by a Telephone Company end user and delivered to the customer and by applying a terminating PVU factor to the total intrastate access MOU terminated by a customer to the Telephone Company's end user.

(N)

(N)

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ACCESS SERVICE2 General Regulations (Cont'd)23 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)(C) Calculation and Application of Percent-VoIP-Usage Factors (Cont'd)

- (1) The customer will calculate and furnish to the Telephone Company an originating PVU factor representing the whole number percentage of the customer's total originating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is received from the Telephone Company and that is terminated in IP format and that would be billed by the Telephone Company as intrastate access MOU.
- (2) The customer will calculate and furnish to the Telephone Company a terminating PVU factor representing the whole number percentage of the customer's total terminating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is sent to the Telephone Company and which originated in IP format and that would be billed by the Telephone Company as intrastate access MOU.
- (3) The customer shall not modify their reported PIU factor to account for VoIP-PSTN traffic.
- (4) Both the customer provided originating PVU and the terminating PVU shall be based on information such as the number of the customer's retail VoIP subscriptions in the state (e.g. as reported on FCC Form 477), traffic studies, actual call detail or other relevant and verifiable information which will be provided to Telephone Company upon request.
- (5) The customer shall retain the call detail, work papers and information used to develop the PVU factors for a minimum of one year.
- (6) If the customer does not furnish the Telephone Company with a PVU factor, the Telephone Company will utilize a PVU equal to zero.

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ACCESS SERVICE2 General Regulations (Cont'd)23 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)(D) Initial Implementation of PVU Factors

- (1) If the PVU factors cannot be implemented in the Telephone Company's billing systems by December 29, 2011, once the factors can be implemented, the Telephone Company will adjust the customer's bills to reflect the PVU factors prospectively in the next bill period, if the PVU factors are provided by the customer to the Telephone Company prior to April 15, 2012.
- (2) The Telephone Company may choose to provide credits based on the reported PVU factors on a quarterly basis until such time as the billing system modifications can be implemented.

(E) PVU Factor Updates

The customer may update the PVU factors quarterly using the method set forth in (C)(1) and (2) preceding. If the customer chooses to submit such updates, it shall forward to the Telephone Company, no later than 15 days after the first of January, April, July and/or October of each year, revised PVU factors based on data for the prior three months, ending the last day of December, March, June and September, respectively. The revised PVU factors will serve as the basis for future billing and will be effective on the next bill date, and shall serve as the basis for subsequent monthly billing until superseded by new PVU factors. No prorating or backbilling will be done based on the updated PVU factors.

(F) PVU Factor Verification

- (1) Not more than twice in any year, the Telephone Company may request from the customer an overview of the process used to determine the PVU factors, the call detail records, description of the method for determining how the end user originates or terminates calls in IP format, and other information used to determine the customer's PVU factors furnished to the Telephone Company in order to validate the PVU factors supplied. The customer shall comply, and shall reasonably supply the requested data and information within 15 days of the Telephone Company's request.

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By Patti Witte at 8:11 am, Jul 13, 2012

ACCESS SERVICE2 General Regulations (Cont'd)23 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)(F) PVU Factor Verification (Cont'd)

- (2) The Telephone Company may dispute the customer's PVU factor based upon:
- (a) A review of the requested data and information provided by the customer.
 - (b) The Telephone Company's reasonable review of other market information, FCC reports on VoIP lines, such as FCC Form 477 or state level results based on FCC Local Competition Report or other relevant data.
 - (c) A change in the reported PVU factor by more than five percentage points from the preceding quarter.
- (3) If after review of the data and information, the customer and the Telephone Company establishes revised PVU factors, the customer and the Telephone Company will begin using those revised PVU factors with the next bill period.
- (4) If the dispute is unresolved, the Telephone Company may initiate an audit. The Telephone Company shall limit audits of the customer's PVU factor to no more than twice per year. The customer may request that the audit be conducted by an independent auditor. In such cases, the associated auditing expenses will be paid by the customer.
- (a) In the event that the customer fails to provide adequate records to enable the Telephone Company or an independent auditor to conduct an audit verifying the customer's PVU factors, the Telephone Company will bill the usage for all contested periods using the most recent undisputed PVU factors reported by the customer. These PVU factors will remain in effect until the audit can be completed.

(N)

(N)

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Issued under authority of Public Act 179 of 1991 as amended and
the FCC 11-161 as revised, reconsidered, or amended

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ACCESS SERVICE2 General Regulations (Cont'd)23 Obligations of the Customer (Cont'd)2.3.13 Identification and Rating of VoIP-PSTN Traffic (Cont'd)(F) PVU Factor Verification (Cont'd)

(4) (Cont'd)

- (b) During the audit, the undisputed PVU factors from the previous reporting period will be used by the Telephone Company.
- (c) The Telephone Company will adjust the customer's PVU factors based on the results of the audit and implement the revised PVU in the next billing period or quarterly report date, whichever is first. The revised PVU factors will apply for the next two quarters before new factors can be submitted by the customer.
- (d) If the audit supports the customer's PVU factors, the usage for the contested periods will be adjusted to reflect the customer's audited PVU factors.

(N)

(N)

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ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances2.4.1 Payment of Rates, Charges and Deposits(A) Deposits

The Telephone Company will only require a customer which has a proven history of late payments to the Telephone Company or does not have established credit, to make a deposit prior to or at any time after the provision of a service to the customer. No such deposit will be required of a customer which is a successor of a company which has established credit and has no history of late payments to the Telephone Company. Such deposit will not exceed the actual or estimated rates and charges for the service for a two-month period. The fact that a deposit has been made in no way relieves the customer from complying with the Telephone Company's regulations as to the prompt payment of bills. At such time as the provision of the service to the customer is terminated, the amount of the deposit will be credited to the customer's account and any credit balance which may remain will be refunded.

Such a deposit will be refunded or credited to the account when the customer has established credit or, in any event, after the customer has established a one-year prompt payment record at any time prior to the termination of the provision of the service to the customer. In case of a cash deposit, for the period the deposit is held by the Telephone Company, the customer will receive interest at the same percentage rate as that set forth in (C)(2)(a) or in (C)(2)(b) following, whichever is lower.

The rate will be compounded daily for the number of days from the date the customer deposit is received by the Telephone Company to and including the date such deposit is credited to the customer's account or the date the deposit is refunded by the Telephone Company. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the customer's account.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(B) Bill Dates

The Telephone Company will bill on a current basis all charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Telephone Company will bill in advance charges for all services to be provided during the ensuing billing period except for charges associated with service usage and for the Federal Government which will be billed in arrears. The bill day (i.e., the billing date of a bill for a customer for Access Service under this tariff), the period of service each bill covers and the payment date will be as follows:

- (1) Held for Future Use

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(B) Bill Dates (Cont'd)(2) Access Services

For Access Service, the Telephone Company will establish a bill day each month for each customer account or advise the customer in writing of an alternate billing schedule. Alternate billing schedules will not be established on less than 60 days notice or initiated by the Telephone Company more than twice in any consecutive 12 month period.

The bill will cover non usage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled non usage sensitive charges for prior periods and unbilled usage charges for the period after the last bill day through the current bill day. Any known unbilled usage charges for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is due in immediately available funds by the payment date, as set forth in following. If payment is not received by the payment date, a late payment penalty will apply as set forth in (C) following.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(C) Payment Dates and Late Payment Penalties

- (1) All bills dated as set forth in (B)(2) preceding for Access Service provided to the customer by the Telephone Company are due 31 days (payment date) after the bill day or by the next bill date (i.e., same date in the following month as the bill date), whichever is the shortest interval, except as provided herein, and are payable in immediately available funds. If the customer does not receive a bill at least 20 days prior to the 31 day payment due date, then the bill will be considered delayed. When the bill has been delayed, upon request of the customer the due date will be extended by the number of days the bill was delayed. Such request of the customer must be accompanied with proof of late bill receipt.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(C) Payment Dates and Late Payment Penalties (Cont'd)

(1) (Cont'd)

If such payment date would cause payment to be due on a Saturday, Sunday or Legal Holiday, payment for such bills will be due from the customer as follows:

- If the payment date falls on a Sunday or on a Legal Holiday which is observed on a Monday, the payment date will be the first non-Holiday day following such Sunday or Legal Holiday.
- If the payment date falls on a Saturday or on a Legal Holiday which is observed on Tuesday, Wednesday, Thursday or Friday, the payment date will be the last non-Holiday day preceding such Saturday or Legal Holiday.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(C) Payment Dates and Late Payment Penalties (Cont'd)

- (2) Further, if no payment is received by the payment date or if a payment or any portion of a payment is received by the Telephone Company after the payment date as set forth in (1) preceding, or if a payment or any portion of a payment is received by the Telephone Company in funds which are not immediately available to the Telephone Company, then a late payment penalty will be due to the Telephone Company. The late payment penalty will be the payment or the portion of the payment not received by the payment date times a late factor. The late factor will be the lesser of:
- (a) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company, or
 - (b) 0.000292 per day, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company.

(D) Billing Disputes Resolved in Favor of the Telephone Company

Late payment charges will apply to amounts withheld pending settlement of the dispute. Late payment charges are calculated as set forth in (C)(2) preceding except that when the customer disputes the bill on or before the payment date and pays the undisputed amount on or before the payment date, the penalty interest period will not begin until 10 days following the payment date.

ACCESS SERVICE**2 General Regulations (Cont'd)****2.4 Payment Arrangements and Credit Allowances (Cont'd)****2.4.1 Payment of Rates, Charges and Deposits (Cont'd)****(E) Billing Disputes Resolved in Favor of the Customer**

Adjustment of charges will be made when billing disputes are brought to the attention of and verified by the Telephone Company as set forth in this section. Except as otherwise expressly provided in a written contract between a Customer and the Telephone Company, all requests for refunds or adjustments must be made in writing to the Telephone Company within two (2) years after the date when the bill that the Customer seeks to dispute was rendered. No refunds or adjustments will be made for billing disputes that occurred more than two (2) years before the date a customer makes a written request to the Company for adjustment. If the request for a refund or adjustment is made by a current Customer of the Telephone Company, the Telephone Company reserves the right to provide any adjustment due the Customer as set forth in this section in whole or in part by a bill credit against charges for current or future services.

(N)

Except as otherwise provided in a written contract between a Customer and the Telephone Company, a Customer will be liable for any unbilled service for two years from the date that the service was provided or two years from the date a bill for that service was rendered, whichever is later. This limitation does not apply when the service was obtained by the Customer by fraud or deception.

(N)

If the customer pays the total billed amount and disputes all or part of the amount, the Telephone Company will refund any overpayment. In addition, the Telephone Company will pay to the customer penalty interest on the overpayment. When a claim is filed within 90 days of the due date, the penalty interest period will begin on the payment date. When a claim is filed more than 90 days after the due date, the penalty interest period will begin from the date of the claim or the date of overpayment, whichever is later.

The penalty interest period will end on the date that the Telephone Company actually refunds the overpayment to the customer. The penalty interest rate will be the lesser of:

- (1) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the first date to and including the last date of the period involved, or
- (2) 0.000292 per day, compounded daily for the number of days from the first date to and including the last date of the period involved.

(F) Proration of Charges

Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period set forth for services in other sections of this tariff will be prorated to the number of days based on a 30-day month. The Telephone Company will, upon request, furnish within 30 days of a request and at no charge to the customer such detailed information as may reasonably be required for verification of any bill.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(G) Rounding of Charges

When a rate as set forth in this tariff is shown to more than two decimal places, the charges will be determined using the rate shown. The resulting amount will then be rounded to the nearest penny (i.e., rounded to two decimal places).

(H) Returned Check Charge

In cases where the Company issues direct bills to Customers, and payment by check is returned for insufficient funds, or is otherwise not processed for payment, there will be a charge as set forth herein. Such charge will be applicable on each occasion when a check is returned or not processed. The "Returned Check Charge" is listed in Section 17.4.4(Q).

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except for the following:

- Switched Access usage rated services
- Switched Access High Capacity DS3 Entrance Facility and Direct Trunked Transport
- Switched Access Synchronous Optical Channel OC3 and OC12 Entrance Facility and Direct Trunked Transport
- Special Access Service

The minimum period for which service is provided and for which rates and charges are applicable for a Specialized Service or Arrangement provided on an individual case basis is one month unless a different minimum period is established with the individual contract.

The Telephone Company and Customer will agree to minimum period and termination liability for Special Access Service, Entrance Facility and Direct Trunked Transport as part of the individual contract for that service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Minimum Periods (Cont'd)

When a service is discontinued prior to the expiration of the minimum period, charges are applicable, whether the service is used or not, as follows:

- (A) When a service with a one month minimum period is discontinued prior to the expiration of the minimum period, a one month charge will apply at the rate level in effect at the time service is discontinued.
- (B) When a service with a minimum period greater than one month is discontinued prior to the expiration of the minimum period the applicable charges will be the lesser of (1) the Telephone Company's total non recoverable costs less the net salvage value for the discontinued service or (2) the total monthly charges, at the rate level in effect at the time service is discontinued, for the remainder of the minimum period.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.3 Cancellation of an Order for Service

Provisions for the cancellation of an order for service are set forth in other applicable sections of this tariff.

2.4.4 Credit Allowance for Service Interruptions(A) General

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer as set forth in 6.2.1 following. An interruption period starts when an inoperative service is reported to the Telephone Company, and ends when the service is operative.

(B) When a Credit Allowance Applies

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the customer, will be provided.

For the following services, any period during which the error performance is below that specified for the service will be considered as an interruption.

- Digital Data (DA1 through DA6)
- High Capacity (DS1)

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)

Credit allowances are computed as follows:

(1) Special Access Service

For Special Access Services and for flat rated Switched Access Service rate elements (i.e., Entrance Facility, Direct Trunked Transport, Multiplexing, and Customer Premises Port), no credit will be allowed for an interruption of less than 30 minutes. The customer will be credited for an interruption of 30 minutes or more at the rate of 1/ 1440 of the monthly charges for the facility or service for each period of 30 minutes or Major Fraction thereof that the interruption continues.

The monthly charges used to determine the credit will be as follows:

- (a) Two-point Services For two-point services, the monthly charge will be the total of all the monthly rate element charges associated with the service (i.e., two channel terminations, channel mileage and optional features and functions).
- (b) Multipoint Services For multipoint services, the monthly charge will be only the total of all the monthly rate element charges associated with that portion of the service that is inoperative (i.e., a channel termination per customer designated premises, channel mileage and optional features and functions).

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(1) Special Access Service (Cont'd)(c) Multiplexed Services

For multiplexed services, the monthly charge will be the total of all the monthly rate element charges associated with that portion of the service that is inoperative. When the facility which is multiplexed or the multiplexer itself is inoperative, the monthly charge will be the total of all the monthly rate element charges associated with the service to the hub and any individual services from the hub.

When the service which rides a channel of the multiplexed facility is inoperative, the monthly charge will be the total of all the monthly rate element charges associated with that portion of the service from the hub or wire center.

(d) Flat rated Switched Access Service rate elements

For flat rated Switched Access Service rate elements, the monthly charge will be the total of all the monthly rate element charges associated with the service (i.e., Entrance Facility, Direct Trunked Transport and Multiplexing).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(1) Special Access Service (Cont'd)

(d) Flat rated Switched Access Service rate elements (Cont'd)

(Held for Future Use)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(2) (Held for Future Use)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(2) (Held for Future Use)

(3) Switched Access

For Switched Access Service, usage rated elements, no credit will be allowed for an interruption of less than 24 hours. The customer will be credited for an interruption of 24 hours or more at the rate of 1/ 30 of any applicable monthly rate or assumed minutes of use charge for each period of 24 hours or major fraction thereof that the interruption continues.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(4) Credit Allowances Cannot Exceed Monthly Rate

The credit allowance(s) for an interruption or for a series of interruptions will not exceed any monthly rate for the service interrupted in any one monthly billing period.

(C) When a Credit Allowance Does Not Apply

No credit allowance will be made for:

- (1) Interruptions caused by the negligence of the customer.
- (2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others.
- (3) Interruptions of a service during any period in which the Telephone Company is not afforded access to the premises where the service is terminated.
- (4) Interruptions of a service when the customer has released that service to the Telephone Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service. Thereafter, a credit allowance as set forth in (B) preceding applies.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(C) When a Credit Allowance Does Not Apply (Cont'd)

(5) (Held for Future Use)

(6) Periods when the customer elects not to release the service for testing and/or repair and continues to use it on an impaired basis.

(7) An interruption or a group of interruptions, resulting from a common cause, that would result in credit in an amount less than one dollar.

(D) Use of an Alternative Service Provided by the Telephone Company

Should the customer elect to use an alternative service provided by the Telephone Company during the period that a service is interrupted, the customer must pay the tariffed rates and charges for the alternative service used.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(E) Temporary Surrender of a Service

In certain instances, the customer may be requested by the Telephone Company to surrender a service for purposes other than maintenance, testing or activity relating to a service order. If the customer consents, a credit allowance will be granted. The credit allowance will be 1/1440 of the monthly rate for each period of 30 minutes or fraction thereof that the service is surrendered. In no case will the credit allowance exceeds the monthly rate for the service surrendered in any one monthly billing period.

2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence(A) Nonrecurring Charges Do Not Apply

Charges do not apply for the reestablishment of service following a fire, flood or other occurrence attributed to an Act of God provided that:

- (1) The service is of the same type as was provided prior to the fire, flood or other occurrence.
- (2) The service is for the same customer.
- (3) The service is at the same location on the same premises.
- (4) The reestablishment of service begins within 60 days after Telephone Company service is available. (The 60-day period may be extended a reasonable period if the renovation of the original location on the premises affected is not practical within the allotted time period).

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.5 Reestablishment of Service Following Fire, Flood or Other Occurrence (Cont'd)(B) Nonrecurring Charges Apply

Nonrecurring Charges apply for establishing service at a different location on the same premises or at a different premise pending reestablishment of service at the original location.

2.4.6 Title or Ownership Rights

The payment of rates and charges by customers for the services offered under the provisions of this tariff does not assign, confer or transfer title or ownership rights to proposals or facilities developed or utilized, respectively, by the Telephone Company in the provision of such services.

2.4.7 Access Services Provided By More Than One Telephone Company

When an Access Service is provided by more than one Telephone Company, the Telephone Companies involved will mutually agree upon one of the billing methods as set forth in (B) (1) and (2) following based on the service being provided. The Telephone Companies will notify the customer in writing of the billing method being used. The customer will place the order for the service as set forth in 5.3 following dependent upon the billing method.

(A) (Held for Future Use)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company

(A) (Held for Future Use)

(B) Meet Point Billing

Meet Point Billing is required when an access service is provided by multiple Telephone Companies for Feature Group D Switched Access Services and Special Access.

Each Telephone Company jointly providing the access service will receive an order or a copy of the order from the customer as specified in 5.3.2 following and arrange to provide the service.

For usage rated access services the access minutes of use will generally be determined by the recording company. Where the recording company is not the Bill Rendering Company, the recording company will provide detailed usage records to the Bill Rendering Company to develop the access minutes.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)

The Bill Rendering Company in a single bill arrangement for Feature Group D Switched Access Services, is normally the end user's end office.

The non Bill Rendering Company(s) is any Telephone Company(s) in whose territory a segment of the Local Transport (Including the tandem switch functionality, if applicable) or Channel Mileage is provided and/or where the customer's Point of Termination is located.

There are two Meet Point Billing Options, Single Bill and Multiple Bill. These billing options are explained in (1) and (2) following. The Single Bill option is the preferred method. However, when a single bill option cannot be agreed to by all telephone companies providing service, the multiple bill option is the default.

Each telephone company must provide meet point billing notification to the customer, in writing, when new service is ordered or thirty days prior to changing an existing meet point arrangement. The notification should include the following:

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)

- The Meet Point Billing Option that will be used,
- The Telephone Company(s) that will render the bill(s),
- The Telephone Company(s) to whom payment(s) should be remitted, and
- The Telephone Company(s) that will provide the bill inquiry function.

A Telephone Company that renders a meet point bill, the Bill Rendering Company, will render the bill in accordance with the industry standards as described in the Multiple Exchange Carrier Access Billing (MECAB) Guidelines and the Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines. The bill will include cross reference(s) to the other telephone Company(s) providing service and common circuit identifiers. Should a billing dispute arise, the terms and conditions of the Bill Rendering company will apply.

(1) Single Bill Option

The single bill option allows the customer to receive one bill for access services that are provided by more than one company. The single bill option provides the following three billing alternatives:

- Single Bill/ Multiple Tariff
- Single Bill/ Pass Through Billing, and
- Single Bill/ Single Tariff

These options are described following in (a), (b) and (c) respectively.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(a) Single Bill/ Multiple Tariff

The single bill/ multiple tariff bill is prepared by the Bill Rendering Company but reflects all rates and charges for each connecting company's part of the service based on each company's access tariff.

The Bill Rendering Company will:

- determine and include all recurring and nonrecurring rates and charges for each involved Telephone Company;
- identify each involved Telephone Company's rates and charges separately on the bill;
- forward the bill to the customer and provide a copy of the bill or other substantiation of the charges to the connecting Telephone Companies; and
- advise the customer how to remit the payment, either directly to each Telephone Company involved in the provision of this meet point billed service, or, as a single payment made to the Bill Rendering Company. If payments are to be sent directly to the Bill Rendering Company, the non Bill Rendering Company(s) will provide the customer with written authorization for the payment arrangement.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(b) Single Bill/ Pass-Through Billing

The single bill/ pass-through bill is compiled by the Bill Rendering Company. Each Telephone Company will prepare a bill for its portion of the access service and forward it to the Bill Rendering Company. Normally, these connecting telephone company bills are forwarded to the Bill Rendering Company without usage to eliminate possible delays.

Each non Bill Rendering Company will:

- prepare its own bill;
- determine its rates and charges for Local Transport, and/or Channel Mileage as set forth in (3) following;
- determine and include all applicable recurring and nonrecurring rates and charges of its access tariff; and
- forward the bill to the Bill Rendering Company for the meet point access service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(1) Single Bill Option (Cont'd)

(b) Single Bill/ Pass-Through Billing (Cont'd)

The Bill Rendering Company will:

- apply usage data, when needed, to the bills and calculate the charges;
- combine all the bills of the involved Telephone Companies providing the meet point access service;
- forward the bill to the customer; and
- advise the customer how to remit the payment, either directly to each Telephone Company involved in the provision of this meet point billed service; or, as a single payment made to the Bill Rendering Company. If payments are to be sent directly to the Bill Rendering Company, the non Bill Rendering Company(s) will provide the customer with written authorization for the payment arrangement.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(1) Single Bill Option (Cont'd)(c) Single Bill/ Single Tariff

The single bill/ single tariff bill provides a meet point bill that is billed completely at the Billing Rendering Company's tariff rates and regulations.

The Bill Rendering Company will:

- determine and include on the access bill all usage data and all other recurring and nonrecurring rates and charges per its access tariff; and
- forward the bill to the customer. The customer will remit the payment to the Bill Rendering Company.

(2) Multiple Bill Option

Under the Multiple Bill Option each company providing the access service will render an access bill to the customer for its portion of the service based on its access tariff rates and regulations. For switched access multiple bills, the end office company is generally the Initial Billing Company (IBC). The IBC is the company that calculates the access minutes to be billed to the customer and provides this data to each connecting company providing service, i.e., the Subsequent Billing Company(s)(SBC). Each company, IBC and SBC, will:

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(2) Multiple Bill Option (Cont'd)

- prepare its own bill;
- determine its charge(s) for Local Transport and/or Channel Mileage as set forth in (3) following;
- determine and include all recurring and nonrecurring rates and charges of its access tariff; - reflect its Billing Account Reference (BAR) and all connecting company Billing Account Cross Reference (BACR) code(s);
- forward its bill to the customer. The customer will remit payment directly to each Bill Rendering Company.

(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges

Each Telephone Company's portion of the Local Transport, and Channel Mileage will be developed as follows:

- (a) Determine the appropriate Local Transport or Channel Mileage by computing the number of airline miles between the Telephone Company premises (end office, access tandem or serving wire centers for

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

(a) (Cont'd)

Switched Access or serving wire centers for Special Access) using the V & H method set forth respectively in 6.4.6 and 7.2.5 following.

(b) Determine the billing percentage (BP), as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. (NECA) TARIFF F.C.C. NO. 4, which represents the portion of the service provided by each Telephone Company.

(c) For Feature Group D Tandem Switched Transport

- multiply the number of originating and terminating access minutes of use routed over the facility times the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Tandem Switched Facility rate;
- multiply the Tandem Switched Termination rate times the number of originating and terminating access minutes routed over the facility.
- When a tandem office is provided by the Company, multiply the Tandem Switching rate times the number of originating and terminating access minutes that are switched at the tandem.

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)

(c) (Cont'd)

The Tandem Switched Termination rate is applied as set forth in 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in 6.4.1(B) following. (Note: The BP is not applied to the Switched Access Tandem Switched Termination rate or any Nonrecurring Charge.)

(d) For Feature Group D Direct Trunked Transport:

- multiply the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Direct Trunked Facility rate.
- The Direct Trunked Termination rate is applied as set forth in 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in 6.4.1(B) following. (Note: The BP is not applied to either the Switched Access Direct Trunked Termination rate or any Nonrecurring Charge.)

ACCESS SERVICE2. General Regulations (Cont d)2.4 Payment Arrangements and Credit Allowances (Cont d)2.4.7 Access Services Provided by More Than One Telephone Company (Cont d)(B) Meet Point Billing (Cont d)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont d)

(e) For Feature Group D.

- When the end office (which may be a Remote Switching Module) is located within the operating territory of a Telephone Company participating in this tariff, if applicable multiply the Transport Interconnection Charge rate times the number of originating and terminating access minutes that are switched at the end office. (C)
- When the Entrance Facility and/or Multiplexing equipment is provided by the Company, the Entrance Facility and/or Multiplexing charge will apply. (C)
- The Billing Percentage (BP) is not applicable to the Entrance Facility or Multiplexer.

(f) Held for Future Use

ACCESS SERVICE2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport, and Channel Mileage Charges (Cont'd)(e) (Cont'd)
Held for Future Use

(g) Held for Future Use

(h) When three or more Telephone Companies are involved in providing an Access Service, the intermediate Telephone Company(s) will determine the charges as set forth in (c) through (g) preceding. Additionally, when a segment of the Tandem Switched Facility, Direct Trunked Facility or Channel Mileage Facility is measured to the intermediate office(s), the Tandem Switched Termination, Direct Trunked Termination or Channel Mileage Termination rates are also applied at the intermediate Telephone Company(s) office(s).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.2 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel
Mileage Charges (Cont'd)

Held for Future Use

ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Connections

Equipment and systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with Switched and Special Access Services furnished by the Telephone Company where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions

Certain terms used herein are defined as follows:

800 Data Base Access Service

The term "800 Data Base Access Service" denotes a service which uses a data base system to identify 800 access customers on a 10-digit basis. For purposes of administering the rules and regulations set forth in this tariff regarding the provision of 800 Database Access, except where otherwise specified, 800 Database Access Service will include the following service access codes 800, 888, 877, 866, 855, 844, 833, and 822.

800 Series

The term "800 series" denotes the service access codes of 800, 888, 877, 866, 855, 844, 833, and 822.

Access Code

The term "Access Code", denotes a uniform access code assigned by the Telephone Company to an individual customer in the form 101XXXX.

Access Minutes

For the purpose of calculating chargeable usage, the term "Access Minutes" denotes customer usage of the Company's facilities in the provision of intrastate service. On the originating end of an intrastate call, usage is measured from the time the originating end user's call is delivered by the Telephone Company to and acknowledged as received by the customer's facilities connected with the originating exchange. On the terminating end of an intrastate call, usage is measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both originating and terminating ends of an intrastate call will terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

Access Tandem

The term "Access Tandem" denotes a Telephone Company switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer designated premises.

ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)Add/ Drop Multiplexing

The term "Add/ Drop Multiplexing" denotes a multiplexing function offered in connection with SONET that allows lower level signals to be added or dropped from a high speed optical carrier channel in a wire center. The connection to the add/drop multiplexer is via a channel to a Central Office Port at a specific digital speed (i.e., DS3, DS1, etc.).

Automatic Number Identification (ANI)

(N)

The term "Automatic Number Identification" denotes the Multi-frequency (MF) signaling parameter that identifies the billing number of the calling party.

(N)

(N)

Answer/ Disconnect Supervision

The term "Answer/ Disconnect Supervision" denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer's point of termination as an indication that the called party has answered or disconnected.

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Attenuation Distortion

The term "Attenuation Distortion" denotes the difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified.

Balance (100 Type) Test Line

The term "Balance (100 Type) Test Line" denotes an arrangement in an end office which provides for balance and noise testing.

Bit

The term "Bit" denotes the smallest unit of information in the binary system of notation.

ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)Business Day

The term "Business Day" denotes the times of day that a company is open for business. Generally, in the business community, these are 8:00 or 9:00 a.m. to 5:00 or 6:00 p.m., respectively, with an hour for lunch, Monday through Friday, resulting in a standard forty (40) hour work week. However, Business Day hours for the Telephone Company may vary based on company policy, union contract and location. To determine such hours for an individual company, or company location, that company should be contacted at the address shown under the Issuing Carrier's name listed on Title Pages 2 through 68 preceding.

Busy Hour Minutes of Capacity (BHMC)

The term "Busy Hour Minutes of Capacity (BHMC)" denotes the customer specified maximum amount of Switched Access Service access minutes the customer expects to be handled in an end office switch during any hour in an 8:00 A.M. to 11:00 P.M. period for the Feature Group ordered. This customer specified BHMC quantity is the input data the Telephone Company uses to determine the number of transmission paths for the Feature Group ordered.

Call

The term "Call" denotes a customer attempt for which complete address information (e.g., 0-, 911, or 10 digits) is provided to the serving dial tone office.

Calling Party Number (CPN)

(N)

The term "Calling Party Number" denotes the SS7 signaling parameter that identifies the subscriber line number or directory number of the calling party.

(N)

(N)

Carrier Identification Code (CIC)

The term "Carrier Identification Code (CIC)" denotes a numeric code assigned by the North American Numbering Plan (NANP) Administrator for the provisioning of Feature Group D Switched Access Services. The numeric code is unique to each carrier and is used by the Telephone Company to route switched access traffic to the Customer Designated Premises.

Carrier or Common Carrier

See Interexchange Carrier.

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ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)CCS

The term "CCS" denotes a hundred call seconds, which is a standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

Central Office

See End Office.

Central Office Maintenance Technician

The term "Central Office Maintenance Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, within the Telephone Company Central Office.

Central Office Prefix

The term "Central Office Prefix" denotes the first three digits (NXX) of the seven digit telephone number assigned to a customer's Telephone Exchange Service when dialed on a local basis.

Channel(s)

The term "Channel(s)" denotes an electrical or photonic, in the case of fiber optic-based transmission systems, communications paths between two or more points of termination.

Channel Service Unit

The term "Channel Service Unit" denotes equipment which performs one or more of the following functions: termination of a digital facility, regeneration of digital signals, detection and/or correction of signal format error, and remote loop back.

Channelize

The term "Channelize" denotes the process of multiplexing-demultiplexing wider bandwidth or higher speed channels into narrower bandwidth or lower speed channels.

Charge Number (CN)

(N)

The term "Charge Number" denotes the SS7 signaling parameter that identifies the billing telephone number of the calling party.

(N)

(N)

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ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Clear Channel Capability

The term "Clear Channel Capability" denotes the ability to transport twenty-four 64 Kbps over a DS1 Mbps High Capacity service via a B8ZS line code format.

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

C-Notched Noise

The term "C-Notched Noise" denotes the C-message frequency weighted noise on a voice channel with a holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

Common Channel Signaling

The term "Common Channel Signaling" (CCS) denotes a high speed packet switched communications network which is separate (out of band) from the public packet switched and message networks. Its purpose is to carry addressed signaling messages for individual trunk circuits and/or database related services between Signaling Points in the CCS network.

Common Line

The term "Common Line" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Telephone Company, terminated on a central office switch. A common line-residence is a line or trunk provided under the residence regulations of the general and/or local exchange service tariffs. A common line-business is a line provided under the business regulations of the general and/or local exchange service tariffs.

ACCESS SERVICE

2 General Regulations (Cont'd)

26 Definitions (Cont'd)

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment provided by other than the Telephone Company.

Customer(s)

The term "Customer(s)" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the services offered under this tariff, including but not limited to End Users, Interexchange Carriers (ICs) and other telecommunications carriers or providers originating or terminating Toll VoIP-PSTN Traffic.

(M)

(M)

Customer Node

The term "Customer Node" denotes Telephone Company provided equipment located at a customer designated premises that terminate a high speed optical channel.

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Customer Designated Premises

The term "Customer Designated Premises" denotes the premises specified by the customer for the provision of Access Service.

Data Transmission (107 Type) Test Line

The term "Data Transmission (107 Type) Test Line" denotes an arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

Decibel

The term "Decibel" denotes a unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

Detail Billing

The term "Detail Billing" denotes the listing of each message and/or rate element for which charges to a customer are due on a bill prepared by the Telephone Company.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Direct-Trunked Transport

The term "Direct-Trunked Transport" denotes transport from the serving wire center to the end office or from the serving wire center to the access tandem on circuits dedicated to the use of a single customer, without switching at the tandem.

(C)

Directory Assistance (Intrastate)

The term "Directory Assistance" denotes the provision of telephone numbers by a Telephone Company operator when the operator location is accessed by a customer by dialing NPA + 555-1212 or 555-1212.

Echo Control

The term "Echo Control" denotes the control of reflected signals in a telephone transmission path.

Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of interface without regard to the send and receive Transmission Level Point.

Echo Return Loss

The term "Echo Return Loss" denotes a frequency weighted measure of return loss over the middle of the voiceband (approximately 500 to 2500 Hz), where talker echo is most annoying.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

End Office

The term "End Office" denotes a local Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. This term includes Remote Switching Modules/ Systems served by a Host Central Office in a different wire center.

End User

The term "End User" means any customer of an intrastate service that is not a carrier, except that a carrier other than a telephone company will be deemed to be an "end user" when such carrier uses a telecommunications service for administrative purposes, and a person or entity that offers telecommunications service exclusively as a reseller will be deemed to be an "end user" if all resale transmissions offered by such reseller originate on the premises of such reseller.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Entrance Facility

The term "Entrance Facility" denotes a Switched Access Service dedicated Local Transport facility between the customer's serving wire center and the customer designated premises.

Entry Switch

See First Point of Switching.

Envelope Delay Distortion

The term "Envelope Delay Distortion" denotes a measure of the linearity of the phase versus frequency of a channel.

Equal Level Echo Path Loss

The term "Equal Level Echo Path Loss" (ELEPL) denotes the measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP). [ELEPL = EPL -TLP (send) + TLP (receive)].

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Exchange

The term "Exchange" denotes a unit generally smaller than a local access and transport area, established by the Telephone Company for the administration of communications service in a specified area which usually embraces a city, town or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area. The exchange includes any Extended Area Service area that is an enlargement of a Telephone Company's exchange area to include nearby exchanges. One or more designated exchanges comprise a given local access and transport area.

Exit Message

The term "Exit Message" denotes an SS7 message sent to an end office by the Telephone Company's tandem switch to mark the Carrier Connect Time when the Telephone Company's tandem switch sends an Initial Address Message to an interexchange customer.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

Extended Area Service

See Exchange.

First Point of Switching

The term "First Point of Switching" denotes the first Telephone Company location at which switching occurs on the terminating path of a call proceeding from the customer designated premises to the terminating end office and, at the same time, the last Telephone Company location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer designated premises.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Host Central Office

The term "Host Central Office" denotes an electronic local Telephone Company End Office where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. Additionally, this type of End Office contains the central call processing functions which service itself and its Remote Switching Modules/ Systems.

Hub

The term "Hub" denotes a wire center at which bridging or multiplexing functions are performed for customers served out of any wire center.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Immediately Available Funds

The term "Immediately Available Funds" denotes a corporate or personal check drawn on a bank account and funds which are available for use by the receiving party on the same day on which they are received and include U. S. Federal Reserve bank wire transfers, U. S. Federal Reserve notes (paper cash), U. S. coins, U.S. Postal Money Orders and New York Certificates of Deposit.

Impulse Noise

The term "Impulse Noise" denotes any momentary occurrence of the noise on a channel over a specified level threshold. It is evaluated by counting the number of occurrences which exceed the threshold.

Individual Case Basis

The term "Individual Case Basis" denotes a condition in which the regulations, if applicable, rates and charges for an offering under the provisions of this tariff are developed based on the circumstances in each case.

(D)

(D)

(D)

(D)

Initial Address Message

The term "Initial Address Message" denotes an SS 7 message sent in the forward direction to initiate trunk set up, reserve an outgoing trunk and process the information about that trunk along with other data relating to the routing and handling of the call to the next switch.

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the maximum power available at the originating end and the actual power reaching the terminating end through the inserted connection.

ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)Installation and Repair Technician

The term "Installation and Repair Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, outside of the Telephone Company Central Office and generally at the customer designated premises.

Interexchange Carrier (IC) or Interexchange Common Carrier

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denotes any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in intrastate communication by wire or radio, between two or more exchanges.

Intermediate Hub

The term "Intermediate Hub" denotes a wire center at which bridging or multiplexing functions are performed only for customers served by that wire center and wire centers that subtend the hub, as specified in NECA Tariff F.C.C. No. 4.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the nonlinearity of a channel. It is measured using four tones, and evaluating the ratios (in dB) of the transmitted composite four-tone signal power to the second-order products of the tones (R2), and the third-order products of the tones (R3).

Internet Protocol (IP) Signaling

(N)

The term "Internet Protocol (IP) Signaling" denotes a packet data-oriented protocol used for communicating call signaling information.

(N)
(N)Interstate Communications

The term "Interstate Communications" denotes both interstate and foreign communications.

Intrastate Communications

The term "Intrastate Communications" denotes any communications within a state subject to oversight by a state regulatory commission as provided by the laws of the state involved.

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ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Legal Holiday

The term "Legal Holiday" denotes days other than Saturday or Sunday for which the Telephone Company is normally closed. These include New Year's Day, Independence Day, Thanksgiving Day, Christmas Day and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed and other locally observed holidays when the Telephone Company is closed.

Local Access and Transport Area (LATA)

The term "Local Access and Transport Area" denotes a geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes.

Loss Deviation

The term "Loss Deviation" denotes the variation of the actual loss from the designed value.

Major Fraction Thereof

The term "Major Fraction Thereof" denotes any period of time in excess of ½ of the stated amount of time. As an example, in considering a period of 24 hours, a major fraction thereof would be any period of time in excess of 12 hours exactly. Therefore, if a given service is interrupted for a period of thirty-six hours and fifteen minutes, the customer would be given a credit allowance for two twenty-four-hour periods for a total of forty-eight hours.

Message

The term "Message" denotes a "call" as defined preceding.

ACCESS SERVICE

2 General Regulations (Cont'd)

26 Definitions (Cont'd)

Milliwatt (102 Type) Test Line

The term "Milliwatt (102 Type) Test Line" denotes an arrangement in an end office which provides a 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the customer's premises from the Telephone Company end office.

Multi-Frequency (MF) Signaling

(N)

The term "Multi-Frequency (MF) Signaling" denotes an in-band signaling method in which call signaling information is transmitted between network switches using the same voiceband channel used for voice.

(N)

(N)

(N)

North American Numbering Plan

The term "North American Numbering Plan" denotes a three-digit area code (Numbering Plan Area -NPA) and a seven-digit telephone number made up of a three-digit Central Office prefix plus a four-digit station number.

Off-hook

The term "Off-hook" denotes the active condition of Switched Access or a Telephone Exchange Service line.

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ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)On-hook

The term "On-hook" denotes the idle condition of Switched Access or a Telephone Exchange Service line.

Open Circuit Test Line

The term "Open Circuit Test Line" denotes an arrangement in an end office which provides an open circuit termination of a trunk or line by means of an inductor of several Henries.

Optical Carrier Channel

The term "Optical Carrier Channel" denotes the high speed optical communications path for transporting information utilizing a Synchronous Optical Channel platform. The channel is provided at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12).

Optical Carrier Rate (OC-N)

The term "Optical Carrier Rate" denotes the line rate being transmitted on an optical carrier channel. A SONET transmission rate is equivalent to "N" times the OC1 line rate of 51.84 Mbps.

Optical Carrier Rate Concatenated

The term "Optical Carrier Rate Concatenated" denotes the transmission of a combined signal formed by linking together multiple individual signals.

Optical Line Termination

The term "Optical Line Termination" denotes the network interface on the customer designated premises equipment that provides for an optical handoff.

Originating Direction

The term "Originating Direction" denotes the use of access service for the origination of calls from an End User Premises to a Customer's Premises. (C)

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Pay Telephone

The term "Pay Telephone" denotes a coin or coinless instrument provided in a public or semipublic place where Payphone Service Provider customers can originate telephonic communications and pay the applicable charges by (1) inserting coins into the equipment, or (2) using a credit card, or (3) third party billing the call or (4) calling collect.

ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)Payphone Service Provider

The term "Payphone Service Provider" denotes an entity that provides pay telephone service, which is the provision of public, semi-public or inmate pay telephone service.

Phase Jitter

The term "Phase Jitter" denotes the unwanted phase variations of a signal.

Point of Termination

The term "Point of Termination" denotes the point of demarcation within a customer-designated premise at which the Telephone Company's responsibility for the provision of Access Service ends.

Premises

The term "Premises" denotes a building or buildings on continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway.

Release Message

The term "Release Message" denotes an SS7 message sent in either direction to indicate that a specific circuit is being released.

Remote Switching Modules/ Systems

The term "Remote Switching Modules/ Systems" denotes small, remotely controlled electronic end office switches which obtain their call processing capability from an electronic Host Central Office. The Remote Switching Modules/ Systems cannot accommodate direct trunks. (C)

Return Loss

The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the higher the similarity.

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By Patti Witte at 8:12 am, Jul 13, 2012

ACCESS SERVICE2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Service Access Code

The term "Service Access Code" denotes a 3-digit code in the NPA format which is used as the first three digits of a 10-digit address and which is assigned for special network uses. Whereas NPA codes are normally used for identifying specific geographical areas, certain Service Access Codes have been allocated in the North American Numbering Plan to identify generic services or to provide access capability. Examples of Service Access Codes include the 800 and 900 codes.

Service Switching Point (SSP)

The term "Service Switching Point" denotes an end office or tandem which, in addition to having SS7 and SP capabilities, is also equipped to query centralized data bases.

Serving Wire Center

The term "Serving Wire Center" denotes the wire center from which the customer designated premises would normally obtain dial tone. The Serving Wire Center for access to GLC's tandem switch is the same facility that houses the GLC tandem switch located in Westphalia, Michigan. From this location, customers that require dedicated circuits from GLC can only obtain GLC's Tandem Connection Transport service as described in Section 11.1.5.

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(C)

Shortage of Facilities or Equipment

The term "Shortage of Facilities or Equipment" denotes a condition which occurs when the Telephone Company does not have appropriate cable, switching capacity, bridging or, multiplexing equipment, etc., necessary to provide the Access Service requested by the customer.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides for an ac short circuit termination of a trunk or line by means of a capacitor of at least four microfarads.

Signal-to-C-Notched Noise Ratio

The term "Signal-to-C-Notched Noise Ratio" denotes the ratio in dB of a test signal to the corresponding C-Notched Noise.

Signaling Point (SP)

The term "Signaling Point (SP)" denotes an SS7 network interface element capable of originating and terminating SS7 trunk signaling messages.

Signaling Point of Interface (SPOI)

The term "Signaling Point of Interface (SPOI)" denotes the customer designated location where the SS7 signaling information is exchanged between the Telephone Company and the customer.

Signaling Return Loss

The term "Signaling Return Loss" denotes the frequency weighted measure of return loss at the edges of the voiceband (200 to 500 Hz and 2500 to 3200 Hz), where signing (instability) problems are most likely to occur.

Signaling System 7 (SS7)

The term "Signaling System 7 (SS7)" denotes the layered protocol used for standardized common channel signaling in the United States and Puerto Rico.

Signal Transfer Point (STP)

The term "Signal Transfer Point (STP)" denotes a packet switch which provides access to the Telephone Company's SS7 network and performs SS7 message signal routing and screening.

Signal Transfer Point (STP) Port

The term "Signal Transfer Point (STP) Port" denotes the point of termination and interconnection to the STP.

ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Subtending End Office of an Access Tandem

The term "Subtending End Office of an Access Tandem" denotes an end office that has final trunk group routing through that tandem.

Super Intermediate Hub

The term "Super Intermediate Hub" denotes a wire center at which bridging or multiplexing functions are performed for Customers served by all wire centers in the LATA. A Super Intermediate Hub can be restricted to one or more designated NPAs within a LATA and/or to wire centers that are owned by the same telephone company as the hub. Super Intermediate Hubs and the wire centers they serve are identified in NECA TARIFF F.C.C. NO. 4.

Synchronous Optical Network (SONET)

The term SONET denotes a North American Standard for high speed synchronous optical channels having minimum transmission rates of 51.84 Mbps. The standard SONET optical carrier rate of 51.84 Mbps. is called OC1; the equivalent electrical signal rate is called STS-1. SONET standardizes higher transmission bit rates, OCN, as exact multiples of OC1 (N X 51.84 Mbps.). For example, OC3 equals 3 X 51.84 Mbps.

ACCESS SERVICE2 General Regulations (Cont'd)26 Definitions (Cont'd)Synchronous Test Line

The term "Synchronous Test Line" denotes an arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

Synchronous Transport Signal (STS)

The term Synchronous Transport Signal denotes a 51.84 Mbps. electrical signal used within the SONET optical carrier network. The signal consists of the information content and the overhead used by SONET. The overhead is used for controlling, framing and maintaining the STS signal so it can be directly connected to other SONET carrier channels. STS signals are in exact multiples of 51.84 Mbps. (STS-1 is 51.84 Mbps., STS-3 is 155.52 Mbps., etc.).

Tandem Switched Transport

The term "Tandem Switched Transport" denotes transport from the tandem to the end office that is switched at a tandem.

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from a Customer's premise to an End User Premises.

(C)

Terminus Hub

The term "Terminus Hub" denotes a wire center at which bridging or multiplexing functions are performed only for Customers served directly by the same wire center.

Throughput

The term "Throughput" denotes the number of data bits successfully transferred in one direction per unit of time.

Toll VoIP-PSTN Traffic

The term "Toll VoIP-PSTN Traffic" denotes a customer's interexchange voice traffic exchanged with the Telephone Company in a Time Division Multiplexing format over PSTN facilities, which originates and/or terminates in Internet Protocol (IP) format. "Toll VoIP-PSTN Traffic" originates and/or terminates in IP format when it originates and/or terminates to an end user customer of a service that requires IP-compatible customer premises equipment.

(N)



(N)

Transmission Measuring (105 Type) Test Line/ Responder

The term "Transmission Measuring (105 Type) Test Line/Responder" denotes an arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

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ACCESS SERVICE2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Transmission Path

The term "Transmission Path" denotes an electrical path capable of transmitting signals within the range of the service offering, e.g., a voice grade transmission path is capable of transmitting voice frequencies within the approximate range of 300 to 3000 Hz. A transmission path comprises physical or derived facilities consisting of any form or configuration of plant typically used in the telecommunications industry.

Trunk

The term "Trunk" denotes a communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

Trunk Group

The term "Trunk Group" denotes a set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

Trunk Side Connection

The term "Trunk Side Connection" denotes the connection of a transmission path to the trunk side of a local exchange switching system.

Two-Wire to Four-Wire Conversion

The term "Two-Wire to Four-Wire Conversion" denotes an arrangement which converts a four-wire transmission path to a two-wire transmission path to allow a four-wire facility to terminate in a two-wire entity (e.g., a central office switch).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

V and H Coordinates Method

The term "V and H Coordinates Method" denotes a method of computing airline miles between two points by utilizing an established formula which is based on the vertical and horizontal coordinates of the two points.

Wireless Switching Center

The term "Wireless Switching Center" (WSC) denotes a Wireless Service Provider (WSP) switching system that is used to terminate wireless stations for purposes of interconnection to each other and to trunks interfacing with the public switched network.

Wire Center

The term "Wire Center" denotes a building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.

ACCESS SERVICE

3. Carrier Common Line Access Service

(C)

The Telephone Company will provide Carrier Common Line Access Service (Carrier Common Line Access) to customers in conjunction with Switched Access Service provided in Section 6. of this tariff or the appropriate Switched Access Service section of other Access Service tariffs.

(N)

3.1 General Description

Carrier Common Line Access provides for the use of end users' Telephone Company provided common lines by customers for access to such end users to furnish Intrastate Communications.

(N)

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.2 Limitations

3.2.1 Exclusions

Neither a telephone number nor detail billing are provided with Carrier Common Line Access. Additionally, directory listings and intercept arrangements are not included in the rates and charges for Carrier Common Line Access.

3.2.2 Access Groups

All trunk side connections provided in the same access group will be limited to the same features and operating characteristics.

3.2.3 Held for Future Use

ACCESS SERVICE3. Carrier Common Line Access Service (Cont'd)3.3 Undertaking of the Telephone Company3.3.1 Provision of Service

Where the customer is provided Switched Access Service under other sections of this or other Access Service tariffs, the Telephone Company will provide the use of Telephone Company common lines by a customer for access to end users at rates and charges as set forth in 17.1.1 following.

3.3.2 Interstate and Intrastate Use

The Switched Access Service provided by the Telephone Company includes the Switched Access Service provided for both interstate and intrastate communications. The Carrier Common Line Access rates and charges as set forth in 17.1.1 following apply to intrastate Switched Access Service access minutes in accordance with the rate regulations as set forth in 3.8.4 following (Percent Intrastate Use -PIaU).

3.4 Obligations of the Customer3.4.1 Switched Access Service Requirement

The Switched Access Service associated with Carrier Common Line Access shall be ordered by the customer under other sections of this tariff.

3.4.2 Supervision

The customer facilities at the premises of the ordering customer shall provide the necessary on-hook and off-hook supervision.

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.5 Determination of Usage Subject to Carrier Common Line Access Charges

Except as set forth herein, all Switched Access Service provided to the customer will be subject to Carrier Common Line Access charges.

3.5.1 Determination of Jurisdiction

When the customer reports interstate and intrastate use of Switched Access Service, the associated Carrier Common Line Access used by the customer for intrastate will be determined as set forth in 3.8.4 following (Percent Intrastate Use-PIaU).

3.5.2 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.5 Determination of Usage Subject to Carrier Common Line Access Charges (Cont'd)

3.5.3 Held for Future Use

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.6 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.7 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.7 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.7 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.7 Held for Future Use

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.8 Rate Regulations

3.8.1 Billing of Charges

Carrier Common Line charges will be billed to each Switched Access Service provided under this tariff in except as set forth in 3.8.4 following (PIaU).

3.8.2 Measuring and Recording of Call Detail

When access minutes are used to determine Carrier Common Line charges, they will be accumulated using call detail recorded by Telephone Company equipment. The Telephone Company measuring and recording equipment tandem switching equipment and will record each originating and terminating access minute where answer supervision is received. The accumulated access minutes will be summed on a line by line basis, by line group or by end office, whichever type of account is used by the Telephone Company, for each customer and then rounded to the nearest minute.

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.8 Rate Regulations (Cont'd)

3.8.3 Held for Future Use

3.8.4 Percent Intrastate Use (PIaU)

When the customer reports interstate and intrastate use of in-service Switched Access Service, Carrier Common Line charges will be billed only to intrastate Switched Access Service access minutes based on the data reported by the customer as set forth in 2.3.11 preceding (Jurisdictional Reports), except where the Telephone Company is billing according to actuals by jurisdiction. Intrastate Switched Access Service access minutes will be used to determine Carrier Common Line Charges as set forth in 3.8.5 following.

ACCESS SERVICE3. Carrier Common Line Access Service (Cont'd)3.8 Rate Regulations (Cont'd)3.8.5 Determination of Charges

After the adjustments as set forth in 3.8.4 preceding have been applied, when necessary, to Switched Access Service access minutes, charges for the involved customer account will be determined as follows:

- (A) Access minutes for all Switched Access Service subject to Carrier Common Line charges will be multiplied by the per minute rate as set forth in 17.1.1 following.
- (B) Held for Future Use
- (C) Held for Future Use
- (D) Held for Future Use
- (E) Terminating, per minute charge(s) apply to:
 - all terminating access minutes of use;
 - less those terminating access minutes of use associated with Wireless Switching Centers (WSCs).

ACCESS SERVICE3. Carrier Common Line Access Service (Cont'd)3.8 Rate Regulations (Cont'd)3.8.5 Determination of Charges (Cont'd)

(E) (Cont'd)

- all originating access minutes of use associated with calls placed to 700, 800 series and 900 numbers, less those originating access minutes of use associated with calls placed to 700, 800 series and 900 numbers for which the customer furnishes for each month a report of either the number of calls or minutes or a report of the percent of calls or minutes that terminate in a Switched Access Service that is assessed Carrier Common Line charges.

When the customer makes this report available to the Telephone Company in advance of billing, these minutes of use will be charged on the current bill as originating minutes of use as set forth in (F) following. If a billing dispute arises concerning the customer provided report, the Telephone Company will request the customer to provide the data the customer used to develop the report. The Telephone Company will not request such data more than once a year. The customer shall supply the data within 30 days of the Telephone Company request.

When this report is not available to the Telephone Company until after billing, it shall be used by the Telephone Company to calculate and post a credit to the customer's account. The credit shall be posted to the customer's account within 30 days of receipt of the report. The credit shall be calculated by multiplying the number of access minutes of use, for which a credit is determined to be applicable, times the difference between the terminating and originating Carrier Common Line charges in effect when the calls were completed.

ACCESS SERVICE

3. Carrier Common Line Access Service (Cont'd)

3.8 Rate Regulations (Cont'd)

3.8.5 Determination of Charges (Cont'd)

(F) The originating Access, per minute charge(s) apply to:

- all originating access minutes of use;
- less all originating access minutes of use associated with calls placed to 700, 800 and 900 numbers;
- less those originating access minutes of use associated with Wireless Switching Centers (WSCs).
- plus all originating access minutes of use associated with calls placed to 700, 800 series and 900 numbers for which the customer furnishes for each month a report of either the number of calls or minutes or a report of the percent of calls or minutes that terminate in a Switched Access Service that is assessed Carrier Common Line charges, and for which a corresponding reduction in the number of terminating access minutes of use has been made as set forth in (E) preceding.

ACCESS SERVICE

4. Held for Future Use

ACCESS SERVICE5. Access Ordering5.1 General

This section sets forth the regulations and order related charges for services set forth in other sections of this tariff. Order related charges are in addition to other applicable charges for the services provided.

An Access Order is an order to provide the customer with Switched Access, Special Access, or Access Related Service or to provide changes to existing services.

The regulations, rates and charges for special construction are set forth in Section 2.1.12 preceding and are in addition to the regulations, rates and charges specified in this section.

A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

The customer will provide to the Telephone Company the order information required in 5.2 following, and in addition the customer must also provide:

- Customer name and premise address(es).
- Billing name and address (when different from customer name and address).
- Customer contact name(s) and telephone number(s) for the following provisioning activities: order negotiation, order confirmation, interactive design, installation and billing.

ACCESS SERVICE5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.1 Service Installation

The Telephone Company will provide the Access Service in accordance with the customer's requested service date, subject to the constraints established by the Telephone Company schedule of applicable service dates.

The Telephone Company will make available to all customers, upon request, a schedule of applicable service intervals for Switched Access and Special Access Services. The schedule will specify the applicable service interval for services and the quantities of services that can be provided by a requested service date. Any associated material will be provided upon request and within a reasonable period of time.

The Telephone Company will not accept orders for service dates which exceed the applicable service date by more than six months.

Access Services will be installed during Telephone Company business days. If a customer requests that installation be done outside of scheduled work hours, and the Telephone Company agrees to this request, the customer will be subject to applicable Additional Labor Charges as set forth in 17.4.3(A) following.

ACCESS SERVICE5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.2 Expedited Orders

When placing an Access Order, a customer may request a service date that is prior to the applicable service date. Additionally, a customer may also request an earlier service date on a pending Access Order. In this case, an Access Order modification as set forth in 5.4 following would be required. If the Telephone Company determines that the service can be provided on the requested date and that additional labor cost or extraordinary costs are required to meet the requested service date, the customer will be notified and will be provided with an estimate of the additional charges involved. Charges will be billed at actual cost, not to exceed 10 percent over estimated charges. Such additional charges will be determined and billed to the customer as explained following.

To calculate the additional labor charges, the Telephone Company will, upon authorization from the customer to incur the additional labor charges, keep track of the additional labor hours used to meet the request of the customer and will bill the customer at the applicable Additional Labor charges as set forth in 17.4.3(A) following.

To develop, determine and bill the customer the extraordinary costs which may be involved, the Special Construction terms and conditions as set forth in Section 2.1.12 preceding will be used by the Telephone Company. Authorization to incur the costs and to bill the customer will be in accordance with the terms and conditions of agreed to under Section 2.1.12 preceding.

When the request for expediting occurs subsequently to the issuance of the Access Order, a Service Date Change Charge as set forth in 17.4.1(B) following also applies.

ACCESS SERVICE5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.3 Selection of Facilities for Access Orders

The option to request a specific transmission path or channel is only provided for High Capacity Facilities Special Access, or as provided for under Special Facilities Routing as set forth in Section 11. following.

When there are High Capacity facilities to a hub on order or in service for the customer's use, the customer may request a specific channel or transmission path be used to provide the Switched or Special Access Service requested in an Access Order. The Telephone Company will make a reasonable effort to accommodate the customer request.

5.1.4 Constructive Ordering of Switched Access Services(A) Terminating Switched Access

Notwithstanding other terms in Section 5, in the event the Company terminates Switched Access minutes for an interexchange carrier that has not submitted an ASR to the Company, the interexchange carrier will be held to have constructively ordered Switched Access Service from the Company for the terminating access minutes. The terminating access minutes shall be subject to charges for Switched Access described in Section 6 of this tariff and the other applicable terms and conditions of this tariff.

(B) Originating Switched Access.

Notwithstanding other terms in Section 5, in the event the Company originates Switched Access minutes for an interexchange carrier that has not submitted an ASR to the Company, including but not limited to 8XX toll free calls and originated dial-around calls, and the interexchange carrier accepts the traffic, the interexchange carrier will be held to have constructively ordered Switched Access Service from the Company for the originating access minutes. The originating access minutes shall be subject to charges for Switched Access described in Section 6 of this tariff and the other applicable terms and conditions of this tariff.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements5.2.1 Switched Access Service

When ordering Switched Access service, the customer must specify the directionality of the service and whether the service is to be provided as (1) Direct Trunked Transport from the serving wire center to the end office or (2) Direct Trunked Transport from the serving wire center to a tandem which connects with Tandem Switched Transport from the tandem to the end office. When all or a portion of service is ordered as Direct Trunked Transport, the customer must specify the type and quantity of Direct Trunked Transport facility (e.g., High Capacity DS1 or DS3, or Synchronous Optical Channel OC3 or OC12) and the hubs equipped wire centers involved.

The Customer must also specify the type of Entrance Facility to be used for Switched Access (e.g., High Capacity or Synchronous Optical Channel). For High Capacity or Synchronous Optical Entrance Facilities, the customer must specify the facility assignment and the channel assignment for each trunk.

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office, the customer will be provided Alternate Traffic Routing as set forth in 6.4.6 following.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.

(A) Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(B) Held for Future Use

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group D and SS7 Signaling

When placing an order for Feature Group D Switched Access Service, the customer will provide:

- The number of BHMC from the customer designated premises to the end office location by type of BHMC, or
- The number of trunks desired between customer designated premises and an entry switch location.
- The number of BHMC or trunks required for or to be converted to an SS7 Signaling capability.
- Optional Features
- A projected Percentage of Intrastate Use (PIU) as set forth in 2.3.11 preceding.
- For Feature Group D switched access service to a Wireless Switching Center (WSC) directly interconnected to a telephone Company access tandem office, the customer will provide information to the Telephone Company indicating the NXX code(s) to be accessed.

When BHMC information is provided it is used to determine the number of transmission paths as set forth in 6.2.5 following. The BHMC may be determined by the customer in the following manner. For each day (8:00 A.M. to 11:00 P.M., Monday through Friday, excluding national holidays), the customer will determine the highest number of minutes of use for a single hour (e.g., 55 minutes in the 10-11 A.M. hour). The customer will, for the same hour period (i.e., busy hour) for each of twenty consecutive business days, pick the twenty consecutive business days in a calendar year which add up to the largest number of minutes of use. Both originating and terminating minutes will be included. The customer will then determine the average busy hour minutes of capacity (i.e., BHMC) by dividing the largest number of minutes of use figure for the same hour period for the consecutive twenty business day period by 20. This computation will be performed for each end office the customer wishes to serve. These determinations thus establish the forecasted BHMC for each end office.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group D and SS7 Signaling (Cont'd)

Customers may, at their option, order FGD by specifying the number of trunks desired between customer designated premises and an end office or access tandem location. When ordering by trunk quantities rather than BHMC quantities to an access tandem, the customer must also provide the Telephone Company an estimate of the amount of traffic it will generate to and/or from each end office subtending the access tandem to assist the Telephone Company in its own efforts to project further facility requirements.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)

(D) Held for Future Use

(E) SS7 Optional Feature

When Feature Group D is ordered with the SS7 optional feature, in addition to information listed in 5.2.1(C) preceding, the customer will specify a reference to existing signaling connections or reference a related SS7 signaling connection order. When ordering SS7 signaling, the customer will provide the Signaling Transfer Point codes, location identifier codes and circuit identifier codes. In addition, the customer will work cooperatively with the Telephone Company to determine the number of SS7 signaling connections required to handle its signaling traffic.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(F) SS7 Optional Feature (Cont'd)

Held for Future Use

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.2 Special Access Service

When placing an order for Special Access Service, the customer must specify:

- the customer designated premises or hubs equipped wire centers involved
- type of service (e.g., Voice Grade, High Capacity, etc.)
- the channel interface(s)
- technical specification package
- options desired
- for multipoint services, the channel interface at each customer designated premises may, at the request of the customer, be different but all such interfaces will be compatible.
- that the traffic consists of less than 10% (ten percent) interstate traffic.

When ordering bridging and/or multiplexing, the Customer must specify the telephone company hub(s) from which they desire service. The Customer must specify only those hubs that provide the type of service ordered and interconnect with the wire center(s) from which the customer requires service. The Wire Center section of NECA TARIFF F.C.C. No. 4 identifies hub types and multiplexing functions (e.g., Digital Data, High Capacity Multiplexing, Add/ Drop Multiplexing) as well as hub levels (i.e., Hub, Terminus Hub, Intermediate Hub and Super-Intermediate Hub). Additionally, the Subtending section of NECA TARIFF F.C.C. No. 4 identifies wire centers and the Intermediate and/or Super-Intermediate Hubs with which they interconnect.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service (Cont'd)

Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service (Cont'd)

Term Discounts-Upgrades in Capacity (DS1 to DS3) are covered under the individual contract for those services.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service (Cont'd)

Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.3 Held for future use

5.2.4 Mixed Use Facilities -Switched and Special Access

Mixed use is the provision of both Switched and Special Access Services over the same High Capacity or Synchronous Optical Channel facilities. Mixed use facilities to a hub or ADM equipped wire center will be ordered and provided as Special Access Service. Where mixed use is employed, individual services utilizing these facilities must be ordered either as Switched Access Service or Special Access Service as further elaborated and set forth in 6.4.7 and 7.2.7 following. When placing the order for the individual service(s), the customer must specify a channel assignment for each service ordered.

ACCESS SERVICE5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.5 Miscellaneous Services

Testing Service, Additional Labor, Telecommunications Service Priority and Special Facilities Routing will be ordered with an Access Order or may subsequently be added to a pending order at any time up to and including the service date for the access service. When miscellaneous services are added to a pending order, a service date change may be required. When a service date change is required, the service date change charge as set forth in 17.4.1(A) following will apply. When miscellaneous services are added to a pending order, charges for a design change as set forth in 17.4.1(C) following will apply when an engineering review is required. If both a service date change and an engineering review are required, both the Service Date Change Charge and the Design Change Charge will apply as set forth in 5.4.3(B) following.

The rates and charges for these services, as set forth in Section 17. of this tariff, will apply in addition to the ordering charges set forth in Section 17. and the rates and charges for the Access Service with which they are associated.

Additional Engineering is not an ordering option, but will be applied to an Access Order when the Telephone Company determines that Additional Engineering is necessary to accommodate a customer request. Additional Engineering will only be required as set forth in 13.1 following. When it is required, the customer will be so notified and will be furnished with a written statement setting forth the justification for the Additional Engineering as well as an estimate of the charges. If the customer agrees to the Additional Engineering, a firm order will be established. If the customer does not want the service or facilities after being notified that Additional Engineering of Telephone Company facilities is required, the order will be withdrawn and no charges will apply. Once a firm order has been established, the total charge to the customer for the Additional Engineering may not exceed the estimated amount by more than 10%.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.6 Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.6 Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company

Access Services provided by more than one Telephone Company are services where one end of the Local Transport or Channel Mileage element is provided by one Telephone Company and the other end of the element is provided by a different Telephone Company or where the Interim NXX Translation service and the end office are not provided by the same Telephone Company.

The ordering procedure for this service is dependent upon the billing arrangement, as set forth in 2.4.7 preceding, to be used by the Telephone Companies involved in providing the Access Service. The Telephone Company will notify the customer which of the ordering procedures will apply.

5.3.1 Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.1 Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.2 Meet Point Billing Ordering

Each Telephone Company will provide its portion of the Access Service it owns, or leases, to an interconnection point(s) with the other Telephone Company(s). Billing Percentages will be determined by the Telephone Companies involved in providing the Access Service and listed in NECA TARIFF F.C.C. NO. 4. Each Telephone Company will bill the customer for its portion of the service as set forth in 2.4.7. All other appropriate charges in each Telephone Company tariff are applicable.

For the service(s) ordered as set forth following, the customer must also supply a copy of the order to any other Telephone Company(s) involved in providing the service.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.2 Meet Point Billing Ordering (Cont'd)

- (C) Held for Future Use
- (D) Except for Special Access Service as set forth in (C) above or as set forth in (E) below, the customer may place the order for a Special Access Service with either Exchange Telephone Company.
- (E) For Special Access Service involving a hub(s) the customer must place the order with the Telephone Company(s) in whose territory the hub(s) is located.
- (F) Held for Future Use
- (G) For initiation, additions, changes or deletions to the Interim NXX Translation code(s), the customer must place an order with the Telephone Company who provides the Interim NXX Translation. The customer must also provide a copy of the order to the Telephone Companies subtending the Interim NXX Translation office.
- (H) Held for Future Use

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering5.4.1 Access Order Charge

The Access Order Charge is applied to all customer requests for new Special Access and Switched Access. In addition, the Access Order Charge is applicable to customer requests for additions, changes or rearrangements to existing Special Access and Switched Access Service with the following exceptions:

The Access Order Charge does not apply:

- When a Service Date Change Charge is applicable.
- When a Design Change Charge is applicable.
- To administrative changes as set forth in 6.4.1(B)(3) and 7.2.2(C)(3) following.
- When a change to a pending order does not result in the cancellation of the pending order and the issuance of a new order.
- When the Interim NXX Translation charge is applicable.
- When a Miscellaneous Service Order Charge is applicable.
- When a Telephone Company initiated network reconfiguration requires a customer's existing access service to be reconfigured.
- When a service with an ICB rate is converted to a similar service with a non-ICB tariff rate prior to the expiration of the ICB.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.4 Charges Associated with Access Ordering (Cont'd)

5.4.1 Access Order Charge (Cont'd)

The Access Order Charge will be applied on a per order basis to each order received by the Telephone Company or copy of an order received by the Telephone Company pursuant to 5.3.1 preceding and 5.3.2 preceding and is in addition to other applicable charges as set forth in this and other sections of this tariff.

The Access Order Charge will be applied on a per order basis for any change, rearrangement or addition to the delivery of signaling to an existing STP Port.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.4 Charges Associated with Access Ordering (Cont'd)

5.4.1 Access Order Charge (Cont'd)

Held for Future Use

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.2 Miscellaneous Service Order Charge

A Miscellaneous Service Order Charge, as set forth in 17.4.1(D) following, applies to any service or combination of services ordered simultaneously from Section 13 of the tariff for which a service order is not already pending. The Miscellaneous Service Order Charge is an administrative charge designed to compensate for the expenses associated with service order issuance.

The charge always applies to the following services since a pending service order would not exist:

- Overtime Repair (13.2.2),
- Standby Repair (13.2.3),
- Testing and Maintenance with Other Telephone Companies other than when in conjunction with Acceptance Testing (13.2.4),
- Other Labor (13.2.5),
- Maintenance of Service (13.3.2).

The Miscellaneous Service Order Charge will also apply to the following services if they are ordered subsequently to the initial installation of the associated access service, thereby necessitating the issuance of another service order:

- Telecommunications Service Priority (13.3.3).

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.2 Miscellaneous Service Order Charge (Cont'd)

The charge does not apply to the following services since there would exist a pending service order:

- Additional Engineering (13.1),
- Overtime Installation (13.2.1),
- Standby Acceptance Testing (13.2.3),
- Testing and Maintenance with Other Telephone Companies when in conjunction with Acceptance Testing (13.2.4),
- Additional Cooperative Acceptance Testing [13.3.1(A)(1) and 13.3.1(B)(1)],

5.4.3 Access Order Change Charges

Access Order changes involve service date changes and design changes. The customer may request a change of its Access Order prior to the service date. The Telephone Company will make every effort to accommodate a requested change when it is able to do so with the normal work force assigned to complete such an order within normal business hours. If the change cannot be made with the normal work force during normal business hours, the Telephone Company will notify the customer. If the customer still desires the Access Order change, the Telephone Company will schedule a new service date as set forth in 5.1.2 preceding. All charges for Access Order change as set forth in 17.4.1(B) and (C) will apply on a per occurrence basis.

Any increase in the number of Switched Access Service lines, trunks, or busy hour minutes of capacity, or CCS/ SS7 Port Terminations will be treated as a new Access Order (for the increased amount only).

If order changes are necessary to satisfy the transmission performance for a Special Access Service ordered by a customer, these changes will be made without order change charges being incurred by the customer.

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(A) Service Date Change

The customer may request a change of service date on a pending Access Order prior to the service date. A change of service date is a change of the scheduled service date by the customer to either an earlier date or a later date which does not exceed 30 calendar days from the original service date.

If the Telephone Company determines that the customer's request can be accommodated without delaying the service dates for orders of other customers, the service date will be changed and the Service Date Change Charge, as set forth in 17.4.1(B) following, will be applied to the order.

If the service date is changed to an earlier date, and the Telephone Company determines additional labor or extraordinary costs are necessary to meet the earlier service date requested by the customer, the customer will be notified by the Telephone Company that Expedited Order Charges as set forth in 5.1.2 preceding apply. Such charges will apply in addition to the Service Date Change Charge.

If the requested service date exceeds 30 calendar days following the original service date, and the Telephone Company determines that the customer's request can be accommodated, the Telephone Company will cancel the original order and apply the Cancellation Charges as set forth in 5.5.3 following. A new Access Order with a new service date will be issued. The Service Date Change Charge will not apply, however, the Access Order Charge will apply to the new order.

If the service date is changed due to a design change as set forth in (B) following, the Service Date Change Charge will apply.

ACCESS SERVICE5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(B) Design Change

The customer may request a design change to the service ordered prior to the requested service date. A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Telephone Company personnel, of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the changes requested by the customer. Design changes include such things as the addition or deletion of optional features or functions or a change in the type of Transport Termination (Switched Access only), type of channel interface, type of Interface Group or technical specification package. Design changes do not include a change of customer designated premises, first point of switching, or channel type. Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied.

The Telephone Company will review the requested change, notify the customer whether the change is a design change, if the change can be accommodated and if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge as set forth in 17.4.1(C) following will apply in addition to the charge for Additional Engineering as set forth in 17.4.2 following. If a change of service date is required, the Service Date Change Charge as set forth in 17.4.1(B) following will also apply. The Access Order Charge as specified in 17.4.1 following does not apply.

ACCESS SERVICE5. Access Ordering (Cont d)5.5 Minimum Periods and Cancellations5.5.1 Minimum Periods

The minimum period for Switched Access High Capacity DS3 and Synchronous Optical Channel Entrance Facilities and Direct Trunked Transport is as set forth in 6.1.3(A) following.

Switched Access usage rated services (i.e., End Office, Common Line, Tandem Switched Transport and Transport Interconnection Charge) have no minimum period. (C)
(C)

The minimum period for which all other Access Service is provided and for which charges are applicable is one month.

5.5.2 Development of Minimum Period Charges

When Access Service is disconnected after commencement of service, but prior to the expiration of the minimum period, charges are applicable for the balance of the minimum period. A disconnection constitutes facilities being returned to available inventory.

The Minimum Period Charge for monthly billed services will be determined as follows:

- (A) For flat-rated Switched Access Service, the charge for a month or fraction thereof is equal to the applicable recurring charges plus any nonrecurring and/or Special Construction charge(s) that may be due.

ACCESS SERVICE5. Access Ordering (Cont'd)5.5 Minimum Period and Cancellations (Cont'd)5.5.2 Development of Minimum Period Charges (Cont'd)

- (B) For Special Access Service the charge for a month or fraction thereof is the applicable monthly rate for the appropriate channel type plus any optional features, nonrecurring and/or special construction charge(s) that may apply.
- (C) Held for Future Use
- (D) Held for Future Use

5.5.3 Cancellation of an Access Order

- (A) A customer may cancel an Access Order for the installation of service on any date prior to the service date. The cancellation date is the date the Telephone Company receives written or verbal notice from the customer that the order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. If a customer or a customer's end user is unable to accept Access Service within 30 calendar days after the original service date, the customer has the choice of the following options:
 - The Access Order will be cancelled and charges set forth in (B) following will apply or,
 - Billing for the service will commence.

In such instances, the cancellation date or the billing date, depending on which option is selected by the customer, will be the 31st day beyond the original service date of the Access Order.

ACCESS SERVICE5. Access Ordering (Cont'd)5.5 Minimum Period and Cancellations (Cont'd)5.5.3 Cancellation of an Access Order (Cont'd)

- (B) When a customer cancels an Access Order for the installation of service, a Cancellation Charge will apply as follows:
- (1) Installation of Switched Access or Special Access facilities is considered to have started when the Telephone Company incurs any cost in connection therewith or in preparation thereof which would not otherwise have been incurred.
 - (2) Where the customer cancels an Access Order prior to the start of installation of access facilities, no charges will apply.
 - (3) Where installation of access facilities has been started prior to the cancellation, the charges specified in (a) or (b) following, whichever is lower, will apply.
 - (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such costs include the non recoverable cost of equipment and materials ordered, provided or used, plus the non recoverable cost of installation and removal including the costs of engineering, labor, supervision, transportation, rights-of-way and other associated costs;
 - (b) The minimum period charges for Switched Access or Special Access Service ordered by the customer, as set forth in 5.5.2 preceding.
- (C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.
- (D) Held for Future Use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.5 Minimum Period and Cancellations (Cont'd)

5.5.3 Cancellation of an Access Order (Cont'd)

- (E) If the Telephone Company misses a service date by more than 30 days and such delay is not requested or caused by the customer (excluding those circumstances where the date is missed due to acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Order without incurring cancellation charges.

5.5.4 Partial Cancellation Charge

Any decrease in the number of ordered Switched Access Service lines, trunks, or busy hour minutes of capacity or CCS/ SS7 Port Terminations will be treated as a partial cancellation and charges will be determined as set forth in 5.5.3(B) preceding.

ACCESS SERVICE**6 Switched Access Service****61 General**

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point communications path between a customer designated premises and an end user's premises. It provides for the use of common terminating, switching, and trunking facilities and for the use of common subscriber plant of the Telephone Company. Switched Access Service provides for the ability to originate calls from an end user's premises to a customer designated premises, and to terminate calls from a customer designated premises to an end user's premises of LEC whose end office(s) subtend the Company's tandem. Specific references to material describing the elements of Switched Access Service are provided in 6.1.3 and 6.5 through 6.9 following.

Rates and charges for Switched Access Service are set forth in 17 following. The application of rates for Switched Access Service is described in 6.4 following. Rates and charges for services other than Switched Access Service, e.g., a customer's interLATA toll message service, may also be applicable when Switched Access Service is used in conjunction with these other services. Descriptions of such applicability are provided in 6.4.5, 6.4.9 and 6.8.1(E) following. (C)

The following provision applies to the treatment of Toll VoIP-PSTN Traffic pursuant to the Federal Communications Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208, adopted October 27, 2011 and released November 18, 2011 (FCC 11-161). In the absence of an interconnection agreement between the Telephone Company and the customer specifying the treatment of Toll VoIP-PSTN Traffic, the Telephone Company will bill the customer the applicable switched access rates and charges specified in Section 17, following, on all jurisdictionally interstate voice traffic identified as Toll VoIP-PSTN Traffic. (N)

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ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements(A) Description

Switched Access Service is provided for only the Feature Group D arrangement which is a service category of standard and optional features.

The provision of Feature Group D requires Local Transport facilities, including an Entrance Facility, and the appropriate End Office functions.

There are three specific transmission specifications (i.e., Types A, B and C) that have been identified for the provision of Feature Group D. The technical specifications for the Entrance Facility and Direct Trunked Transport are the same as those set forth in Section 7. following for Voice Grade, High Capacity and Synchronous Optical Channel Services. The specifications provided are dependent on the Interface Group and the routing of the service, i.e., whether the service is routed directly to the end office or via an access tandem. The parameters for the transmission specifications are set forth in Section 15.1.2 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(A) Description (Cont'd)

Feature Group D is arranged for either originating, terminating or two-way calling, based on the customer end office switching capacity ordered. Originating calling permits the delivery of calls from Telephone Exchange Service locations to the customer designated premises. Terminating calling permits the delivery of calls from the customer designated premises to Telephone Exchange Service locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously. The Telephone Company will determine the type of calling to be provided unless the customer requests that a different type of directional calling is to be provided. In such cases, the Telephone Company will work cooperatively with the customer to determine the directionality.

There are various optional features associated with Local Transport, Common Switching and Transport Termination available with Feature Group D.

Feature Group D, in Section 6.8, is described terms of its specific physical characteristics and calling capabilities, the optional features available for use with it and the standard testing capabilities.

The Common Switching and Transport Termination optional features, which are described in 6.10 following, unless specifically stated otherwise, are available at all Telephone Company end office switches.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(B) Manner of Provision

Switched Access is furnished in either quantities of lines or trunks, or in busy hour minutes of capacity (BHMCs). FGD Access is furnished on a BHMC and on a per trunk basis as set forth in 5.2 preceding.

BHMCs are differentiated by type and directionality of traffic carried over a Switched Access Service arrangement. Differentiation of traffic among BHMC types is necessary for the Telephone Company to properly design Switched Access Service to meet the traffic carrying capacity requirement of the customer.

There are two major BHMC categories identified as: Originating and Terminating. Originating BHMCs represent access capacity for carrying traffic from the end user to the customer; and, Terminating BHMCs represent access capacity for carrying traffic from the customer to the end user. When ordering capacity for FGD Access in BHMCs, the customer must specify such access capacity in terms of Originating BHMCs and/or Terminating BHMCs.

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont d)(B) Manner of Provision (Cont d)

Because some customers will wish to further segregate their originating traffic into separate trunk groups, or because segregation may be required by network considerations originating BHCs are further categorized into Domestic, 700, 800 series, 900, Operator, IDDD and Operator Transfer Services. Domestic BHCs represent access capacity for carrying only domestic traffic other than 700, 800 series, 900, Operator and Operator Transfer Services traffic; IDDD BHCs represent access capacity for carrying only international traffic; and, 700, 800 series, 900 and Operator represent access capacity for carrying, respectively, only 700, 800 series, 900 or Operator traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800 series, 900, Operator or IDDD BHCs.

6.1.2 Ordering Options and Conditions

Switched Access Service is ordered under the Access Order provisions set forth in 5.2 preceding. Also, included in that section are regulations concerning miscellaneous service order charges which may be associated with Switched Access Service ordering (e.g., Service Date Changes, Cancellations, etc.).

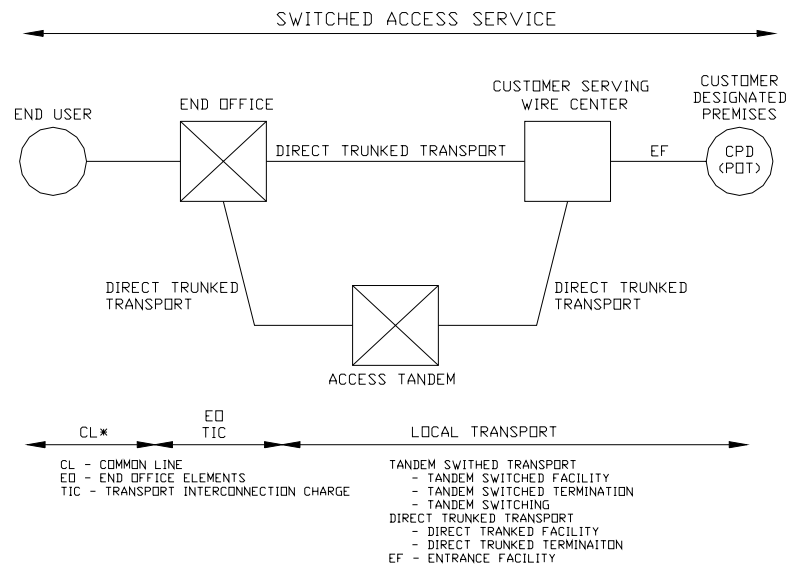
6.1.3 Rate Categories

The Telephone Company offers three rate categories which apply to Switched Access Service:

- Local Transport (described in 6.1.3(A) following)
- End Office (described in 6.1.3(B) following)
- Chargeable Optional Features (described in 6.1.3(C) following) (C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)

The following diagram depicts a generic view of the components of Switched Access Service and the manner in which the components are combined to provide a complete Access Service.



* COMMON LINE ACCESS SERVICE IS PROVIDED UNDER SECTION 3. PRECEDING

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es), which may be a Remote Switching Module(s), where the customer's traffic is switched to originate or terminate the customer's communications. Mileage measurement rules are set forth in 6.4.6 following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer designated premises) and in the terminating direction (from the customer designated premises to the end office switch), but not simultaneously. The voice frequency transmission path may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz. The customer must specify the choice of facilities (i.e., Voice Grade 2 or 4 wire, High Capacity DS1 or DS3, or Synchronous Optical Channel OC3 or OC12) to be used in the provision of the Direct Trunked Transport or Entrance Facility. High Capacity DS3 and Synchronous Optical Channel facilities are only available at wire centers identified in NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

The customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through an access tandem switch, (2) the type of Direct Trunked Transport and whether it will overflow to Tandem Switched Transport when service is directly routed to an end office, (3) the type of Entrance Facility, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office, the customer will be provided Alternate Traffic Routing as set forth in 6.4.6 following.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NECA TARIFF F.C.C. NO. 4. as not having the capability to provide Direct Trunked Transport.

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(A) Local Transport (Cont d)

Local Transport is provided at the rates and charges set forth in 17.2.2 and 17.5.1 following. When more than one Telephone Company is involved in providing the Switched Access Service, the Local Transport rates are applied as set forth in 2.4.7 preceding.

The Local Transport Rate Category includes ten classifications of rate elements: (1) Entrance Facility, (2) Direct Trunked Transport, (3) Tandem Switched Transport, (4) Transport Interconnection Charge, (5) Multiplexing, (6) Add/Drop Multiplexing, (7) Customer Node, (8) Interface Group, (9) Nonchargeable Optional Features and, (10) Chargeable Optional Features. (C)

(1) Entrance Facility

The Entrance Facility recovers a portion of the costs associated with a communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Entrance Facility is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the customer designated premises and the type of signaling capability, if any.

Four types of Entrance Facility are available:

- High Capacity DS1 - an isochronous serial digital channel with a rate of 1.544 Mbps;
- High Capacity DS3 - an isochronous serial digital channel with a rate of 44.736 Mbps;
- Synchronous Optical Channel OC3 - a synchronous optical channel with a rate of 155.52 Mbps;
- Synchronous Optical Channel OC12 - a synchronous optical channel with a rate of 622.08 Mbps.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(1) Entrance Facility (Cont'd)

The minimum period for which a High Capacity DS3 or Synchronous Optical Channel Entrance Facility is provided is twelve months.

One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge specified in 17.2.2 following will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building.

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(2) Direct Trunked Transport

The Direct Trunked Transport rate elements recover a portion of the cost associated with a communications path or circuits dedicated to the use of a single customer between:

- the serving wire center and an end office, or
- the serving wire center and a tandem.

Direct Trunked Transport is available at all tandems and to all end offices except those end offices identified in NECA F.C.C. NO. 4, WIRE CENTER INFORMATION as not having the capability to provide Direct Trunked Transport.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

Four types of Direct Trunked Transport are available:

- High Capacity DS1 – an isochronous serial digital channel with a rate of 1.544 Mbps;
- High Capacity DS3 – an isochronous serial digital channel with a rate of 44.736 Mbps.
- Synchronous Optical Channel OC3 - a synchronous optical channel with a rate of 155.52 Mbps;
- Synchronous Optical Channel OC12 - a synchronous optical channel with a rate of 622.08 Mbps.

High Capacity DS3 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing.

Synchronous Optical Channel Service OC3 or OC12 Direct Trunked Transport can not be terminated at end offices that are not identified as ADM equipped wire centers that provide OC3 to DS1 or OC12 to OC3 Add/Drop Multiplexing.

Additionally, DS1 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS1 to Voice Grade multiplexing or are not electronic end offices.

Offices that provide multiplexing and add/drop multiplexing functions are identified in NECA, TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

Direct Trunked Transport rates consist of a Direct Trunked Facility rate specified in 17.2.2 following which is applied on a per mile basis and a Direct Trunked Termination rate which is applied at each end of each measured segment of the Direct Trunked Facility (e.g., at the end office, tandem, hub, ADM equipped wire center, and serving wire center). When the Direct Trunked Facility mileage is zero, neither the Direct Trunked Facility rate nor the Direct Trunked Termination rate will apply.

The Direct Trunked Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits.

The Direct Trunked Termination rate specified in 17.2.2 following recovers a portion of the costs of the circuit equipment that is necessary for the termination of each end of the Direct Trunked Facility.

The minimum period for which High Capacity DS3 or Synchronous Optical Channel Direct Trunked Transport is provided is twelve months.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover a portion of the costs associated with a communications path between a tandem and an end office on circuits that are switched at a tandem switch.

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, and a Tandem Switched Termination rate.

- (a) The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Tandem Switching rate specified in 17.2.2 following is applied on a per access minute per tandem basis for all originating and all terminating minutes of use switched at the tandem. Tandem locations are identified in NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(A) Local Transport (Cont d)(3) Tandem Switched Transport (Cont d)

(b) The Tandem Switched Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of interoffice circuits. The Tandem Switched Facility rate specified in 17.2.2 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility.

(c) The Tandem Switched Termination rate recovers a portion of the costs of circuit equipment necessary for the termination of each end of each measured segment of the Tandem Switched Facility. The Tandem Switched Termination rate specified in 17.2.2 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem Switched Facility (e.g., at the end office, host office and the access tandem). When the Tandem Switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

(4) Transport Interconnection Charge

The Transport Interconnection Charge recovers the costs associated with Local Transport that are not recovered by other Local Transport Rate Categories (i.e., Entrance Facility, Direct Trunked Transport, Tandem Switched Transport and Multiplexing) or by dedicated signaling (i.e., SS7) rates. The Transport Interconnection Charge specified in 17.2.2 to both Tandem Switched and Direct Trunked access minutes of use.

(C)

(C)

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(5) Multiplexing

Multiplexing provides an arrangement for converting a single, higher capacity or bandwidth circuit to several lower capacity or bandwidth circuits.

When a derived channel is itself multiplexed to derive additional channels with a lesser capacity, this is referred to as cascade multiplexing. When cascade multiplexing occurs, a charge for the additional multiplexing function applies. When cascade multiplexing is performed at different hubbing locations, Direct Trunked Transport charges also apply between the hubs.

Multiplexing is only available at wire centers identified in NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

The following multiplexing arrangements are offered for use with Switched Access Service.

- (a) DS3 to DS1 Multiplexing charges specified in 17.2.2 following apply when a High Capacity DS3 Entrance Facility or High Capacity DS3 Direct Trunked Transport is connected with High Capacity DS1 Direct Trunked Transport. The DS3 to DS1 multiplexer will convert a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.
- (b) DS1 to Voice Grade Multiplexing charges specified in 17.2.2 following apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is connected with Voice Grade Direct Trunked Transport. However, a DS1 to Voice Grade Multiplexing Charge does not apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is terminated at an electronic tandem and only Switched Access Service is provided over the DS1 facility. The DS1 to Voice Grade multiplexer will convert a 1.544 Mbps channel to 24 Voice Grade channels.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(6) Add/ Drop Multiplexing

Add/Drop Multiplexing provides a type of multiplexing function in connection with Synchronous Optical Channel Service that allows lower level signals to be added or dropped from a high speed optical carrier channel within a Telephone Company wire center.

The Add/Drop Multiplexing Central Office Port charge specified in 17.2.2 applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Entrance Facilities or Direct Trunked Transport. Central Office Ports are available at the following speeds:

<u>Central Office Port</u>	<u>Speed</u>	
OC3	155.52	Mbps
DS3	44.736	Mbps
DS1	1.544	Mbps

OC12 service may only be multiplexed to OC3 channels.

When an OC3 channel is derived from an OC12 service and is further multiplexed to obtain DS3 service, a DS3 port charge will apply in addition to the OC3 port charge.

When a DS3 channel is derived from an OC3 service and is further multiplexed to obtain DS1 service, a DS3 to DS1 Multiplexing charge will apply in addition to the DS3 port charge.

When a DS1 channel is directly derived from an OC3 service, a DS1 port charge will apply.

When a DS1 channel is further multiplexed to a lower level signal, a DS1 to Voice Grade Multiplexing charge will also apply.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(6) Add/Drop Multiplexing (Cont'd)

Add/Drop Multiplexing is only available at wire centers identified in NECA TARIFF NO. 4, WIRE CENTER INFORMATION.

(7) Customer Node

A Customer Node charge specified in 17.2.2 applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a Synchronous Optical Channel Entrance Facility. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3 or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.

Customer Premises Port charges specified in 17.2.2 apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3 channels ordered. Customer Premises Ports are available at the following speeds:

<u>Customer Premises Port</u>	<u>Speed</u>
OC3	155.52 Mbps
STS-1	51.84 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

(8) Interface Groups

Different Interface Groups are provided for terminating the Entrance Facility at the customer's designated premises. Technical specifications concerning the available interface groups are set forth in 15.1 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(9) Nonchargeable Optional Features

Where transmission facilities permit, the individual transmission path between the customer's designated premises and the first point of switching, may at the option of the customer, be provided with the following optional features as set forth and described in 15.1.1(E) following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination

When a customer subscribes to Common Channel Signaling (SS7) Network Connection Service (CCSNC Service), the following optional features are made available and are described in 6.10.1 following.

- Signaling System 7 (SS7) Signaling
- Calling Party Number
- Carrier Selection Parameter
- Charge Number Parameter
- Carrier Identification Parameter

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(A) Local Transport (Cont d)(10) Chargeable Optional Features

Common Channel Signaling, Signaling System 7 (CCS/ SS7) Network Connection (CCSNC) Service provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP). CCSNC is provided as set forth in 6.10.3 following.

800 Data Base Access Service is provided to all customers in conjunction with FGD switched access service. A Basic or Vertical Feature Query charge, as set forth in 17.2.2 (B) following, is assessed for each completed query returned from the 800 data base whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides this same customer identification function in addition to vertical features which may include: (1) call validation (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers (which is generally necessary for the routing of 800 series calls); (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place of origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).

In addition to the above, Shared SONET Interoffice Ring Transport (SSRIT) is available as chargeable optional feature with High Capacity DS3 or Synchronous Optical Channel Local Transport service from wire centers identified in the NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION. The SSRIT feature is set forth and described in 7.10.3(E) and 7.11.3(C) following.

(B) End Office

The End Office rate category establishes the charges related to the local end office switching and end user termination functions necessary to complete the transmission of Switched Access communications to and from the end users served by the local end office. The End Office rate category includes the Local Switching and Information Surcharge rate elements.

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ACCESS SERVICE

6. Switched Access Service (Cont d)

6.1 General (Cont d)

6.1.3 Rate Categories (Cont d)

(B) End Office (Cont'd)

(1) Local Switching

The Local Switching rate element establishes the charges related to the use of end office switching equipment, the terminations in the end office of end user lines, the terminations of calls at Telephone Company Intercept Operators or recordings, the STP costs, and the SS7 signaling function between the end office and the Signaling Transfer Point.

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ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(B) End Office (Cont'd)

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(1) Local Switching (Cont'd)

Local Switching does not apply to Feature Group D Switched Access Services associated with Wireless Switching Center (WSCs) directly interconnected to a Telephone Company access tandem office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with Local Switching which provides local dial switching for Feature Group D. International dialing provides the capability of switching international calls with service prefix and address codes having more digits than are capable of being switched through a standard FGD equipped end office.

Rates for Local Switching are set forth in 17.2.3 following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) following.

There are four types of functions included in the Local Switching rate element: Common Switching, Transport Termination, Line Termination and Intercept. These are described in (a) through (d) following.

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ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(B) End Office (Cont'd)

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(1) Local Switching (Cont'd)(a) Common Switching

Common Switching provides the local end office switching functions associated with Feature Group D switching arrangements. The Common Switching arrangements provided for the Feature Group D arrangement are described in 6.7 following.

Included as part of Common Switching are various nonchargeable optional features which the customer can order to meet the customer's specific communications requirements. These optional features are described in 6.10.1 following.

(b) Transport Termination

Transport Termination functions provide for trunk side arrangements which terminate the Local Transport facilities. Included as part of these functions are various nonchargeable optional termination arrangements. These optional terminating arrangements are described in 6.10.2 following.

The number of Transport Terminations provided will be determined by the Telephone Company as set forth in 6.2.5 following.

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ACCESS SERVICE

6. Switched Access Service (Cont d)

6.1 General (Cont d)

6.1.3 Rate Categories (Cont d)

(B) End Office (Cont'd)

(1) Local Switching (Cont'd)

(c) Line Termination

Line Termination provides for the terminations of end user lines in the local end office. Line side terminations are available with either dial pulse or dual tone multifrequency address signaling.

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ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(B) End Office (Cont'd)

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(1) Local Switching (Cont'd)(d) Intercept

The Intercept function provides for the termination of a call at a Telephone Company Intercept operator or recording. The operator or recording tells a caller why a call, as dialed, could not be completed, and if possible, provides the correct number.

(2) Information Surcharge

Information Surcharge rates are assessed to a customer based on the total number of access minutes. Information Surcharge rates are as set forth in 17.2.3(B) following. The application of these rates with respect to Feature Group D is as set forth in 6.4.1(C) following.

The Information Surcharge does not apply to Feature Group D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

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The number of end office switching transmission paths will be determined as set forth in 6.2.5 following.

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(C) Chargeable Optional Features

Where facilities permit, the Telephone Company will, at the option of the customer, provide the following chargeable optional features.

(1) Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification of non-data base services when calls are directed by end users in the 1+SAC+NXX-XXXX (e.g., 1+900+NXX-XXXX) format. The NXX codes are assigned to specific customers in conformance with the North American Numbering Plan (NANP). NXX code assignment(s) will be made by the NANP Coordinator. The Telephone Company will use the NXX code to identify the customer to whose point of termination the traffic is to be delivered, (i.e., at appropriately equipped electronic end offices, access tandems or through contracted arrangements with other parties.) It is then the responsibility of the customer to do any further translation the customer deems necessary to route the call. Customer assigned NXX codes which have not been ordered will be blocked.

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ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(C) Chargeable Optional Features (Cont d)(1) Interim NXX Translation (Cont'd)

A nonrecurring charge, as set forth in 17.2.1 following, is associated with this optional feature. This nonrecurring charge is assessed by the Telephone Company on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in 17.4.1(A) following. The nonrecurring charge is assessed only by the Telephone Company that provides the final translation function. A Telephone Company is said to have provided the final Interim NXX Translation when its translation identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation. The description and application of this charge with respect to Feature Group is as set forth in 6.4.1(B)(2) following.

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(2) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont d)6.1 General (Cont d)6.1.3 Rate Categories (Cont d)(C) Chargeable Optional Features (Cont d)

(2) Held for Future Use

(3) 800 Data Base Access Service

800 Data Base Access Service is provided to all customers in conjunction with FGD switched access service. When a 1+800 series+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to identify the customer to whom the call will be delivered and provide vertical features based on the dialed ten digits. The call will then be routed to the identified customer over FGD switched access. The 800 series includes the following service access codes: 800, 888, 877, 866, 855, 844, 833 and 822.

A Basic or Vertical Feature Query charge, as set forth in 17.2.2(B) following, is assessed for each completed query returned from the data base identifying the customer to whom the call will be delivered whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides the same customer identification as the basic query and vertical features which may include: (1) call validation, (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers; (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place or origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).

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ACCESS SERVICE

6. Switched Access Service (Cont d)

6.1 General (Cont d)

6.1.3 Rate Categories (Cont d)

(C) Chargeable Optional Features (Cont d)

(3) 800 Data Base Access Service (Cont'd)

The description and application of this charge with respect to Feature Group D is as set forth in 6.4.1(C)(2) and 6.4.1(C)(8) following.

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ACCESS SERVICE6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.4 Special Facilities Routing

Any customer may request that the facilities used to provide Switched Access Service be specially routed. The regulations for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 11, following.

6.1.5 Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

6.2 Undertaking of the Telephone Company

In addition to the obligations of the Telephone Company set forth in Section 2. preceding, the Telephone Company has certain other obligations concerning only the provision of Switched Access Service. These obligations are as follows:

6.2.1 Network Management

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services. Generally, service levels are considered acceptable only when both end users and

ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.1 Network Management (Cont'd)

Customers are able to establish connections with little or no delay encountered within the Telephone Company network. The Telephone Company maintains the right to apply protective controls, i.e., those actions over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Telephone Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in 2.4.4(B)(3) preceding.

6.2.2 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are three different standard specifications (Types A, B and C). The standard for a particular transmission path is dependent on the Feature Group, the Interface Group and whether the service is directly routed or via an access tandem. The available transmission specifications are set forth in 15.1.2 following. Data Transmission Parameters are also provided with each Switched Access Service transmission path. The Telephone Company will, upon notification by the customer that the data parameters set forth in 15.1.3 following are not being met, conduct tests independently or in cooperation with the customer, and take any necessary action to insure that the data parameters are met.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.2 Transmission Specifications (Cont'd)

The transmission specifications concerning Switched Access Service are limits which, when exceeded, may require the immediate corrective action of the Telephone Company. The transmission specifications are set forth in 15.1.2 following. Acceptance limits are set forth in Technical Reference GR-334-CORE. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

6.2.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to the Telephone Company through its own service evaluation routines, may also be made available to the customer based on previously arranged intervals and format. These data provide information on overall end-to-end call completion and non-completion performance, e.g., customer equipment blockage, failure results and transmission performance. These data do not include service performance data which are provided under other tariff sections, e.g., testing service results. If data are to be provided in other than paper format, the charges for such exchange will be determined on an individual case basis.

6.2.4 Testing(A) Acceptance Testing

At no additional charge the Telephone Company will, at the customer's request, cooperatively test at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d. c. continuity and operational signaling. When the Local Transport is provided with Interface Groups 2 through 10, and the Transport Termination is two-wire (i.e., there is a four-wire to two-wire conversion in Local Transport), balance parameters (equal level echo path loss) may also be tested.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Undertaking of the Telephone Company (Cont'd)

6.2.4 Testing (Cont'd)

(B) Routine Testing

At no additional charge, the Telephone Company will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C-message noise and Balance (Improved Return loss).

In the case of automatic testing, the customer shall provide remote office test lines and 105 test lines with associated responders or their functional equivalent.

The frequency of these tests will be that which is mutually agreed upon by the customer and the Telephone Company, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

Additional tests may be ordered as set forth in 13.3.1 following. Charges for these additional tests are set forth in 17.4.4 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.5 Determination of Number of Transmission Paths

Feature Group D when ordered on a per trunk basis the customer specifies the type of transport facilities and the number of channels in the order for service.

For Tandem Switched Transport, the Telephone Company will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Group D busy hour minutes of capacity ordered. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in 6.1.1(B) preceding) for the end offices ordered from a customer's designated premises. The total busy hour minutes of capacity by type (e.g., originating, terminating, IDDD, Operator) for the end office will be converted to transmission paths using standard Telephone Company traffic engineering methods. The number of transmission paths provided shall be the number required based on (1) the use of access tandem switches and end office switches, (2) the use of the end office switches only, or (3) the use of the tandem switches only.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.2 Undertaking of the Telephone Company (Cont'd)

6.2.6 Trunk Group Measurement Reports

Subject to availability, the Telephone Company will make available trunk group data in the form of usage in CCS, peg count and overflow, to the customer based on previously agreed to intervals.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.3 Obligations of the Customer

In addition to the obligations of the customer set forth in Section 2. preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

6.3.1 Report Requirements

Customers are responsible for providing the following reports to the Telephone Company, when applicable.

(A) Jurisdictional Reports

When a customer orders Switched Access Service for both interstate and intrastate use, the customer is responsible for providing reports as set forth in 2.3.11 preceding. Charges will be apportioned in accordance with those reports. The method to be used for determining the intrastate charges is set forth in 2.3.12 preceding.

(B) Held for Future Use

ACCESS SERVICE**6 Switched Access Service (Cont'd)****63 Obligations of the Customer (Cont'd)****6.3.2 Trunk Group Measurement Reports**

With the agreement of the customer, trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Telephone Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.3.3 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

6.3.4 Short Duration Mass Calling Requirements

When a customer offers service for which a substantial call volume is expected during a short period of time (e.g., 900 service media stimulated events), the customer must notify the Telephone Company at least 48 hours in advance of each peak period. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the telephone number(s) to be used.

On the basis of the information provided, the telephone Company may invoke network management controls, (e.g., code blocking) to reduce the probability of excessive network congestion. The Telephone Company will work cooperatively with the customer to determine the appropriate level of such control.

6.3.5 Call Signaling

Depending on the signaling system used by the customer in its network, the customer's facilities shall transmit the following call signaling information to the Telephone Company on traffic the customer's end users originate which is handed off for termination on the Telephone Company's network.

(A) Signaling System 7 (SS7) Signaling

When the customer uses SS7 signaling, it will transmit the Calling Party Number (CPN) or, if different from the CPN, the Charge Number (CN) information in the SS7 signaling stream.

(B) Multi-Frequency (MF) Signaling

When the customer uses MF signaling, it will transmit the number of the calling party or, if different from the number of the calling party, the Charge Number (CN) information in the MF Automatic Number Identification (ANI) field.

(C) Internet Protocol (IP) Signaling

When the customer uses IP signaling, it will transmit the telephone number of the calling party or, if different from the telephone number, the billing number of the calling party.

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ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Switched Access Service.

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6.4.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service; recurring (usage and flat rates) and nonrecurring charges. These rates and charges are applied differently to the various rate elements as set forth below.

(A) Recurring Rates

(1) Usage Rates for Switched Access Service are rates that apply on a-per access minute or a per call basis. Access minute charges and per call charges are accumulated over a monthly period.

(2) Flat Rates for Switched Access Service are rates that apply on a per month per rate element basis.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

ACCESS SERVICE6. Switched Access Service (Cont d)6.4 Rate Regulations (Cont d)6.4.1 Description and Application of Rates and Charges (Cont d)(B) Nonrecurring Charges (Cont d)(1) Installation of Service

For Entrance Facilities, a Local Transport nonrecurring installation charge, as set forth in 17.2.1(A) following, will be applied at the serving wire center for each Entrance Facility installed.

For Direct Trunked Transport ordered to the end office, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1(E) following, will be applied at the end office on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the end office

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For Direct Trunked Transport ordered to the access tandem, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1(E) following, will be applied at the access tandem on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the access tandem.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(1) Installation of Service

A maximum of 24 trunks can be activated on a DS1 facility and a maximum of 672 trunks can be activated on a DS3 facility.

For example, if a customer orders a DS1 Entrance Facility and requests activation of 18 of the available circuits, the customer will be charged one Local Transport High Capacity DS1 Installation nonrecurring charge at the serving wire center and one Direct Trunked Transport Activation nonrecurring charge at the end office. If at a later date the customer requests the activation of three more circuits, the customer will then be charged an additional Direct Trunked Transport Activation nonrecurring charge. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(2) Interim NXX Translation Optional Feature

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the installation of Switched Access Services. This charge is applied by the Telephone Company per order, per LATA or Market Area. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the Telephone Company that provides the final translation function which identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements

All changes to existing services, other than changes involving administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. The nonrecurring charge described in (1) preceding will apply for this work activity. Moves that change the physical location of the point of termination are described and charged for as set forth in 6.4.4 following.

- If, due to technical limitations of the Telephone Company, a customer could not combine its Interim NXX traffic with its other trunk side Switched Access Services, no charge shall apply to combine these trunk groups when it becomes technically possible.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

Other changes made without charge to the customer are as follows:

- Changes and additions to existing Switched Access Services which are necessary due to Telephone Company initiated network reconfiguration, and required to provide the same grade of service to the customer that existed prior to the reconfiguration. Charges will apply to those changes and additions which are in excess of those required to provide the same grade of service and/or capacity. Grade of service will be as determined by industry standard engineering tables.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Changes to the point in time when the off-hook supervisory signal is provided in the originating call sequence i.e., when the off-hook supervisory signal is changed from being provided by the customer's equipment before the called party answers to being forwarded by the customer's equipment when the called party answers or vice versa, are subject to the Access Order Charge as set forth in 17.4.1(A) following.

For additions, changes or modifications to an optional feature which has a separate nonrecurring charge, that nonrecurring charge will apply.

For additions, changes, or modifications to optional features that do not have their own separate nonrecurring charges, an Access Order Charge as set forth in 17.4.1(A) following will apply. When an optional feature is not required on each transmission path, but rather for an entire transmission path group, an end office or an access tandem switch, only one such charge will apply (i.e., it will not apply per transmission path).

When the 64 Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated non-recurring charges will apply.

For conversion of FGD trunks from multifrequency address signaling to SS7 signaling or from SS7 signaling to multifrequency address signaling, nonrecurring charges will apply as set forth in 17.2.1(D).

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates

Rates are applied as premium rates.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(1) Held for Future Use

(2) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(3) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(5) Held for Future Use

(6) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(7) Common Channel Signaling/ Signaling System 7 (CCS/ SS7) Network Connection Service

The CCS/ SS7 Network Connection is comprised of a Signaling Mileage Facility charge, a Signaling Mileage Termination charge, a Signaling Entrance Facility charge, and a Signaling Transfer Point (STP) Port charge.

The Signaling Mileage Facility charge is assessed on a per facility per mile basis. The Signaling Mileage Termination charge is assessed on a per termination basis (i.e., at each end of the Signaling Mileage Facility). When the Signaling Mileage Facility mileage measurement is zero, Signaling Mileage Termination charges do not apply. The Signaling Entrance Facility charge is assessed on a per facility basis for the connection between the customer's designated premises (Signaling Point of Interface) and the serving wire center of that premises.

The STP Port charge is assessed on a per port basis for each termination of a Signaling Mileage Facility at an STP.

(8) 800 Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each completed query that is returned from the 800 data base identifying the customer to whom the call will be delivered whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. Query charges, as set forth in 17.2.2(B), will only be applied by those companies whose wire centers are identified as assessing query charges in the NECA TARIFF F.C.C. NO. 4.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

This sheet holds Sheet 40-44 for future use

ACCESS SERVICE

6. Switched Access Service (Cont d)

6.4 Rate Regulations (Cont d)

6.4.2 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge is calculated as follows.

For usage rated Local Transport, Local Switching and Information Surcharge rate elements, the minimum monthly charge is the sum of the recurring charges set forth in 17.2.2, 17.2.3 and 17.5.1 following for the actual measured usage. (C)

For flat rated Local Transport rate elements, the minimum monthly charge is the sum of the recurring charges set forth in 17.2.2 following prorated to the number of days or major fraction of days on a 30 day month.

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
- 6.4 Rate Regulations (Cont'd)
- 6.4.3 Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.4 Moves

A move involves a change in the physical location of one of the following:

- The point of termination at the customer designated premises
- The customer designated premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the installation nonrecurring charge for the capacity affected. This charge is in addition to the Access Order Charge as specified in 17.4.1(A) following. There will be no change in the minimum period requirements.

(B) Moves to a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

6.4.5 Local Information Delivery Services

Calls over Switched Access Service in the terminating direction to certain community information services will be rated under the applicable rates for Switched Access Service as set forth in 17.2 following. In addition, the charges per call as specified under the Telephone Company's local and/or general exchange service tariffs, e.g., 976 (DIAL-IT) Network Services, will also apply.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for Local Transport is calculated on airline distances between the end office switch, which may be a Remote Switching Module, (where the call carried by Local Transport originates or terminates) and the customer's serving wire center. When Direct Trunked Transport is ordered between the serving wire center and the end office, mileage is normally measured in one segment from the serving wire center to the end office. When Direct Trunked Transport is ordered between a serving wire center and a tandem and Tandem Switched Transport is ordered between the tandem and the end office, mileage is calculated separately for each segment. Exceptions to these methods are as set forth in (B) through (I) following. For SS7 signaling, the mileage to be used to determine the monthly rate for the Signaling Mileage Facility is calculated on the airline distance between the serving wire center associated with the customer's designated premises (Signaling Point of Interface) and the Telephone Company wire center providing the STP Port.

Where applicable, the V& H coordinates method is used to determine mileage. This method is set forth in the NECA TARIFF F.C.C. NO. 4 for Wire Center Information (V& H coordinates).

Mileage rates are as set forth in 17.2.2 following. To determine the rate to be billed, first compute the airline mileage using the V& H coordinates method. If the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. Then multiply the mileage by the appropriate rate.

Exceptions to the mileage measurement rules are as follows:

(A) None

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.6 Mileage Measurement (Cont'd)

(B) Held for Future Use

(C) Held for Future Use

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
- 6.4 Rate Regulations (Cont'd)
- 6.4.6 Mileage Measurement (Cont'd)

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ACCESS SERVICE6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(D) Feature Group D -Alternate Traffic Routing

When the Alternate Traffic Routing optional feature is provided with Feature Group D, the Local Transport access minutes will be apportioned between the two trunk groups used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group, as described in 6.10.1(L) following (Alternate Traffic Routing), and the total busy hour minutes of capacity ordered to the end office, when the feature is provided at an end office switch, or to the subtending end offices when the feature is provided at an access tandem switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.

(E) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.6 Mileage Measurement (Cont'd)

(F) Held for Future Use

(G) Feature Group D -WSCs Directly Interconnected to Access Tandems

The Local Transport mileage for Feature Group D switched access service provided to Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office will be determined on an airline basis, using the V& H coordinate method. The mileage will be measured between the customer's serving wire center and the Telephone Company access tandem office to which the WSC is interconnected.

(H) Held for Future Use

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
 - 6.4 Rate Regulations (Cont'd)
 - 6.4.6 Mileage Measurement (Cont'd)
 - (I) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.7 Mixed Use

Mixed use occurs when Switched Access Service and Special Access Service are provided over the same High Capacity facilities through a common interface. The regulations governing the provision of Mixed Use Facilities are set forth in 5.2.4 preceding and within the Special Access Service Individual Contract.

6.4.8 Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.9 Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

Page 54 to Page 88 (Section 6.5 to Section 6.7) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD)6.8.1 Description

- (A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches.
- (B) FGD is provided at Telephone Company designated end office switches whether routed directly or via Telephone Company designated electronic access tandem switches.
- (C) FGD is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink-start start-pulsing signals and answer and disconnect supervisory signaling.
- (D) FGD switching is provided with multifrequency address signaling or out of band SS7 signaling. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (E) FGD switching, when used in the terminating direction, may be used access valid NXXs of the end offices subtending the tandem switches of the Telephone Company, time or weather announcement services of the Telephone Company, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed.

When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed.

The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0-and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGD switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGD switching arrangement provided. Different types of FGD or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.
- (G) The access code for FGD switching is a uniform access code of the form 101XXXX. A uniform access code(s) will be the assigned number of all FGD access provided to the customer by the Telephone Company. No access code is required for calls to a customer over FGD Switched Access Service if the end user's telephone exchange service is arranged for presubscription to that customer. Where no access code is required, the number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN. When the 101XXXX access code is used, FGD switching also provides for dialing the digit 0 for access to the customer's operator, 911 for access to the Telephone Company's emergency reporting service, or the end-of-dialing digit (#) for cut-through access to the customer designated premises.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interLATA service.
- (I) Unless prohibited by technical limitations, the customer's Interim NXX Translation and/or 800 Data Base traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-Interim NXX Translation and/or 800 Data Base traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation and/or 800 Data Base traffic.
- (J) Held for Future Use
- (K) For FGD switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGD usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6(G) preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.1 Description (Cont'd)

(L) Held for Future Use

(M) The Company will route traffic an end user dials as 1-950-XXXX as if it were FGD. The Company will route this call with the CIC the NANP administrator has associated with that number.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features

Following are the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Nonchargeable Optional Features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.10 following.

- (1) Automatic Number Identification
- (2) Service Class Routing
- (3) Alternate Traffic Routing
- (4) Held for Future Use
- (5) Held for Future Use
- (6) International Carrier Option
- (7) Held for Future Use
- (8) Held for Future Use
- (9) Held for Future Use
- (10) Held for Future Use
- (11) Held for Future Use
- (12) Held for Future Use
- (13) Feature Group D Treatment of 1-950-XXXX Dialing

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(B) Transport Termination Options

- (1) Operator Trunk -Full Feature The Operator Trunk optional feature is set forth in 6.10.2(C) following.

(C) Local Transport Options

- (1) Supervisory Signaling
The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.
- (2) Signaling System 7 (SS7)
The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/ Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP). SS7 is provided in both the originating and terminating direction on FGD and each signaling connection is provisioned for two-way SS7 signaling information.
- (3) Multifrequency Address Signaling
- (4) Calling Party Number (CPN) Parameter
- (5) Charge Number Parameter (CNP)
- (6) Carrier Selection Parameter (CSP)
- (7) 64 Clear Channel Capability
The 64 Clear Channel Capability optional feature, due to its technical nature, is set forth in 15.1.1 following.
- (8) Carrier Identification Parameter (CIP)

(D) Chargeable Optional Features(1) Interim NXX translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(D) Chargeable Optional Features (Cont'd)

(2) Held for Future Use

(3) Common Channel Signaling/ Signaling System 7 (CCS/ SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.3 following.

6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Transport service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specifies one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point of switching.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.3 Design and Traffic Routing (Cont'd)

Selection of facilities and equipment and traffic routing of the service is based on standard engineering methods, available facilities and equipment, and actual traffic patterns.

6.8.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

Originating Usage

For originating calls over FGD the measured minutes are the chargeable access minutes. For originating calls over FGD, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGD first point of switching receives the first wink supervisory signal forwarded from the customer's point of termination.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes (Cont'd)Originating Usage (Cont'd)

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Signal Transfer Point (STP).

For originating calls over FGD provided with Signaling System 7 (SS7) signaling when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGD provided with Multi-Frequency Signaling ends when the originating FGD first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD provided with SS7 Signaling ends when the originating FGD end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGD the chargeable access minutes are either measured or derived.

For terminating calls over FGD provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGD first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGD first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes (Cont'd)Terminating Usage (Cont'd)

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services. For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

6.8.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGD to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering -Volume 3 -Networks and Services (Chapters 6-7) will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

<u>Number of Transmission Paths Per Trunk Group</u>	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a. m. and 11:00 p. m. Per Trunk Group			
	15-20	11-14	7-10	3-6
	<u>Measurements</u>	<u>Measurements</u>	<u>Measurements</u>	<u>Measurements</u>
2	7.0%	8.0%	9.0%	14.0%
3	5.0%	6.0%	7.0%	9.0%
4	5.0%	6.0%	7.0%	8.0%
5-6	4.0%	5.0%	6.0%	7.0%
7 or more	3.0%	3.5%	4.0%	6.0%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

<u>Number of Transmission Paths Per Trunk Group</u>	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a. m. and 11:00 p. m. Per Trunk Group			
	15-20	11-14	7-10	3-6
	<u>Measurements</u>	<u>Measurements</u>	<u>Measurements</u>	<u>Measurements</u>
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in 17.2.2 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<u>Trunks in Service</u>	<u>1%</u>	<u>1/ 2%</u>
1 - 2	7.0%	4.5%
3 - 4	5.0%	3.5%
5 - 6	4.0%	2.5%
7 or greater	3.0%	2.0%

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/ 2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in 13.3.1 following. When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical References GR-905-CORE.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.9 Interim Access

This sheet holds sheet 101 – 103 for future use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features

Following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. They are provided as Common Switching, Transport Termination or Interim NXX Translation options. Local Transport options associated with Common Channel Signaling Network Connection Service (CCSNC) are described in 6.10.1 following. All other Local Transport options, due to their technical nature, are described in 15.1.1 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features

The following table shows optional features that are available with FGD.

Option

A)	Held for Future Use
B)	Held for Future Use
C)	Held for Future Use
D)	Held for Future Use
E)	Held for Future Use
F)	Automatic Number Identification
G)	Held for Future Use
H)	Held for Future Use
I)	Held for Future Use
J)	Held for Future Use
K)	Service Class Routing
L)	Alternate Traffic Routing
M)	Held for Future Use
N)	Held for Future Use
O)	International Carrier Option
P)	Held for Future Use
Q)	Held for Future Use
R)	Held for Future Use
S)	Held for Future Use
T)	Held for Future Use
U)	Held for Future Use
V)	Multifrequency Address Signaling
W)	Signaling System 7 (SS7) Signaling
X)	Calling Party Number (CPN)
Y)	Carrier Selection Parameter (CSP)
Z)	Charge Number Parameter (CNP)
AA)	Flexible Automatic Number Identification (Flex ANI)
AB)	Carrier Identification Parameter (CIP)
AC)	Feature Group D Treatment of 1-950-XXXX Dialing

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

- (A) Held for Future Use
- (B) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

- (C) Held for Future Use
- (D) Held for Future Use
- (E) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI)

- (1) This option provides the automatic transmission of a seven digit or ten digit number and information digits to the customer designated premises for calls originating from an end office with an end office that subtends a tandem of the Company, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with:
 - (a) all individual transmission paths in a trunk group routed directly between an end office and a customer designated premises or, where technically feasible, with
 - (b) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer designated premises.
- (2) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

- (3) The ten digit ANI telephone number is available with Feature Group D. The ten digit ANI telephone number consists of the Number Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as multiparty line or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below). Ten digit ANI is provided with multifrequency address signaling or SS7 signaling.
- (4) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (5) Where complete ANI detail cannot be provided, e.g., on calls from 4 and 8 party services, information digits will be provided to the customer.

The information digits identify:

- (a) telephone number is the station billing number - no special treatment required,
- (b) multiparty line - telephone number is a 4- or 8- party line and cannot be identified - number must be obtained via an operator or in some other manner,
- (c) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner,
- (d) hotel/motel originated call which requires room number identification,
- (e) coinless station, hospital, inmate, etc. call which requires special screening or handling by the customer, and
- (f) call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment. The AIOD ANI telephone number is the listed telephone number of the customer and is not the telephone number of the calling party.

These ANI information digits are generally available with Feature Group D.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

- (6) ANI information digits that are also available with Feature Group D also. They include:

- (a) InterLATA restricted - telephone number is identified line
- (b) InterLATA restricted - hotel/motel line
- (c) InterLATA restricted - coinless, hospital, inmate, etc., line

These information digits will be transmitted as agreed to by the customer and the Telephone Company.

Flexible Automatic Number Identification (Flex ANI) is an enhancement to ANI and is offered as a Common Switching Nonchargeable Optional Feature of Feature Group D as described in 6.10.1(AA) following.

(7) Restrictions on Use and Sale of ANI

- (a) Intrastate access customers of this tariff may use ANI in the following manner:
 - (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use ANI to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

(7) Restrictions on Use and Sale of ANI (Cont'd)

- (b) Intrastate access customers of this tariff may not use ANI in the following manner:
 - (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
 - (ii) Disclosing (except as permitted in (a), preceding), any information derived from the ANI for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(G) Held for Future Use

(H) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(I) Held for Future Use

(J) Held for Future Use

(K) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin, multiparty or hotel/ motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or Service Access Code (e.g., 900).

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(L) Alternate Traffic Routing

When the customer orders both Direct Trunked Transport and Tandem Switched Transport at the same end office, this option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. The customer shall specify the last trunk CCS desired for the high usage group. It is provided in suitably equipped end office or access tandem switches.

(M) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(N) Held for Future Use

(O) International Carrier Option

This option allows end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Telephone Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 101XXXX dialing). This arrangement requires provision of written verification to the Telephone Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Telephone Company end offices or access tandems equipped for International Direct Distance Dialing.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(P) Held for Future Use

(Q) Held for Future Use

(R) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(S) Held for Future Use

(T) Held for Future Use

(U) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(V) Multifrequency Address Signaling

This feature provides for the transmission of number information and control signals (e.g., number address signals, automatic number identification) between the end office switch and the customer's premises (in either direction). Multifrequency signaling arrangements make use of pairs of frequencies out of a group of six frequencies. Specific information transmitted is dependent upon feature group and call type (i.e., POTS, coin or operator). This feature is not available in combination with SS7 signaling.

(W) Signaling System 7 (SS7) Signaling

This feature provides common channel out of band transmission of address and supervisory SS7 protocol signaling information between the end office switch or the tandem office switching system and the customer's designated premises. The signaling information is transmitted over facilities provided with the Common Channel Signaling/ Signaling System 7 Network Connection Service (CCSNC) as specified in 6.1.3(A)(8) preceding. This feature will be provided in accordance with the SS7 Interconnect specifications described in Technical Reference GR-905-CORE.

(X) Calling Party Number (CPN)

This feature provides for the automatic transmission of the ten digit telephone number, associated with a calling station, to the customer's premises for calls originating. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "privacy indicator" for delivery to the called end user. This feature is automatically provided with originating FGD with SS7 signaling. CPN is available where technically feasible.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(X) Calling Party Number (CPN)(1) Restrictions on Use and Sale of CPN

- (a) Intrastate access customers of this tariff may use CPN in the following manner:

- (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CPN to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

- (b) Intrastate access customers of this tariff may not use CPN in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding) any information derived from the CPN for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(Y) Carrier Selection Parameter (CSP)

This feature provides for the automatic transmission of a signaling indicator which signifies to the customer whether or not the call being processed originated from a presubscribed line. If the line was presubscribed, the indicator will signify if the end user did or did not dial 101XXXX. This feature is provided with originating FGD with SS7 signaling.

(Z) Charge Number Parameter (CNP)

(1) The CNP is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGD with MF signaling. The CNP provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. This feature is provided with originating FGD with SS7 signaling.

(2) Restrictions on Use and Sale of CNP

(a) Intrastate access customers of this tariff may use CNP in the following manner:

(i) For billing and collection information, for routing, screening and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CNP to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(Z) Charge Number Parameter (CNP) (Cont'd)(2) Restrictions on Use and Sale of CNP (Cont'd)

- (b) Intrastate access customers of this tariff may not use CNP in the following manner:
 - (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
 - (ii) Disclosing, except as permitted in (a), preceding, any information derived from the CNP for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

(AA) Flexible Automatic Number Identification (Flex ANI)

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.10.1 (F) preceding) by allowing customers to receive additional information digits. Flex ANI provides additional values for these information digits over and above the values currently available with ANI and is used to identify additional call types, e.g., 27 for pay telephones requiring central office coin supervision capability, 29 for prison/ inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision. Flex ANI can also be used to provide Originating Line Screening (OLS) service. OLS service is described in 13.10 following.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(AA) Flexible Automatic Number Identification (Flex ANI) (Cont'd)

Flex ANI information digits are two digits in length and are activated through switched software program updates. These codes precede the 10-digit directory number of the calling line and are part of the signaling protocol in equal access end offices. The information digits are outpulsed by the switching system along with the directory number from the originating end office and are sent to the receiving office for billing, routing, or special handling purposes.

Customers who have ANI but do not order Flex ANI, will continue to receive the information digits associated with ANI. Flex ANI digits are assigned by the North American Numbering Plan Administrator. The Telephone Company will make available those information digits that are mutually agreed to by the customer and the Telephone Company.

Flex ANI is available to customers with FGD Switched Access Service equipped with ANI. Flex ANI is available in suitably equipped end offices as identified in NECA TARIFF F.C.C. NO. 4.

(AB) Carrier Identification Parameter (CIP)

Carrier Identification Parameter (CIP) provides for the automatic transmission of the Carrier Identification Code (CIC) to the Customer Designated Premises for tandem routed calls originating from end users of end offices that subtend that access tandem. The CIC is included in the Signaling System 7 information provided to the customer when the call originates from a presubscribed line or when the end user dials the customer's 101XXXX access code. CIP is available from suitably equipped end office and access tandems as identified in NECA TARIFF F.C.C. NO. 4, when used in conjunction with Common Channel Signaling/ Signaling System 7 Network Connection Service (CCSNC) as described in 6.10.3 following and Signaling System 7 Signaling as described in 6.10.1(W) preceding.

(AC) Feature Group D Treatment of 1-950-XXXX Dialing

Feature Group D treatment of 1-950-XXXX dialing allows the routing of calls dialed using 950-0XXX, 950-1XXX or 950-5XXX Access Code (Commonly known as FGD) to the FGD Customer as directed by the CIC associated the FGD dialed number using FGD signaling protocols and technical specifications. The Customer is responsible for distinguishing between standard FGD calls and 950-dialed calls.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.2 Transport Termination Nonchargeable Optional Features

- (A) Held for Future Use
- (B) Held for Future Use

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.2 Transport Termination Nonchargeable Optional Features

(B) Held for Future Use

(C) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features(A) Interim NXX Translation

This service is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code.

For example, when a 1+ 900+ NXX-XXXX call is originated by an end user, the Telephone Company will perform the customer identification function based on the dialed digits to determine the customer location to which the call is to be routed. If the call originates from an end office switch not equipped to provide the customer identification function, the call will be routed to an office at which the function is available. Once customer identification has been established, the call will be routed to that customer. Calls originating from an end office switch at which the customer identification function is performed, but to which the customer has not ordered Interim NXX Translation, will be blocked.

Calls to a 900 number dialed via 1+ from coin telephones, 0-, 101XXXX, Inmate Service, and Hotel/ Motel Service will be blocked. Calls to a 900 number dialed via 0+ will normally be blocked. Orders received from customers to unblock 0+ calls to a 900 number will be accommodated where suitably equipped facilities exist.

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
 - 6.10 Chargeable and Nonchargeable Optional Features (Cont'd)
 - 6.10.3 Chargeable Optional Features (Cont'd)
 - (B) Held for Future Use

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)

(B) Held for Future Use

(C) Common Channel Signaling/ Signaling System 7 Network Connection Service (CCSNC)

Common Channel Signaling/ Signaling System 7 (CCS/ SS7) Network Connection Service (CCSNC), which is available with Feature Group D, where technically feasible as designated in NECA TARIFF FCC NO. 4, WIRE CENTER INFORMATION, provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Signaling Transfer Point (STP). This service provides customers with the use of a two-way signaling path for accessing information necessary for the completion of their end user's calls.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(C) Common Channel Signaling/ Signaling System 7 Network Connection Service (CCSNC) (Cont'd)

CCS/ SS7 Network Connection Service is comprised of two parts; a Signaling Network Access Link (SNAL, consisting of Signaling Mileage Facility, Signaling Mileage Termination and Signaling Entrance Facility) and a Signaling Transfer Point (STP) Port. The SNAL is provided as a dedicated 56 Kbps out-of-band signaling connection between the customer's SPOI and the STP Port on the STP.

The CCS/ SS7 Network Connection Service is provisioned by a mated pair of STPs as described in Technical Reference GR-905-CORE in order to ensure network availability and reliability. The Telephone Company shall not be held liable for service outages if the customer employs technology related to the interconnection of signaling networks that do not adhere to generally accepted industry technical standards.

When CCS/ SS7 Network Connection service is provisioned for use with SS7 Signaling, interconnection between signaling networks must occur at an STP.

Rates and charges for the CCS/ SS7 Network Connection STP Ports and Signaling Network Access Links are contained in 17.2.2 following.

(D) 800 Data Base Access Service

When a 1+ 800 series + NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to perform the identification function. The call will then be routed to the identified customer over FGD switched access. The 800 series includes the following service area codes: 800, 888, 877, 866, 855, 844, 833 and 822.

ACCESS SERVICE6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(D) 800 Data Base Access Service (Cont'd)

The manner in which 800 data base access service is provided is dependent on the availability of SS7 service at the end office from which the service is provided as outlined following:

- When 800 data base access service originates at an end office equipped with Service Switching Point (SSP) capability for querying centralized data bases or at a non-SSP equipped end office that can accommodate direct trunking of originating 800 series calls, all such service will be provisioned from that end office.
- When 800 data base access service originates at an end office not equipped with SSP customer identification capability, the 800 series call will be delivered to the access tandem on which the end office is homed for 800 series service and which is equipped with the SSP feature to query centralized data bases.
- When 800 data base access service originates at an end office equipped with SSP capability that is not capable of accommodating direct trunking of originating 800 series (other than the 800 service access codes) calls, the 800 series (other than the 800 service access codes) call will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

Query charges as set forth in 17.2.2 following are in addition to those charges applicable for the Feature Group D switched access service.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(D) 800 Data Base Access Service (Cont'd)

The Federal Communications Commission ("FCC") has concluded that hoarding, defined as the acquisition of more toll free numbers than one intends to use for the provision of toll free service, as well as the sale of a toll free number by a private entity for a fee, is contrary to the public interest in the conservation of the scarce toll free number resource and contrary to the FCC's responsibility to promote the orderly use and allocation of toll free numbers.

ACCESS SERVICE

- 6. Switched Access Service (Cont'd)
 - 6.10 Chargeable and Nonchargeable Optional Features (Cont'd)
 - 6.10.3 Chargeable Optional Features (Cont'd)
 - Held for Future Use

ACCESS SERVICE**7. Special Access Service****7.1 General**

Special Access Service provides a transmission path to connect customer designated premises, directly, or through a Telephone Company hub or hubs where bridging or multiplexing functions are performed. Special Access Service includes all exchange access not utilizing Telephone Company end office or tandem switches.

The connections provided by Special Access Service can be either analog, digital or optical. Analog connections are differentiated by spectrum and bandwidth. Digital and optical connections are differentiated by bit rate.

7.1.1 Channel Types

There are four types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

- Transmission specifications,
- Bandwidth,
- Speed (i.e., bit rate),
- Spectrum

Customers can order a basic channel and select from a list of those available transmission parameters and channel interfaces that they desire in order to meet specific communications requirements.

For purposes of ordering channels, each has been identified as a type of Special Access Service. However, such identification is not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use. For example, if a customer's equipment is capable of transmitting voice over a channel that is identified as a Metallic Service in this tariff, there is no restriction against doing so.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Following is a brief description of each type of channel:

Voice Grade -a channel for the transmission of analog signals within an approximate bandwidth of 300 to 3000 Hz.

Digital Data -a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0 Kbps.

High Capacity -a channel for the transmission of isochronous serial digital data at rates of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps.

Synchronous Optical - a high speed channel for the transmission of synchronous full duplex over optical fiber at rates of 155.52 or 622.08 Mbps.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)

Detailed descriptions of each of the channel types are provided in 7.4 through 7.11 following.

The customer also has the option of ordering Voice Grade and High Capacity facilities (e.g., 1.544 Mbps and 44.736 Mbps) to Telephone Company hubs for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 7.6 and 7.10 following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are set forth in 7.2.1 following.

For example, a customer may order a 44.736 Mbps High Capacity channel from a customer designated premises to a Telephone Company hub for multiplexing to twenty-eight 1.544 Mbps channels. The 1.544 Mbps channels may be further multiplexed at the same or a different hub to Voice Grade channels or may be extended to other customer designated premises or hubs. Optional features may be added to either the 1.544 Mbps or the Voice Grade channels.

Similarly, the customer has the option of ordering Synchronous Optical Channel Service to a wire center equipped for Add/Drop Multiplexing. This allows lower level signals to be added or dropped from a high speed optical carrier channel for delivery to a customer designated premises, or another wire center. A description of Add/Drop Multiplexing is set forth in 7.11.3 (B) following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions

For the purposes of ordering, there are four categories of Special Access Service. These are:

Service Designator Codes

Voice	VG
Digital Data	DA
High Capacity	DS
Synchronous Optical	OC

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer. Technical specifications packages are described in Section 15. following, optional features and functions are described in this section. Channel interfaces are described in 15.2 following.

Customized technical specifications packages will be provided where technically feasible. If the Telephone Company determines that the requested parameter specifications are not compatible, the customer will be advised and given the opportunity to change the order.

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be advised and given the opportunity to change the order.

The channel descriptions provided in 7.4 through 7.11 following, specify the characteristics of the basic channel and indicate whether the channel is provided between customer designated premises, between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed or between hubs.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions (Cont'd)

- (A) Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. This information is displayed in matrices set forth in 15.2 following.
- (B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 15.2 following, in a combination format.
- (C) Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth in (F) following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.
- (D) The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available. Such information is displayed in matrices set forth in 15.2 following with the optional feature or function listed down the left side and the technical specifications package listed across the top.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2 Service Descriptions (Cont'd)

(E) Held for Future Use

(F) All services will conform to the transmission specifications standards contained in this tariff or in the following Technical References for each category of service:

Voice Grade	TR-NWT-000335 PUB 41004, Table 4
Digital Data	TR-NWT-000341
For 2.4,4.8,9.6& 56.0 Kbps	Pub 62310 (MDP-326-726)
For 19.2 Kbps	INC Bulletin CB-INC-100
For 64.0 Kbps	PUB 62310 (MDP-326-726)
High Capacity	GR-342-CORE
	GR-54-CORE
Synchronous Optical	GR-253-CORE
For OC3, OC3c and OC12	GR-1374-CORE
	ANSI T1.105
	ANSI T1.102

7.1.3 Service Configurations

There are three types of service configurations over which Special Access Services are provided: two-point service, multipoint service and Synchronous Optical Channel Service.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service

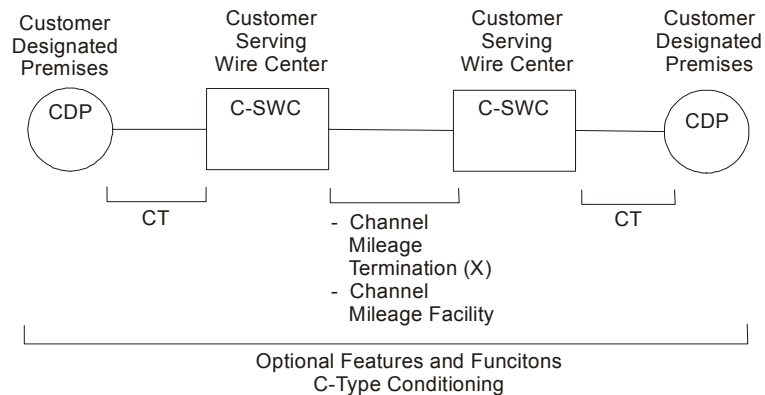
A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(A) Two-Point Service (Cont'd)

Applicable rate elements are:

- Channel Terminations
- Channel Mileage (as applicable)
- Optional Features and Functions (when applicable)

The following diagram depicts a two-point Voice Grade service connecting two Customer Designated Premises (CDP). The service is provided with C-Type conditioning.



Applicable rate elements are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
- C 2 Channel Mileage Terminations plus
- C 1 section, Channel Mileage Facility per mile
- C-Type Conditioning Optional Feature

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

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ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(B) Multipoint Service

Multipoint service connects three or more customer designated premises through one or more Telephone Company hubs. Only certain types of Special Access Service are provided as multipoint service. These are so designated in the descriptions for the appropriate channel.

The channel between hubs (i.e., bridging locations) on a multipoint service is a mid-link. There is no limitation on the number of mid-links available with a multipoint service. However, when more than three mid-links in tandem are provided the quality of the overall service may be degraded.

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.2 preceding and 15.2 following, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s). NECA TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

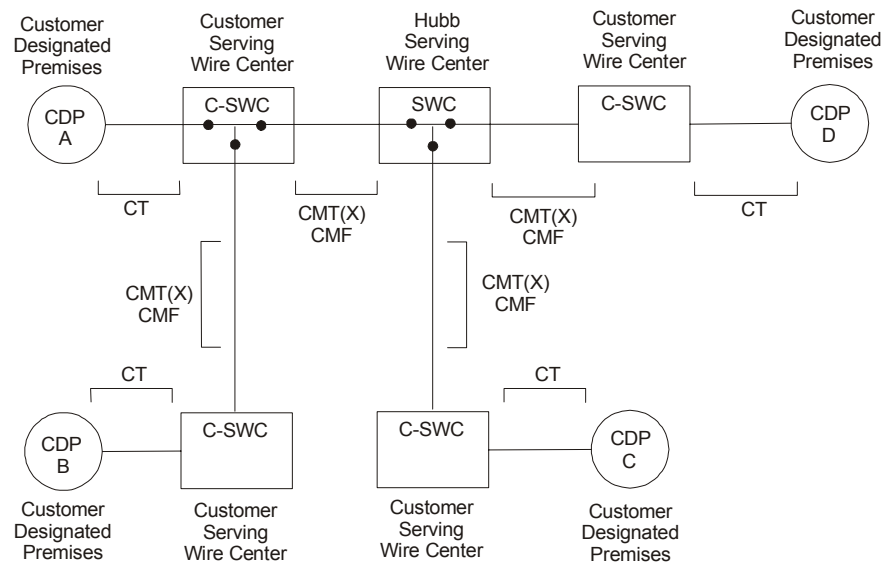
Applicable Rate Elements are:

- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between the serving wire center for each customer designated premises and the hub and between hubs).
- Bridging
- Additional Optional Features and Functions (when applicable).

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

Example: Voice Grade multipoint service connecting four customer designated premises (CDP) via two customer specified bridging hubs.



Applicable Rate Elements Are

- Channel Termination (4 Applicable)
- Channel Mileage
 - 2 Channel Mileage Terminations per Channel Mileage Facility section for a total of 8, plus
 - 4 sections, Channel Mileage Facility per mile
- Bridging Optional Features (6 applicable, i.e. each bridge port)

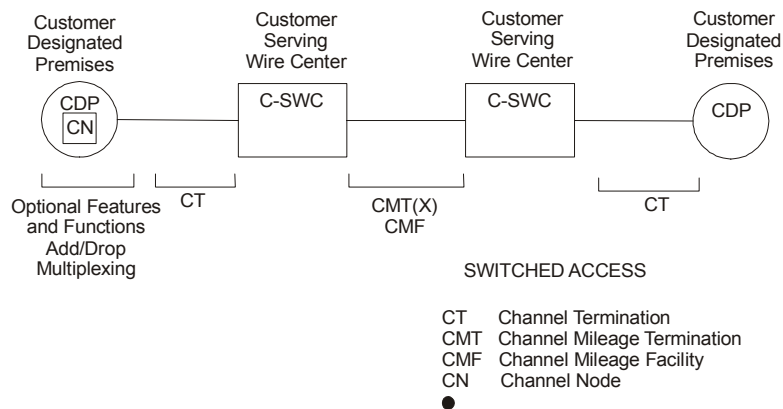
ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service

A Synchronous Optical Channel Service connects two customer designated premises or a customer designated premises and a wire center equipped for Add/ Drop Multiplexing. The connection is provided via a high speed optical carrier communications path delivering an optical handoff.

Applicable rate elements are:

- Channel Terminations
- Channel Mileage (where applicable)
- Optional Features and Functions

- (1) The following diagram depicts a synchronous optical channel service connecting two Customer Designated Premises (CDP). The Optional Feature and Function of a Customer Node was ordered at one CDP.

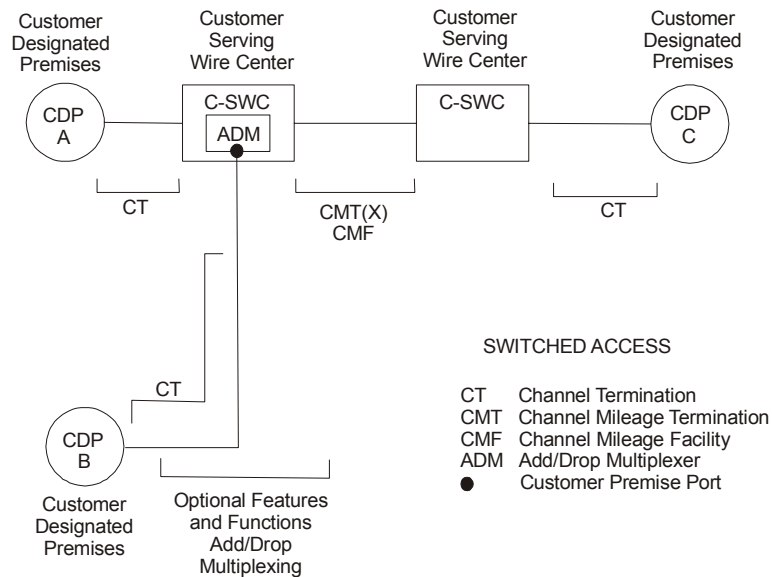


Applicable rate elements are:

- Channel Termination
2 Channel Terminations (1 per CDP)
- Channel Mileage
2 Channel Mileage Terminations plus
1 Segment Channel Mileage Facility (per mile)
- Optional Feature
1 Customer Node, plus
2 Customer Premises Ports

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service (Cont'd)

- (2) The following diagram depicts a Synchronous Optical Channel Service connecting three Customer Designated Premises. CDP-A and CDP-B are connected using an Add/ Drop Multiplexer. At the Add/ Drop Multiplexer, the customer may drop off lower speed special access services.



Applicable rate elements are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
 - Channel Mileage Termination (2 applicable)
 - 1 Section, Channel Mileage Facility per mile
- Add/ Drop Multiplexing Optional Feature
 - (1 Central Office Port applicable, i.e., each port)

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Alternate Use

Alternate Use occurs when a service is arranged by the Telephone Company so that the customer can select different types of transmission at different times. A customer may use a service in any privately beneficial manner. However, where technical or engineering changes are required to effectuate an alternate use, the Telephone Company will make such special arrangements available on an individual case basis.

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis and filed in Section 12. following, Specialized Service or Arrangements. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered [i.e., Channel Terminations, Channel Mileage (as applicable) and Optional Features and Functions (if any)].

7.1.5 Special Facilities Routing

A customer may request that the facilities used to provide Special Access Service be specially routed. The regulations, rates and charges for Special Facilities Routing are set forth in Section 11 following.

(C)
(C)7.1.6 Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the make-up of the facilities and services provided under this tariff as Special Access Service to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

ACCESS SERVICE7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.7 Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test the following at the time of installation:

- (A) For Voice Grade analog services, the acceptance test will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise when these parameters are applicable and specified in the order of service. Additionally, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.
- (B) For digital services (i.e., Digital Data and High Capacity), acceptance tests will include tests applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade service to test other parameters, as described in 13.3.1(B) following, is available at the customer's request. All test results will be made available to the customer upon request.

7.1.8 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provisions set forth in Section 5. preceding. Also included in that section are other charges which may be associated with ordering Special Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Special Access.

7.2.1 Rate Categories

There are three basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 7.2.1(A) following)
- Channel Mileage (described in 7.2.1(B) following)
- Optional Features and Functions (described in 7.2.1(C) following).

(A) Channel Terminations

The Channel Termination rate category recovers the costs associated with the communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability is provided as an optional feature as set forth in (C) following.

For Synchronous Optical Channel Service the high speed optical communications path is between the Optical Line Termination (OLT) at the customer designated premises and the serving wire center of that premises.

One Channel Termination charge applies per customer designated premises at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations(Cont'd)7.2.1 Rate Categories (Cont'd)(A) Channel Terminations (Cont'd)

For DS3 High Capacity Service, the Channel Termination rates are made up of the DS3 Capacity Interface rate and the DS3 Channel Installed rate. The Capacity Interface rate is dependent upon the capacity ordered (i. e., Capacity Interface of 1, 3, 6 or 12) and is applicable at each customer designated premises. The capacity ordered is the maximum number of DS3 services that can be terminated on a given service at the customer designated premises (e. g., a capacity of 3 can terminate 1, 2, or 3 DS3 services). One DS3 Channel Installed rate applies per customer designated premises at which the channel is terminated for each DS3 channel that is ordered. These charges will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(B) Channel Mileage

The Channel Mileage rate category recovers the costs associated with the equipment and the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designated premises and a Telephone Company hub, between two Telephone Company hubs, between a serving wire center associated with a customer designated premises and a wire center equipped for Add/ Drop Multiplexing (ADM). Channel Mileage rates are made up of the Channel Mileage Facility rate and the Channel Mileage Termination rate. For GLC, the Channel Mileage rate category also recovers the costs associated with the equipment and the transmission facilities that GLC provides between locations on GLC's transport network, which are not connected to GLC's tandem switch location in Westphalia, Michigan, where GLC provides cross connects that are not Channel Termination facilities and not otherwise functionally equivalent to such facilities ("GLC CM Cross Connect Location").

(C)
(C)(C)
—
(C)(1) Channel Mileage Facility

The Channel Mileage Facility rate recovers the per mile cost for the transmission path which extends between the Telephone Company serving wire centers and/ or hub(s). Channel Mileage Facility rate also recovers the per mile cost for the transmission path which extends between GLC CM Cross Connect Locations.

(C)
(C)
(C)

The Synchronous Optical Channel Service Channel Mileage Facility provides high speed transmission facilities between the Telephone Company serving wire centers or between a Telephone company serving wire center and another wire center equipped for Add/Drop Multiplexing (ADM) or between two ADM equipped wire centers.

(2) Channel Mileage Termination

The Channel Mileage Termination rate recovers the cost for equipment associated with terminating the facility (i.e., basic circuit equipment and terminations). The Channel Mileage Termination rate will apply at each location where the channel is terminated. For example, if the Channel Mileage is between Telephone Company bridging hubs, the Channel Mileage Termination rate will apply per Telephone Company designated hub. Likewise, if the Channel Mileage is between two GLC CM Cross Connect Locations, the Channel Mileage Termination rate will apply at each GLC CM Cross Connect Location.

(C)
—
(M)
—
(C)

Certain material appearing on this page previously appeared on Original Page 7-14.1.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage (Cont'd)

If the Channel Mileage for Synchronous Optical Channel Service is between the serving wire center for a customer designated premises and a wire center equipped for Add/Drop Multiplexing, the Channel Mileage Termination Rate will apply at both the serving wire center associated with the Customer Designated Premises and the wire center equipped for Add/Drop Multiplexing. If the Channel Mileage is between two wire centers equipped for Add/Drop Multiplexing, the Channel Mileage Termination rate will apply at both wire centers equipped for Add/Drop Multiplexing.

When the Channel Mileage Facility is zero (i.e., collocated serving wire centers), neither the Channel Mileage Facility rate nor the Channel Mileage Termination rate will apply.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(C) Optional Features and Functions

The Optional Features and Functions rate category recovers the costs associated with optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.

Examples of Optional Features and Functions that are available include, but are not limited to, the following:

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

Descriptions for each of the available Optional Features and Functions are set forth in 7.4 through 7.11 following.

A hub is a Telephone Company designated serving wire center at which bridging or multiplexing functions are performed. The bridging functions performed are to connect three or more customer designated premises in a multipoint arrangement. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth.

NECA TARIFF F. C. C. NO. 4 identifies serving wire centers, hub locations, hub level (i. e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of bridging or multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super-Intermediate Hubs.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges

There are two types of rates and charges. These are monthly rates, daily rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof that a Special Access Service is provided. For billing purposes, each month is considered to have 30 days.

(B) Not offered

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i. e., installation or change to an existing service). The types of nonrecurring charges that apply for Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1 following.

(1) Installation of Service

Nonrecurring charges apply to each service installed. The nonrecurring charges for the installation of service are set for each channel type as a nonrecurring charge for the Channel Termination.

(2) Installation of Optional Features and Functions

When optional features and functions are installed coincident with the initial installation of service, no separate nonrecurring charge is applicable. When optional features and functions are installed or changed subsequent to the installation of service, an Access Order Charge as specified in 17.4.1 following will apply per order.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, as set forth following, or that involve actual physical change to the service. Changes to pending orders are set forth in 5.4 preceding.

Changes in the physical location of the point of termination or customer designated premises are moves as set forth in 7.2.3 following.

Changes in the type of Service or Channel Termination which result in a change of the minimum period requirement will be treated as a discontinuance of the service and an installation of a new service.

Changes in ownership or transfer of responsibility from one customer to another will be treated as a discontinuance of the service and an installation of a new service. In the event the change in ownership or transfer of responsibility is as set forth in 2.1.2(A) preceding where there is no change in facilities or arrangements, the change will be treated as an administrative change.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

All other service rearrangements will be charged as follows:

- If the change involves the addition of other customer designated premises to an existing service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added. The charge(s) will be in addition to an Access Order Charge as set forth in 17.4.1 following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

- If the change involves the addition of an optional feature or function (with the exception of the addition of Clear Channel Capability to an existing service), or if the change involves changing the type of signaling on a Voice Grade service, and for all other changes the Access Order Charge as set forth in 17.4.1 following will apply.
- When the Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated non-recurring charges will apply.

7.2.3 Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the nonrecurring (i. e., installation) charge for the service termination affected. There will be no change in the minimum period requirements. This charge is in addition to the Access Order Charge as specified in 17.4.1 following.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.3 Moves (Cont'd)(B) Moves To a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

7.2.4 Minimum Periods

The minimum service period for all services except DS3 High Capacity Service and Synchronous Optical Channel Service is one month and the full monthly rate will apply to the first month. Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period are as set forth in 2.4.1(F) preceding. The minimum service period for DS3 High Capacity Service and Synchronous Optical Channel Service is twelve months.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.5 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage Facility is calculated on the airline distance between the locations involved, i. e.,

- the serving wire centers associated with two customer designated premises,
- a serving wire center associated with a customer designated premises and a Telephone Company hub,
- two Telephone Company hubs,
- or between a serving wire center associated with a customer designated premises and a wire center equipped for Add/ Drop Multiplexing,

The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.

Mileage charges are shown with each channel type. To determine the rate to be billed, first compute the mileage using the V & H coordinates method, as set forth in the NECA TARIFF F. C. C. NO. 4, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination rate for each termination. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. When more than one Telephone Company is involved in the provision of service, billing will be accomplished as set forth in 2.4.7 preceding.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.5 Mileage Measurement (Cont'd)

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i. e.,

- customer designated premises serving wire center to hub,
- hub to hub and/ or
- hub to customer designated premises serving wire center.

However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e. g., the Telephone Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

See the service configuration example for multipoint service as set forth in 7.1.3(B) preceding.

When Add/Drop Multiplexing is offered in connection with Synchronous Optical Channel Service, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.,

- customer designated premises serving wire center to an Add/Drop Multiplexing (ADM) equipped wire center,
- ADM equipped wire center to ADM equipped wire center,
- ADM equipped wire center to a customer designated premises serving wire center.

7.2.6 Facility Hubs

A customer has the option of ordering Voice Grade service or High Capacity services (i.e., DS1, DS1C, DS2, DS3 or DS4) to a facility hub for channelizing to individual services requiring lower capacity facilities (e. g., Voice, etc.).

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

Different locations may be designated as hubs for different facility capacities, e. g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub.

NECA TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations, hub level (i.e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super-Intermediate Hubs.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from high capacity to voice frequency channels.

Point to point services may be provided on channels of these services to a hub. The transmission performance for the point to point service provided between customer designated premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps channel is multiplexed to voice frequency channels, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

The Telephone Company will commence billing the monthly rate for the service to the hub on the date specified by the customer on the Access Order. Individual channels utilizing these services may be installed coincident with the installation of the service to the hub or may be ordered and/ or installed at a later date, at the option of the customer. The customer will be billed for a Voice Grade or a High Capacity Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the service is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

Cascading multiplexing occurs when a High Capacity service is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a 6.312 Mbps High Capacity service is de-multiplexed to four DS1 channels and then one of the DS1 channels is further de-multiplexed to 24 individual Voice Grade channels.

When cascading multiplexing is performed, whether in the same or a different hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different hubbing locations, Channel Mileage charges also apply between the hubs.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use

Mixed use refers to a rate applicable when the customer orders High Capacity or Synchronous Optical Channel Service Special Access facilities between a customer designated premises and a Telephone Company hub or ADM equipped wire center where the Telephone Company performs multiplexing/ de-multiplexing functions and the same customer then orders the derived channels as Special and Switched Access Services. Mixed use also applies when the customer orders Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub or ADM equipped wire center and the same customer then orders the derived channels as Special and Switched Access Service. Rates and charges will apply for the existing facilities and new facilities as if the service were ordered as mixed use.

Except as noted above, the High Capacity or Synchronous Optical Channel Service facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate Multiplexing, Customer Node, Customer Premises Port, and Add/Drop Multiplexing). The nonrecurring charge that applies when the mixed use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity or Synchronous Optical Channel Service Channel Termination.

Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i. e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the mixed use facility.

When Special Access Service is provided utilizing a channel of the mixed use facility to a hub, High Capacity rates and charges will apply for the facility to the hub, as set forth preceding, and individual service rates and charges will apply from the hub to the customer designated premises.

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use (Cont'd)

The rates and charges that will apply to the portion from the hub to the customer designated premises will be dependent on the specific type of Special Access Service that is provided (e. g., Voice Grade, etc.). The applicable rates and charges will include a Channel Termination and Channel Mileage, if applicable. Rates and charges for optional features and functions associated with the service, if any, will apply for the appropriate channel type.

As each individual channel of a Special Access High Capacity Service is activated for Switched Access Service, the Special Access Channel Termination, Channel Mileage and Multiplexing rates will be reduced accordingly (e. g., 1/ 24th for a DS1 service, 1/ 672nd for a DS3 service).

Similarly, as each individual channel of a Special Access Synchronous Optical Channel Service is activated for Switched Access Service, the Special Access Channel Termination, Channel Mileage, Customer Node, Customer Premises Port, and Add/Drop Multiplexing rates will be reduced accordingly (e.g., 1/2016th for an OC3 service, 1/8064th for an OC12 service).

ACCESS SERVICE7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Mixed Use (Cont'd)

Switched Access Service rates and charges, as set forth in 17.2 following, will apply for each channel that is used to provide a Switched Access Service. The Switched Access Service Entrance Facility charge will be reduced by multiplying its rate by a rate reduction factor (i.e., the ratio of derived Switched Access Service channels to the total number of channels that can be derived). If the Telephone Company is providing Direct Trunked Transport, then the Direct Trunked Transport, Multiplexing, Customer Node, Customer Premises Port, and Add/Drop Multiplexing charges will be reduced by multiplying their respective rates by the rate reduction factor.

The following table shows the total voice grade equivalents for each of the services that may be used for Mixed Use.

High Capacity or Synchronous Optical Channel Service	DS3 Quantities	DS1 Quantities	Voice Grade Equivalents
DS1	n/a	1	24
DS3	1	28	672
OC3	3	84	2,016
OC12	12	336	8,064

The customer must place an order for each individual Switched or Special Access Service utilizing the Mixed Use facilities and specify the channel assignment for each such service.

ACCESS SERVICE

7. Special Access Service (Cont'd)

Sheet 7-27 to Sheet 7-33 (Section 7.2.8 through Section 7.5) Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service7.6.1 Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated as two-wire or four-wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub or hubs.

Voice Grade Special Access Services are typically used For voice and voiceband data applications. Typical examples of voice grade circuits are Foreign Exchange lines (station end only), multipoint private line, voice trunk type, two-point voice grade data (one-way or simultaneous two-way), multipoint voice grade data, and voice grade telephoto or facsimile. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

Rates and charges for Special Access Voice Grade Service are as set forth in the Customer's individual contract.

7.6.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(C) following. Compatible network channel interfaces are set forth in 15.2.2(C)(3) following.

7.6.3 Optional Features and Functions(A) Central Office Bridging Capability

- (1) Voice Bridging (two-wire and four-wire)
- (2) Data Bridging (two-wire and four-wire)
- (3) Telephoto Bridging (two-wire and four-wire)
- (4) DATAPHONE Select-A-Station Bridging with sequential arrangement ports or addressable arrangement ports

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(A) Central Office Bridging Capability (Cont'd)

(5) Telemetry and Alarm Bridging

Split Band, Active Bridging
Passive Bridging
Summation, Active Bridging

(B) Held for Future Use

(C) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services.

For two-point services, the parameters apply to each service as measured end-to-end. For multipoint services, the parameters apply as measured on each mid-link or as measured on each end link. C-Type conditioning and Data Capability may be combined on the same service.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Voice Grade Service (Cont'd)

7.6.3 Optional Features and Functions (Cont'd)

(C) Conditioning (Cont'd)

(1) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are delineated in Technical Reference TR-NWT-000335.

(2) Held for Future Use

(3) Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(C) Conditioning (Cont'd)(4) Data Capability (D Conditioning)

Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C-Notched Noise Ratio and intermodulation distortion. It is available for two-point services or three-point multipoint services.

The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are delineated in Technical Reference TR-NWT-000335.

When a service equipped with Data Capability is used for voice communications, the quality of the voice transmission may not be satisfactory.

(5) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are delineated in Technical Reference TR-NWT-000335.

(6) Sealing Current Conditioning

Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire DA or NO type network channel interfaces.

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(D) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference TR-NWT-000335.

(E) Improved Return Loss

- (1) On Effective Four-Wire Transmission at Four-Wire Point of Termination (applicable to each two-wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335.
- (2) On Effective Two-Wire Transmission at Two-Wire Point of Termination: Provides for more stringent Echo Control specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Voice Grade Service (Cont'd)

7.6.3 Optional Features and Functions (Cont'd)

(F) Signaling Capability

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service.

The following network channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR and TF.

The following network channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV and SF.

(G) Selective Signaling Arrangement

An arrangement that permits code selective ringing for up to ten codes on a multipoint service.

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(H) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of an access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to another channel that terminates in either the same or a different customer premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.

(I) Held for Future Use

(J) Four-Wire/ Two-Wire Conversions

When a customer requests that an effective four-wire channel be terminated with a two-wire channel interface at the customer designated premises, a four-wire to two-wire conversion is required.

ACCESS SERVICE7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(K) Improved Two-Wire Voice Transmission(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0 dB to +4.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 280 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +6.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	35 dBrnco
51 to 100	37 dBrnco
101 to 200	40 dBrnco
201 to 400	43 dBrnco
401 to 1000	45 dBrnco

(4) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL	13.0 dB
SRL	6.0 dB

The rate for the provision of Improved Two-Wire Voice Transmission is included as part of the basic Channel Termination rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.7 Held for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.7 Held for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.8 Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.9 Digital Data Service7.9.1 Basic Channel Description

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0* Kbps. The actual bit rate is a function of the channel interface selected by the customer. The channel provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data channels are provided as either hubbed or non-hubbed services between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs. The hubs providing hubbed digital service and the wire centers providing non-hubbed digital service are identified in NECA, WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

The customer may provide the Channel Service Unit-type equipment or other Network Channel Terminating Equipment associated with the Digital Data channel at the customer premises.

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310 (MDP-326-726).

7.9.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(F) following. Compatible channel interfaces are set forth in 15.2.2(C)(6) following.

- * When 64.0 Kbps service is multiplexed on a DS1 High Capacity service, the DS1 must be equipped to provide Clear Channel Capability.

ACCESS SERVICE7. Special Access Service (Cont'd)7.9 Digital Data Service (Cont'd)7.9.2 Technical Specifications Packages and Network Channel Interfaces (Cont'd)

The following network channel interfaces (NCIs) define the bit rates that are available for a Digital Data channel:

<u>NCI</u>	<u>Bit Rate</u>
DU-24	2.4 Kbps
DU-48	4.8 Kbps
DU-96	9.6 Kbps
DU-19	19.2 Kbps
DU-56	56.0 Kbps
DU-64	64.0 Kbps

7.9.3 Optional Features and Functions

The Optional Features and Functions described in (A), (B), and (C) following are only available where Digital Data Service is provided via a hub. The Optional Features and Functions described in (D) following are available where Digital Data Service is provided on a non-hubbed basis.

(A) Central Office Bridging Capability

Bridging is not available on a 64.0 Kbps channel.

(B) Transfer Arrangement

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access channel(s) on a 1xN basis. The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. This arrangement is only available at a Telephone Company designated hub. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as a part of the option.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.9 Digital Data Service (Cont'd)

7.9.3 Optional Features and Functions (Cont'd)

(C) Held for Future Use

(D) Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service7.10.1 Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 Kbps* or 1.544, 3.152, 6.312, 44.736, or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

The customer may provide the Network Channel Terminating Equipment associated with the High Capacity channel at the customer's premises.

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference GR-342-CORE.

* Available only as a channel of a 1.544 Mbps facility to a Telephone Company Digital Data hub or as a cross connect of two 2.4, 4.8, 9.6, 56.0 or 64.0 Kbps channels of two 1.544 Mbps facilities to a Digital Data hub(s). The customer must provide system and channel assignment data.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(G) following. Compatible channel interfaces are set forth in 15.2.2(C)(7) following.

The following network channel interfaces (NCIs) define the bit rates that are available for a High Capacity channel:

<u>NCI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

* A 64.0 Kbps channel is available as a channel(s) of a 1.544 Mbps channel to a Telephone Company hub.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions(A) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel line when a working line fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer designated premises. The customer is responsible for providing the equipment at its designated premises.

(B) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(C) Central Office Multiplexing(1) DS4 to DS1

An arrangement that converts a 274.176 Mbps channel to 168 DS1 channels using digital time division multiplexing.

(2) DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

(3) DS2 to DS1

An arrangement that converts a 6.312 Mbps channel to four DS1 channels using digital time division multiplexing.

(4) DS1C to DS1

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing.

(5) DS1 to Voice

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel(s) of this DS1 to the Hub can also be used for a Digital Data Service.

(6) DS1 to DS0

An arrangement that converts a 1.544 Mbps channel to 23 64.0 Kbps channels utilizing digital time division multiplexing.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(C) Central Office Multiplexing (Cont'd)(7) DS0 to Subrate

An arrangement that converts a 64.0 Kbps channel to subspeeds of up to twenty 2.4 Kbps, ten 4.8 Kbps, or five 9.6 Kbps channels using digital time division multiplexing.

The table set forth in 15.2.1(G) following shows the technical specifications packages with which the optional features and functions are available.

(D) Clear Channel Capability (CCC)

- (1) CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel or over a 1.544 Mbps High Capacity channel derived from a multiplexed 44.736 Mbps High Capacity channel with no constraint on the quantity or sequence of one and zero bits. This arrangement requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code as described in Technical Reference GR-54-CORE and Technical Reference GR-342-CORE.
- (2) CCC is provided, subject to availability of facilities, on DS1/ 1.544 Mbps High Capacity channels between two customer designated premises and on multiplexed DS3/ 44.736 Mbps High Capacity channels or multiplexed DS1/ 1.544 Mbps High Capacity channels* between a Telephone Company hub office and a customer designated premises. The wire centers providing CCC are identified in NECA WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.
- (3) The CCC optional feature may be ordered at the same time the High Capacity service is ordered or it may be ordered as an addition to an existing High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing High Capacity Service. The charges for the CCC optional feature are as set forth in 7.2.2(C)(3) preceding.

* Available only on a DS1-to-Digital multiplexed configuration.

ACCESS SERVICE7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(E) Shared SONET Ring Interoffice Transport

- (1) Shared SONET Ring Interoffice Transport (SSRIT) is a chargeable optional feature which provides interoffice transmission of a DS3 High Capacity Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self-healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.
- (2) Shared SONET Ring Interoffice Transport is provided for the interoffice portion of DS3 High Capacity Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NECA WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.
- (3) The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the DS3 High Capacity service is ordered or it may be ordered as an addition to an existing DS3 High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing DS3 High Capacity Service.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.10 High Capacity Service (Cont'd)

7.10.3 Optional Features and Functions (Cont'd)

(F) Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service7.11.1 Basic Channel Description

A Synchronous Optical Channel Service channel provides dedicated transport utilizing Synchronous Optical Network (SONET) transmission standards. Synchronous Optical Channel Service provides optical network capability to customers requiring connections at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12). Synchronous Optical Channel Service is provided between two customer designated premises (CDP) through one or more Telephone Company wire centers or between a CDP and a wire center equipped for Add/ Drop Multiplexing (ADM). In addition, customers at an ADM equipped wire center may add or drop bandwidth capacity from the synchronous optical channel for delivery to a customer designated premises, or another wire center.

OC3/ OC3c Synchronous Optical Channel Service may also be provided between a customer designated premises and a Telephone Company designated DSL Access Service Connection Point.

Each channel will be configured with one working and one protect fiber pair within the same sheath between the CDP and the serving wire center of the CDP which provides redundancy to protect the customer's service. Should a failure occur, the SONET technology will automatically switch the customer's transmission to the dedicated protect fiber pair. The customer may provide node and port equipment at the CDP which allows the high speed optical carrier channel to be converted to an electrical signal at a lower speed. The provision of such equipment by the customer is subject to compatibility with the Telephone Company's equipment in the serving wire center and must comply with the standards specified in GR-253-CORE.

The OC3 channel is available in a non-concatenated format (OC3) which provides three individual signals. The OC3 channel is also available in a concatenated format (OC3c) which provides a single signal appropriate for data transmissions.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.1 Basic Channel Description (Cont'd)

Synchronous Optical Channel Service is available at the wire centers as identified in NECA Tariff F.C.C. No. 4.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.2 Network Channel Interfaces

Compatible channel interfaces for Synchronous Optical Channel Service are as set forth in 15.2.2(C)(8) following.

The following network channel interfaces (NCIs) define the bit rates that are available for a synchronous optical channel:

<u>NCI</u>	<u>Bit Rate</u>
FCF-B	155.52 Mbps (OC3, OC3c)
FCF-D	622.08 Mbps (OC12)

7.11.3 Optional Features and Functions

(A) Customer Node

A Customer Node charge applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a Synchronous Optical Channel Service Channel Termination. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3, OC3c or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 Optional Features and Functions (Cont'd)(B) Customer Premises Port

Customer Premises Port charges apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3/ OC3c channels ordered. Customer Premises Ports are available at the following speeds:

<u>Customer Premises Port</u>	<u>Speed</u>
OC3, OC3c	155.52 Mbps
STS-1	51.84 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

(C) Add/ Drop Multiplexing

An Add/ Drop Multiplexing Central Office Port charge applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Service Channel Termination or Channel Mileage transport facilities. Central Office Ports are available at the following speeds:

<u>Central Office Port</u>	<u>Speed</u>
OC3, OC3c	155.52 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

OC12 service may only be multiplexed to OC3/ OC3c channels.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.3 Optional Features and Functions (Cont'd)

(C) Add/ Drop Multiplexing (Cont'd)

Held for Future Use

ACCESS SERVICE7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 Optional Features and Functions (Cont'd)(D) Shared SONET Ring Interoffice Transport(1) Shared SONET Ring Interoffice Transport

(SSRIT) is a chargeable optional feature which provides interoffice transmission of a Synchronous Optical Channel Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self-healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.

(2) Shared SONET Ring Interoffice Transport is provided for the interoffice portion of Synchronous Optical Channel Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NECA, WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

(3) The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the Synchronous Optical Channel Service is ordered or it may be ordered as an addition to an existing Synchronous Optical Channel Service. The customer must agree to out-of-service periods required to add this feature to an existing Synchronous Optical Channel Service. The charges for the Shared SONET Ring Interoffice Transport optional feature are as set forth in 7.2.2.(C)(3) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.3 Optional Features and Functions (Cont'd)

(E) Held for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.12 Individual Case Filings

None

ACCESS SERVICE

8. Held for Future Use

ACCESS SERVICE

9. Held for Future Use

ACCESS SERVICE

10. Held for Future Use

ACCESS SERVICE**11. Special Facilities Routing of Access Services****11.1 Description**

The services provided under this tariff are provided over such routes and facilities as the Telephone Company may elect. Special Facilities Routing is involved when, in order to comply with requirements specified by the customer, the Telephone Company provides one or more of the following:

(T)

(T)

11.1.1 Diversity

Two or more circuits must be provided over not more than two different physical routes.

11.1.2 Avoidance

A circuit(s) must be provided on a route which avoids specified geographical locations.

11.1.3 Diversity and Avoidance Combined**11.1.4 Cable-Only Facilities**

Certain Voice Grade services are provided on Cable-Only Facilities to meet the particular needs of a customer. Service is provided subject to the availability of Cable-Only facilities. In the event of service failure, restoration will be made through the use of any available facilities as selected by the Telephone Company.

11.1.5 Tandem Connection Transport

Tandem Connection Transport service is provided by GLC and includes the equipment and the transmission facilities that GLC provides between its tandem location in Westphalia, Michigan and a different location on GLC's transport network, which is designated by the customer, where GLC provides cross connects that are not Channel Termination facilities and not otherwise functionally equivalent to such facilities ("GLC TCT Cross Connect Location"). Tandem Connection Transport service is provided over special access circuits that are dedicated to the use of a single customer.

(N)

Monthly Rates. Tandem Connection Transport service has Facility, Termination, Multiplexing (if applicable) and Cross Connect (if applicable) rate elements that are assessed on a monthly basis for each circuit provisioned. The Tandem Connection Transport Facility rate applies on a per mile basis for the transmission path which extends between GLC's tandem location in Westphalia, Michigan and a GLC TCT Cross Connect Location. The Tandem Connection Transport Termination rate applies at GLC's tandem location and at the GLC TCT Cross Connect Location. The Tandem Connection Transport Multiplexing rate applies for each arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing and the Tandem Connection Transport Cross Connect rate applies per connection.

Nonrecurring Charges. Section 5.4 Access Ordering charges and Tandem Connection Transport Trunk Activation charges are assessed, when applicable, on a nonrecurring basis.

(N)

Avoidance and Diversity are available on Switched Access Service as set forth in Section 6 preceding; Voice Grade Special Access Services as set forth in 7.6 preceding. Cable-Only Facilities are available for Switched Access Service as set forth in Section 6 preceding; Voice Grade Special Access Services as set forth in 7.6.

ACCESS SERVICE

12. Held for Future Use

ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services**

13.1 addresses Additional Engineering. 13.2 addresses Additional Labor (which is comprised of Overtime Installation, Overtime Repair, Standby, Testing and Maintenance with Other Telephone Companies, and Other Labor). 13.3 addresses Miscellaneous Services (which are comprised of Testing Services, Maintenance of Service and Telecommunications Service Restoration Priority).

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 8: 00 a. m. to 5: 00 p. m.) for the application of rates based on working hours.

A Miscellaneous Service Order charge as described in 5.4.2 preceding may be applicable to services ordered from this section.

13.1 Additional Engineering

Additional Engineering, including engineering reviews as set forth in 5.4.3 preceding, will be undertaken only after the Telephone Company has notified the customer that additional engineering charges apply as set forth in 17.4.2 following, and the customer agrees to such charges.

Additional Engineering will be provided by the Telephone Company at the request of the customer only when:

- (A) A customer requests additional technical information after the Telephone Company has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.5 and 7.1.6 preceding.
- (B) Additional Engineering time is incurred by the Telephone Company to engineer a customer's request for a customized service as set forth in 7.1.2 preceding.
- (C) A customer requested Design Change requires the expenditure of Additional Engineering time. Such Additional Engineering time is incurred by the Telephone Company for the engineering review as set forth in 5.4.3 preceding. The charge for additional engineering time relating to the engineering review, which is undertaken to determine if a design change is indeed required, will apply whether or not the customer authorizes the Telephone Company to proceed with the Design Change. In this case the Design Change charge, as set forth in 17.4.1(B) following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor

Additional Labor is that labor requested by the customer on a given service and agreed to by the Telephone Company as set forth in 13.2.1 through 13.2.5 following. The Telephone Company will notify the customer that Additional Labor charges as set forth in 17.4.3 following will apply before any additional labor is undertaken. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. When provisioning or restoring Telecommunications Service Priority services, the Telephone Company will, when possible, notify the customer of the applicability of these Additional Labor charges.

13.2.1 Overtime Installation

Overtime installation is that Telephone Company installation effort outside of normally scheduled working hours.

13.2.2 Overtime Repair

Overtime repair is that Telephone Company effort performed outside of normally scheduled working hours.

13.2.3 Standby

Standby includes all time in excess of one-half (½) hour during which Telephone Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services13.3.1 Testing Services

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 17.4.4 following. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Other testing services, as described in 6.2.4 and 7.1.7 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge.

Testing Services are normally provided by Telephone Company personnel at Telephone Company locations; however, provisions are made in (B)(2) following for a customer to request Telephone Company personnel to perform Testing Services at the customer designated premises.

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in (A) and (B) following.

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, (i.e., Acceptance Tests), (b) tests which are performed after customer acceptance of such access services and which are without charge (i.e., routine testing) and (c) additional tests which are performed during or after customer acceptance of such access services and for which additional charges apply, (i.e., Additional Cooperative Acceptance Tests and in-service tests).

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.1 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)

Routine tests are those tests performed by the Telephone Company on a regular basis, as set forth in 6.2.4 preceding which are required to maintain Switched Access Service. Additional in-service tests may be done on an automatic basis (no Telephone Company or customer technicians involved), on a manual basis [Telephone Company technician(s) involved at Telephone Company office(s) and Telephone Company or customer technician(s) involved at the customer designated premises].

Testing services are ordered to the end office for FG D.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

- Impulse Noise
- Phase Jitter
- Signal to C-Notched Noise Ratio
- Intermodulation (Nonlinear) Distortion
- Frequency Shift (Offset)
- Envelope Delay Distortion
- Dial Pulse Percent Break

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.1 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Group D), is a service where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent. The customer may order, at additional charges, gain-slope and C-notched noise testing and may order the routine tests (1004 Hz loss, C-Message Noise and Balance) on an as-needed or more than routine schedule.

The Telephone Company will provide an AAT report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

The Additional Tests, (i.e., gain slope, C-notched noise, 1004 Hz loss, C-message noise and balance) may be ordered by the customer at additional charges, 60 days prior to the start of the customer prescribed schedule. The rates for Additional Automatic Tests are as set forth in 17.4.4(B) following.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(3) Additional Manual Testing

Not Available

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

- (A) The customer shall provide the Remote Office Test Line priming data to the Telephone Company, as appropriate, to support routine testing as set forth in 6.2.4(B) preceding or AAT as set forth in 13.3.1(A)(2) preceding.
- (B) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.1 Testing Services (Cont'd)(B) Special Access Service

The Telephone Company will provide assistance in performing specific tests requested by the customer.

(1) Additional Cooperative Acceptance Testing

When a customer provides a technician at its premises or at an end user's premises, with suitable test equipment to perform the requested tests, the Telephone Company will provide a technician at its office for the purpose of conducting Additional Cooperative Acceptance Testing on Voice Grade Services. At the customer's request, the Telephone Company will provide a technician at the customer's premises or at the end user premises. These tests may, for example, consist of the following:

- Attenuation Distortion (i.e., frequency response)
- Intermodulation Distortion (i.e., harmonic distortion)
- Phase Jitter
- Impulse Noise
- Envelope Delay Distortion
- Echo Control
- Frequency Shift

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(B) Special Access Service (Cont'd)

(2) Additional Manual Testing

The Telephone Company will provide a technician at its premises, and the Telephone Company or customer will provide a technician at the customer's designated premises with suitable test equipment to perform the requested tests.

(3) Obligation of the Customer

When the customer subscribes to Testing Service as set forth in this section, the customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.2 Maintenance of Service

- (A) When a customer reports a trouble to the Telephone Company for clearance and no trouble is found in the Telephone Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge as set forth in 17.4.4(F) following for the period of time from when Telephone Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed. Failure of Telephone Company personnel to find trouble in Telephone Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.
- (B) The customer shall be responsible for payment of a Maintenance of Service charge when the Telephone Company dispatches personnel to the customer designated premises, and the trouble is in equipment or communications systems provided by other than the Telephone Company or in detariffed CPE provided by the Telephone Company.

In either (A) or (B) preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service Charge applies.

13.3.3 Telecommunications Service Priority -TSP

- (A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations.

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1).

ACCESS SERVICE13. Additional Engineering, Additional L or and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.3 Telecommunications Service Priority -TSP (Cont'd)

(A) (Cont'd)

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include both Switched and Special Access Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services.

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

(B) A Telecommunications Service Priority charge applies as set forth in 17.4.4 when a request to provide or change a Telecommunications Service Priority is received subsequent to the issuance of an Access Order to install the service.

Additionally, a Miscellaneous Service Order Charge as set forth in 17.4.1 will apply to Telecommunications Service Priority requests that are ordered subsequent to the initial installation of the associated access service.

A Telecommunications Service Priority charge does not apply when a Telecommunications Service Priority is discontinued or when ordered coincident with an Access Order to install or change service.

In addition, Additional Labor rates as set forth in 17.4.3 may be applicable when provisioning or restoring Switched or Special Access Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge as set forth in 17.4.1(D) and Additional Labor rates as set forth in 17.4.3 are applicable.

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.4 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)

13.4 Presubscription

- (A) Presubscription is the process by which end user customers may select and designate to the Telephone Company an IC to access, without an access code, for intrastate calls. This IC is referred to as the end user's predesignated IC.
- (B) Not applicable
- (C) Not applicable

(C)

(C)

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)

- | | | |
|------|---------------------------------|-----|
| 13.4 | <u>Presubscription</u> (Cont d) | (C) |
| | (D) Not applicable | (C) |
| | (E) Not applicable | (C) |

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)13.4 Presubscription (Cont d)

(C)

- (F) New end users who are served by end offices equipped with Feature Group D will be asked to presubscribe to an IC at the time they place an order with the Telephone Company for Telephone Exchange Service. They may select either of the following options. There will be no charge for this initial selection.

- designate a primary IC for all of its lines,
- designate a different IC for each of its lines.

Only one IC may be selected for each individual line, or lines terminating in the same hunt group. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a predesignated IC, for any change in selection, a nonrecurring charge, as set forth in 17.4.4(I) following, applies.

- (G) If the new end user fails to designate an IC as its predesignated IC prior to the date of installation of Telephone Exchange Service, the Telephone Company will require the end user to dial an access code (101X XXX) for all intrastate calls. For any change in selection after installation of Telephone Exchange Service, a nonrecurring charge, as set forth in 17.4.4(I) following applies.

(C)

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)

13.4 Presubscription (Cont d)

(C)

(H) Not Applicable

(I) If an IC elects to change or discontinue use of a Carrier Identification Code (CIC) for any reasons, the IC will identify to the Telephone Company any affected end users and advise the Telephone Company of the new CIC to be assigned to these end users. If the CIC change involves a change of carrier for any end users, the IC will notify the affected end users of the change. The Telephone Company will change the predesignated carrier code of each end user identified by the IC to the new CIC and bill the IC the nonrecurring charge set forth in 17.4.4(I) following for each end user line or trunk that is changed.

(C)

13.5 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.5 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.5 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.5 Held for Future Use

13.6 Held for Future Use

13.7 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.8 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.8 Held for Future Use

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)13.9 Billing Name and Address Service

(C)

13.9.1 General Description

- (A) Billing Name and Address (BNA) Service is the provision by the Telephone Company to an intrastate service provider who is a customer of the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number or calling card account number assigned by the Telephone Company. An intrastate service provider is defined as an interexchange carrier, an operator service provider, an enhanced service provider or any other provider of intrastate telecommunications services.
- (B) BNA Service is provided only for the purposes of allowing customers to bill their end users for telephone services provided by the customer, order entry and customer service information, fraud prevention identification of end users who have moved to a new address, any purpose associated with equal access requirement, and information associated with Local Exchange Carrier (LEC) calling calls card calls, collect and third party calls. BNA information may not be resold or used for any other purpose including, but not limited to, marketing or merchandising activities.
- (C) BNA information associated with listed/published telephone numbers will be provided. Requests for BNA information associated with nonpublished and unlisted telephone numbers will be provided, unless the subscriber to a nonpublished or unlisted telephone number has affirmatively that requested its BNA not be disclosed.

13.9.2 Undertaking of the Telephone Company

- (A) A standard format for the receipt of BNA requests and the provision of BNA information will be established by the Telephone Company.
- (B) Standard response to BNA requests will be by First Class Mail. Standard format will be on paper. Optional Magnetic Tape formatting will be offered where available.
- (C) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need.

(C)

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)13.9 Billing Name and Address Service (Cont d)

(C)

13.9.2 Undertaking of the Telephone Company (Cont'd)

- (D) The Telephone Company will make every effort to provide accurate and complete BNA data. The Telephone Company makes no warranties, expressed or implied, as to the accuracy or completeness of this information.
- (E) The Telephone Company will not disclose BNA information to parties other than intrastate service providers and their authorized billing agents as defined in 13.9.1(A) preceding. BNA disclosure is limited to those purposes as defined in 13.9.1(B) preceding.
- (F) The Telephone Company reserves the right to request from an intrastate service provider who has placed an order for BNA service, the source data upon which the interexchange carrier has based the order. This request is made to ensure that the BNA information is to be used only for purposes as described in 13.9.1(B) preceding. The Telephone Company will not process the order until such time as the intrastate service provider supplies the requested data.

13.9.3 Obligations of the Customer

- (A) The customer shall order BNA Service on a separate BNA Order. The order must identify both the customer's authorized representative and the address to which the information is to be sent.
- (B) The customer shall treat all BNA information as confidential. The customer shall insure that BNA information is used only for the purposes as described in 13.9.1(B) preceding.
- (C) The customer shall not publicize or represent to others that the Telephone Company jointly participates with the customer in the development of the customer's end user records it assembles through the use of BNA Service.
- (D) Upon request, the customer will provide to the Telephone Company the source data upon which the customer has based an order for BNA service. The Telephone Company will not process the order until such time as the customer provides the requested data.

(C)

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont d)13.9 Billing Name and Address Service (Cont d)

(C)

13.9.4 Rate Regulations

- (A) For each order for BNA information received by the Telephone Company, a BNA Order Charge applies. In addition, a charge applies for each customer specific record provided. The BNA Order Charge and the Per Record Charge are specified in 17.4.4 following.
- (B) Where available, the customer may order the response formatted on Magnetic Tape. The Optional Magnetic Tape Charge is specified in 17.4.4 following and is in addition to the BNA Order Charge and the BNA Record Charge.
- (C) Where available, the customer may order an output format other than a standard paper format in order to meet a customer's specific requirement. This option is subject to an hourly programming charge as specified in 17.4.4 following and is in addition to the BNA Order Charge and the BNA Record Charge.

(C)

13.10 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.10 Held for Future Use

13.11 Held for Future Use

13.12 Held for Future Use

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.12 Held for Future Use

13.13 Held for Future Use

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.14 Local Number Portability Services

Where facilities permit, Local Number Portability (LNP) provides an end user of local exchange telecommunications service the ability to retain its existing local exchange service telephone number (TN) when changing from one telecommunications provider to another provided the end user remains at the same location. LNP also allows an end user the ability to complete calls to numbers that have been ported from one telecommunications service provider to another. LNP capability will be activated in Telephone Company end office or tandem switches. The Telephone Company will identify its LNP capable serving wire centers in the NECA TARIFF F.C.C. No. 4. The technical specifications for Local Number Portability are contained in Telcordia Technologies Technical Reference GR-2936-CORE. (C)

13.14.1 Held for Future Use

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.14 Local Number Portability Services (Cont'd)13.14.2 Local Number Portability Query Service(A) Description

LNP Query Service uses Advanced Intelligent Network (AIN) technology and the Common Channel Signaling (CCS) network to query an LNP database to obtain network routing instructions before completion of a call. The LNP database contains all of the TNs within an NXX and the location routing number (LRN) of the switch serving each of those TNs when at least one of the TNs within the NXX has been transferred from telecommunications service provider to another. The LRN associates a unique NPA-NXX-XXXX routing number with each central office switch that has subscribers who have transferred their TNs. (C)

Where more than one carrier is involved in completing the call, the carrier prior to the terminating carrier (i.e., the N-1 carrier) is responsible for querying an LNP database to obtain the LRN used in routing the call for a number portable NXX code. When the N-1 carrier forwards a non-queried call to a Telephone Company end office or tandem switch and the NXX code has one or more transferred TNs, the Telephone Company's end office or tandem switch will suspend call processing and formulate and launch a query to an LNP database to secure the LRN of the transferred TN. When the LRN has been returned from an LNP database to the Telephone Company end office or tandem switch originating the query, call processing is resumed and the call is either processed in the Telephone Company's network or routed to the correct telecommunications service provider's network for completion to the called party. The Telephone Company will perform the query on behalf of the N-1 carrier (i.e., the LNP query service customer) that forwarded the call. The Telephone Company will bill the N-1 wireline or wireless telecommunications carrier a charge per query as specified in 17.4.4 (R), regardless of whether the call is completed. (C)

An LNP Order Charge will apply on a per order basis for those customers that have ordered LNP Query Service as specified in Section 17.4.4 (R), following. (C)
N-1 carriers who terminate non-queried traffic into the Telephone Company's network and have not placed an order for LNP Query Service will be assessed on a per account basis an LNP Billing Charge as specified in Section 17.4.4 (R), (C)
following. (C)

ACCESS SERVICE13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.14 Local Number Portability Services (Cont'd)13.14.2 Local Number Portability Query Service (Cont'd)(B) Limitations

LNP Query Service is to be used only on a call-by-call basis for routing calls to number portable NXX codes and cannot be used for purposes other than those functions described herein.

(C) Network Management

The Telephone Company will administer its network to ensure the provision of acceptable service levels to all customers of the LNP Query Service.

The Telephone Company reserves the right to block any LNP query traffic in a nondiscriminatory manner, where the processing of the LNP queries threatens to disrupt operation of its network and impair network reliability.

(D) Rate Regulations

The LNP charge per query recovers the cost to query an LNP database on behalf of the N-1 carrier. The rate associated with an LNP query will be billed monthly, per query as set forth in Section 17.4.4 (R), following, based on the recorded number of queries. The Telephone Company will develop monthly charges based on an average number of queries per month if actual query recordings are not available. For billing purposes, each month is considered to have thirty (30) days. (C)

The LNP Order Charge and LNP Billing Charge recover the cost to establish the customer's LNP query account. The LNP Order Charge will be billed per order as set forth in Section 17.4.4 (R), following, to those customers that have ordered LNP Query Service. The LNP Billing Charge will be applied per account as set forth in Section 17.4.4 (R), following, to the N-1 carrier who terminates non-queried traffic into the Telephone Company's network and has not placed an order for LNP Query Service. (C)

ACCESS SERVICE

14. Held for Future Use

ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications**

15.1 contains Switched Access Service Options (which are comprised of Interface Groups, Supervisory Signaling, Entry Switch Receive Level and Local Transport Termination) and Transmission Specifications. 15.2 describes Special Access Service Network Channel (NC) codes and Network Channel Interface (NCI) codes. 15.3 contains Interface Group, Premises Interface Code and Standard Transmission Specifications applicable to Directory Access Service.

15.1 Switched Access Service

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in 15.1.1 following.

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

15.1.1 Local Transport Interface Groups

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in (A) through (D) following.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)

Interface Group 1 is provided with Type C Transmission Specifications, as set forth in 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in 15.1.2(E) and (F) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises.

(A) Interface Group 1

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Interface Group 1 is not provided when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGD when the first point of switching provides only four-wire terminations.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(A) Interface Group 1 (Cont'd)

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

The interface is provided with loop supervisory signaling. When the interface is associated with FGD, such signaling, except for two-way calling which is E& M signaling, will be reverse battery signaling.

(B) Interface Group 2

Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGD, such signaling, except for two-way calling which is E& M signaling, will be reverse battery signaling.

(C) Interface Groups 3 through 5

Interface Groups 3 through 5 provide analog transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the frequencies illustrated following, with the capability to channelize voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Groups are reserved for Telephone Company use, e.g., pilot and carrier group alarm tones. Before the first point of switching, the Telephone Company will provide multiplex equipment to derive the transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interfaces are provided with individual transmission path SF supervisory signaling.

<u>Interface Group Identification No.</u>	<u>Transmission Frequency Bandwidth</u>	<u>Analog Hierarchy Level</u>	<u>Maximum No. of Channelized Voice Freq. Trans. Paths</u>
3	60 -108 kHz	Group	12
4	312 -552 kHz	Supergroup	60
5	564 -3084 kHz	Mastergroup	600

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(D) Interface Groups 6 through 10

Interface Groups 6 through 10 provide digital transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the nominal bit rates illustrated following, with the capability to channelize voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide, a DS1 signal(s) in D3/ D4 format.

The interfaces are provided with individual transmission path bit stream supervisory signaling.

<u>Interface Group Identification No.</u>	<u>Transmission Frequency Bandwidth</u>	<u>Analog Hierarchy Level</u>	<u>Maximum No. of Channelized Voice Freq. Trans. Paths</u>
6	1.554	DS1	24
7	3.152	DS1C	48
8	6.312	DS2	96
9	44.736	DS3	672
10	274.176	DS4	4032

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following features in association with Local Transport. An Access Order Charge as specified in 17.4.1(A) following is applicable on a per order basis when nonchargeable optional features are added subsequent to the installation of service (with the exception of the addition of 64 Clear Channel Capability to an existing service).

When the 64 Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply.

- Customer Specified Entry Switch Receive Level

Not available

- Customer Specification of Local Transport Termination

Not available

- Supervisory Signaling

Supervisory Signaling allows the customer to order an optional supervisory signaling arrangement for each transmission path provided where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features (Cont'd)- 64 Clear Channel Capability

64 Clear Channel Capability allows the customer to transport voice or data signals over a 64 Kbps channel with no constraints on the quantity or sequence of ones and zero bits. This option employs the Bipolar 8 Zero Suppression (B8ZS) technique to permit customers to use the full 64 Kbps bandwidth of a DS0 channel. It is only available in suitably equipped electronic end offices as identified in NECA TARIFF NO. 4. 64 Clear Channel Capability, as described in Technical Reference GR-334-CORE, is available with Interface Groups 6 and 9 for Feature Group D with Signaling System 7 (SS&) signaling.

The Interface Groups, as described in (A) through (D) preceding, represent industry standard arrangements. Where transmission parameters permit, the customer may select the following optional signaling arrangements in place of the signaling arrangements standardly associated with the Interface Groups.

- For Interface Groups 1 and 2 associated with FGD

DX Supervisory Signaling,
E& M Type I Supervisory Signaling,
E& M Type II Supervisory Signaling, or
E& M Type III Supervisory Signaling

- For Interface Group 2 associated with FGD and in addition to the preceding

SF Supervisory Signaling, or
Tandem Supervisory Signaling

- For Interface Groups 3 through 5

Optional Supervisory Signaling Not Available

- For Interface Groups 6 through 10

These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features (Cont'd)

central offices. Generally such signaling is available only where the first point of switching provides an analog (i.e., non-digital) interface to the transport termination.

These optional Supervisory Signaling arrangements not available in combination with the SS7 optional feature as described in 6.8.2(C)(2) preceding.

Additionally, in (F) following, there is a matrix of available Premises Interface Codes as a function of Interface Group, Telephone Company Switch Supervisory Signaling and Feature Group.

(F) Available Premises Interface Codes

Following is a matrix showing premises interface codes which are available for each Interface Group. Their availability is a function of the Telephone Company switch supervisory signaling and Feature Group. For explanations of these codes, see the Parameter Codes and Options as set forth in 15.2.2(A) following.

<u>Interface Group</u>	<u>Telephone Company Switch Supervisory Signaling</u>	<u>Premises Interface Code</u>
1	RV, EA, EB, EC	2D3
	RV, EA, EB, EC	4EA3-E
	RV, EA, EB, EC	4EA3-M
	RV, EA, EB, EC	6EB3-E
	RV, EA, EB, EC	6EB3-M
	EA, EB, EC	6EC3
	RV	2RV3-0
	RV	2RV3-T
	SS7	2NO2

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(F) Available Premises Interface Codes (Cont'd)

<u>Interface Group</u>	<u>Telephone Company Switch Supervisory Signaling</u>	<u>Premises Interface Code</u>
2	RV, EA, EB, EC	4SF2
	RV, EA, EB, EC	4DX2
	RV, EA, EB, EC	6EA2-E
	RV, EA, EB, EC	6EA2-M
	RV, EA, EB, EC	8EB2-E
	RV, EA, EB, EC	8EB2-M
	EA, EB, EC	8EC2-M
	RV	RV2-O
	RV	4RV2-T
	RV	4RV3-O
	RV	4RV3-T
	SS7	4NO2
3	RV, EA, EB, EC	4AH5-B
	SS7	AH5-B
4	RV, EA, EB, EC	4AH6-C
	SS7	4AH6-C
5	RV, EA, EB, EC	4AH6-D
	SS7	4AH6-D

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(F) Available Premises Interface Codes (Cont'd)

<u>Interface Group</u>	<u>Telephone Company Switch Supervisory Signaling</u>	<u>Premises Interface Code</u>
6	RV, EA, EB, EC	4DS9-15
	RV, EA, EB, EC	4DS9-15L
	SS7	4DS9-15
7	RV, EA, EB, EC	4DS9-31
	RV, EA, EB, EC	4DS9-31L
	SS7	4DS9-31
8	RV, EA, EB, EC	4DS0-63
	RV, EA, EB, EC	4DS0-63L
	SS7	4DS0-63
9	RV, EA, EB, EC	4DS6-44
	RV, EA, EB, EC	4DS6-44L
	SS7	4DS6-44
10	RV, EA, EB, EC	4DS6-27
	RV, EA, EB, EC	4DS6-27L
	SS7	4DS6-27

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with Feature Group D as a function of the Interface Group selected by the customer, are set forth in (A) through (D) following. Descriptions of each of these Standard Transmission Specifications and the two Data Transmission Parameters mentioned are set forth respectively in (E) through (G) and 15.1.3(A) and (B) following:

(A) Held for Future Use

(B) Held for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(C) Held for Future Use

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(D) Feature Group D

FGD is provided with either Type A, Type B or Type C Transmission Specifications as follows:

- When routed to the end office either Type B or C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1. Type A and Type B Transmission Specifications are provided with Interface Groups 2 through 10.

Type DB Data Transmission Parameters are provided with FGD for the transmission path between the customer designated premises and the end office when directly routed to the end office. Type DA Data Transmission Parameters are provided for the transmission path between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

(E) Type A Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss(EML) is ± 2.0 dB.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(E) Type A Transmission Specifications (Cont'd)(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	32 dBmCO
51 to 100	34 dBmCO
101 to 200	37 dBmCO
201 to 400	40 dBmCO
401 to 1000	42 dBmCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBmCO.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(E) Type A Transmission Specifications (Cont'd)(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/ A	N/ A
- Via Access Tandem	16 dB	11 dB

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) Type B Transmission Specifications

Type B Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 2.5 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type B1</u>	<u>Type B2</u>
less than 50	32 dBrnCO	35 dBrnCO
51 to 100	33 dBrnCO	37 dBrnCO
101 to 200	35 dBrnCO	40 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Group D only Type B2 will be provided.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) Type B Transmission Specifications (Cont'd)(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss for FG D, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also by type of termination, and type of transmission path. They are greater than or equal to the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem		
- Terminated in 4-Wire trunk	21 dB	14 dB
- Terminated in 2-Wire trunk	16 dB	11 dB
POT to End Office		
- Direct	16 dB	11 dB

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(F) Type B Transmission Specifications (Cont'd)(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return LossSinging Return Loss

5 dB

2.5 dB

(G) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 3.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(G) Type C Transmission Specifications (Cont'd)(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise Type B2</u>
less than 50	38 dBrnCO
51 to 100	39 dBrnCO
101 to 200	41 dBrnCO
201 to 400	43 dBrnCO
401 to 1000	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(G) Type C Transmission Specifications (Cont'd)(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	13 dB	6 dB
POT to End Office - Direct	13 dB	6 dB

15.1.3 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group D arrangements. Type DB is provided with Feature Group D when Feature Group D is directly routed to the end office. Type DA is provided with Feature Group D when routed via an access tandem. Following are descriptions of each.

(A) Data Transmission Parameters Type DA(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.3 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters Type DA (Cont'd)(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	500 microseconds
equal to or greater than 50 route miles	900 microseconds

1004 to 2404 Hz

less than 50 route miles	200 microseconds
equal to or greater than 50 route miles	400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBmCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	33 dB
Third Order (R3)	37 dB

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.3 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters Type DA (Cont'd)(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 5 degrees peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(B) Data Transmission Parameters Type DB(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	800 microseconds
equal to or greater than 50 route miles	1000 microseconds

1004 to 2404 Hz

less than 50 route miles	320 microseconds
equal to or greater than 50 route miles	500 microseconds

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.3 Data Transmission Parameters (Cont'd)(B) Data Transmission Parameters Type DB (Cont'd)(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7degrees peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service

This section explains and lists the codes that the customer must specify when ordering Special Access Service, Switched Access Entrance Facilities, and Voice Grade and High Capacity Direct Trunked Transport. These codes provide a standardized means to relate the services being ordered to Switched Access Service and Special Access Service offerings contained in Sections 6. and 7. preceding.

When ordering, the type of Special Access Service or Switched Access Entrance Facility or Direct Trunked Transport is described by two code sets, the Network Channel (NC) code and the Network Channel Interface (NCI) codes.

The Network Channel (NC) code consists of two elements. Element one is a Channel Service Code (character positions 1 and 2) that describes the channel service type in an abbreviated form. Element two is an Optional Feature Code (character positions 3 and 4) that identifies option codes available for each channel service code, such as C-conditioning or Improved Return Loss.

The Network Channel Interface (NCI) is used to identify interface specifications associated with a particular channel. This code describes the total wires, protocol, impedance, protocol options and transmission level point(s) reflecting physical and electrical characteristics between the Telephone Company and the customer.

On the following 3 pages are examples which explain the specific characters of the codes and which reference matrices and charts used in developing the codes. Included in the matrices are Service Designator (SD) codes which are used to identify variations of service within service types. The SD and NC codes are displayed as components of the matrices designated as Technical Specifications packages in (A) through (G) following. Through the use of these matrices, SD codes may be converted to NC codes for service ordering purposes.

A chart is also provided in 15.2.2(A) following which contains information necessary to develop NCI codes.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)

Comprehensive lists of allowed Network Channel (NC) and Network Channel Interface (NCI) codes are contained in Special Report SR-ST5-000307. However, not all services contained in this Special Report may be offered by the Telephone Company at this time.

Lastly, 15.2.2(C) following provides a list of compatible Network Channel Interfaces inasmuch as the Network Channel Interfaces associated with a given service need not always be the same, but all must be compatible.

Example No. 1: If the customer wishes to order a 4-wire voice grade circuit with 600 Ohms impedance, capable of data transmission, and with improved return loss, the customer might specify the following:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LG-R	04DB2	04DA2-S

NC Code:

LG = Voice Grade Channel Service, VG6
-R = Improved Return Loss

NCI Code:

04 = Number of physical wires at CDP
DB = Data stream in VF frequency band at the customer designated main terminal location
2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):

04 = Number of physical wires at CDP
DA = Data stream in VG frequency at the customer designated secondary terminal location
2 = 600 Ohms impedance
S = Sealing current option for 4-wire transmission

In the above example the NCI (Network Channel Interface) code is the interface requested at the customer's POT (Point of Termination) and the SECNCI (Secondary Network Channel Interface) code represents the interface at the end office serving the End User.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)

Example No. 2: If the customer wishes to order a FX circuit to a station, with 600 Ohms impedance, loop start signaling, which is 4-wire at the CDP and 2-wire at the end-user, the customer might specify:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LC--	04LO2	02LS2

NC Code:

LC = Voice Grade Channel Service, VG2
-- = No Optional Features

NCI Code:

04 = Number of physical wires at CDP
LO = Loop start, loop signaling -open end
2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):

02 = Number of physical wires at CDP
LS = Loop start signaling -closed end
2 = 600 Ohms impedance

Example No. 3: If the customer wishes to order a 1.544 Mbps Hi-cap facility with no channel options such as CO multiplexing, the customer might specify the following:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
HC--	04DS9-15	04DS9-15

NC Code:

HC = High Capacity Channel Service, HC1
-- = No Optional Features

NCI, SECNCI Code:

04 = Number of physical wires at CDP
DS = Digital hierarchy interface
9 = 100 Ohms impedance
15 = 1.544 Mbps (DS1) format

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes

In order to determine the NC code appropriate for the service to be ordered, the type of Special Access Service the customer wishes must be identified. This identification is accomplished by a Service Designator (SD) code. The broad categories of Service Designator codes (e.g., VG, DA, etc.) are set forth in Section 7. preceding. Variations within service type (e.g., VG1, DA2 etc.) are described in the various Technical Publications cited in (A) through (H) following.

Having determined the specific service type to be ordered and its SD code, and having used the appropriate Technical Publication, the customer should match the SD code to the NC code using the following matrices. Once the NC code has been determined, the Network Channel Interface (NCI) code may be developed using the information set forth in 15.2.2 following and the guidelines concerning specific parameters available for each service type as set forth in the specified Technical Publication.

(A) Held for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(B) Held for Future Use

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(C) Technical Specifications Packages Voice Grade Service

		Package VG-														
	SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W	
	NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE	
<u>Parameter</u>																
Attenuation																
Distortion																
C-Message Noise																
Echo Control																
Envelope Delay																
Distortion																
Frequency Shift																
Impulse Noise																
Intermodulation																
Distortion																
Loss Deviation																
Phase Hits, Gain																
Hits, and Dropouts																
Phase Jitter																
Signal-to-C																
Message Noise																
Signal-to-C																
Notch Noise																

The technical specifications for these parameters (except for dropouts, phase hits, and gain hits) are described in Technical References GR-334-CORE and TR-NWT-000335. The technical specifications for dropouts, phase hits, and gain hits are described in Technical Reference PUB 41004 (MDP-326-584), Table 4.

* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(C) Technical Specifications Packages Voice Grade Service (Cont'd)

		Package VG-														
SD Code	C*	1	2	3	4	5	6	7	8	9	10	11	12	W		
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE		
<u>Optional Features and Functions</u>																
Central Office Bridging Capability	X		X			X	X				X	X	X			
Central Office Multiplexing	X						X									
Conditioning:																
- C-Type	X					X	X	X	X	X	X					
- Improved Attenuation Distortion	X					X	X	X	X	X	X					
- Improved Envelope Delay Distortion	X					X	X	X	X	X	X					
- Sealing Current	X						X									
- Data Capability	X						X	X			X					
- Telephoto Capability	X												X			
Customer Specified Premises Receive Level	X		X	X				X	X	X						
Improved Return Loss for Effective Four-Wire Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
For Effective Two-Wire Transmission	X		X	X				X								
Improved Two-Wire Voice Transmission														X		
PPSN Interface Arrangement	X									X						
Selective Signaling Arrangement	X		X			X	X				X	X	X			
Signaling Capability	X	X	X	X				X	X	X						
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X			

* The desired parameters are selected by the customer from the list of available parameters

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(D) Held for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Held for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Held for Future Use

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(F) Technical Specifications Packages Digital Data Service

<u>Parameter/ Hubbed</u>	SD Code NC Code	Package					
		DA1 XA	DA2 XB	DA3 XG	DA4 XH	DA5 XE	DA6 YN
Error-Free Seconds		X	X	X	X	X	X
<u>Optional Features and Functions/ Hubbed</u>							
Central Office Bridging Capability		X	X	X	X	X	X
Transfer Arrangement		X	X	X	X	X	X

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310 (MDP-326-726).

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(G) Technical Specifications Packages High Capacity Service

SD Code NC Code	DS0 HS	DS1 HC	DS1C HD	Package			DS4 HG
				DS2 HE	DS3 HF		
<u>Parameters</u>							
Error-Free Seconds	X						
<u>Optional Features and Functions</u>							
Automatic Loop Transfer	X						
Central Office Multiplexing:							
DS4 to DS1							X
DS3 to DS1						X	
DS2 to DS1					X		
DS1C to DS1				X			
DS1 to Voice		X					
DS1 to DS0		X					
DS0 to Subrate*	X						
Transfer Arrangement		X					
Clear Channel Capability		X					

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference GR-342-CORE.

* Available only on a channel of 1.544 Mbps facility to a Telephone Company Hub.

ACCESS SERVICE15 Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.1 Network Channel (NC) Codes (Cont'd)(H) Technical Specifications Packages Synchronous Optical Channel Service

SD Code NC Code	Package	
	<u>OC3</u> <u>OB</u>	<u>OC12</u> <u>OD</u>
<u>Parameters</u>		
Error-Free Seconds	X	X
<u>Optional Features and Functions</u>		
Customer Premises Multiplexing:		
OC12 to OC3		X
OC12 to OC3c		X
OC12 to DS3		X
OC12 to DS1		X
OC3 to STS-1	X	
OC3 to DS3	X	
OC3 to DS1	X	
Central Office Multiplexing:		
OC12 to OC3		X
OC12 to OC3c		X
OC3 to DS3	X	
OC3 to DS1	X	

Technical specifications are delineated in Technical Reference GR-253-CORE, GR-1374-CORE, ANSI T1.102-1993 and ANSI T1.105-1995.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes

The electrical interface with the Telephone Company for Special Access Services, is defined by an interface code. There are interface codes for both the customer designated premises and the point of termination. Three examples of NCI codes are found in 15.2 preceding.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(A) Parameter Codes and OptionsParameter

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
AB	-	accepts 20 Hz ringing signal at customer's point of termination	
AC	-	accepts 20 Hz ringing signal at customer's end user's point of termination	
AH		analog high capacity interface	
	-B	60 kHz to 108 kHz (12 channels)	
	-C	312 kHz to 552 kHz (60 channels)	
	-D	564 kHz to 3084 kHz (600 channels)	
CT	-	Centrex Tie Trunk Termination	
CS	-	digital hierarchy interface at Digital Cross Connect System (DCS)	
	-15	1.544 Mbps (DS1) ANSI Extended Superframe ESF and B8ZS Clear Channel Capability	Format
	-15A	1.544 Mbps (DS1) Superframe (SF) format	
	-15B	1.544 Mbps (DS1) Superframe (SF) format and 8ZS Clear Channel Capability	
	-15K	1.544 Mbps (DS1) Extended Superframe (ESF)	
DA	-	data stream in VF frequency band at customer's end user's point of termination	
DB	-	data stream in VF frequency band at customer's point of termination	
	-	10 VF for TG1 and TG2	
	-	43 VF for 43 Telegraph Carrier type signals, TG1 and TG2	
DD	-	DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination	
DE	-	DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination	
DS	-	digital hierarchy interface	
	-15	1.544 Mbps (DS1) format per PUB 62411 plus D4	
	-15E	8-bit PCM encoded in one 64 kbps of the DS1 signal	

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(A) Parameter Codes and Options (Cont'd)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DS	-15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
	-15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
	-15H	14/ 11-bit PCM encoded in six 64 kbps of the DS1 signal
	-15J	1.544 Mbps format per PUB 62411
	-15K	1.544 Mbps format per PUB 62411 plus extended framing format
	-15L	1.544 Mbps (DS1) with SF signaling
	-27	274.176 Mbps (DS4)
	-27L	274.176 Mbps (DS4) with SF signaling
	-31	3.152 Mbps (DS1C)
	-31L	3.152 Mbps (DS1C) with SF signaling
	-44	44.736 Mbps (DS3)
	-44L	44.736 Mbps (DS3) with SF signaling
	-63	6.312 Mbps (DS2)
	-63L	6.312 Mbps (DS2) with SF signaling
DU	-	digital access interface -24 2.4 kbps
	-48	4.8 kbps -19 19.2 kbps
	-56	56.0 kbps -96 9.6 kbps
	-64	64.0 kbps
	-A	1.544 Mbps format per PUB 62411
	-B	1.544 Mbps format per PUB 62411 plus D4
	-C	1.544 Mbps format per PUB 62411 plus extended framing format
	-1KN	1.544 Mbps ANSI Extended Superframe (ESF) Format without line power
	-1SN	1.544 Mbps ANSI Extended Superframe (ESF) Format with B8ZS Clear Channel Capability and without line power
	-AN	1.544 Mbps free-framing format without line power (only avail. to U. S. Govt. agencies)
	-BN	1.544 Mbps Superframe (SF) Format without line power
	-DN	1.544 Mbps Superframe (SF) Format with B8ZS Clear Channel Capability without line power
DX	-	duplex signaling interface at customer's point of termination
DY	-	duplex signaling interface at customer's end user's point of termination

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(A) Parameter Codes and Options (Cont'd)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
EA	-E	Type I E& M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EA	-M	Type I E& M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EB	-E	Type II E& M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EB	-M	Type II E& M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EC	-	Type III E& M signaling at customer POT
EX	-A	tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.
EX	-B	tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.
FC	-	Fiber Optic Interface
	-B	OC3, OC3c
	-D	OC12
GO	-	ground start loop signaling -open end function by customer or customer's end user
GS	-	ground start loop signaling -closed end function by customer or customer's end user
LA	-	end user loop start loop signaling -Type A OPS registered port open end
LB	-	end user loop start loop signaling -Type B OPS registered port open end
LC	-	end user loop start loop signaling -Type C OPS registered port open end
LO	-	loop start loop signaling -open end function by customer or customer's end user
LR	-	20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR
LS	-	Loop start loop signaling -closed end function by customer or customer's end user
NO	-	no signaling interface, transmission only

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(A) Parameter Codes and Options (Cont'd)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
PR	-	protective relaying*
RV	-0	reverse battery signaling, one way operation, originate by customer
	-T	reverse battery signaling, one way operation, terminate function by customer or customer's end user
SF	-	single frequency signaling with VF band at either customer POT or customer's end user POT
SO	-	SONET Optical
	- AB	Long Range Multilongitudinal Mode (LR1-MLN) Bidirectional Ring
	- AU	LR1-MLM Unidirectional Ring
	- BB	Long Range Single Longitudinal Mode (LR1-SLM) Bidirectional Ring
	- BU	LR1-SLM Unidirectional Ring
	- CB	Intermediate Range Multilongitudinal Mode (IR1-MLM) Bidirectional Ring
	- CU	IR1-MLM Unidirectional Ring
	- DB	Intermediate Range single Longitudinal Mode (IR1-SLM) Bidirectional Ring
	- DU	IR1-SLM Unidirectional Ring
	- EB	Short Range Multilongitudinal Mode Light Emitting Diode (SR-MLM/LED) Bidirectional ring
	- EU	SR-MLM/LED Unidirectional Ring
	- FB	Short Range Multilongitudinal Mode (SR-MLM) Bidirectional Ring
	- FU	SR-MLM Unidirectional Ring

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(A) Parameter Codes and Options (Cont'd)Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
ST	-	Synchronous Transmission Signal (STS)
	- A	STS1
TF	-	telephotograph interface

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.3 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(B) Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

<u>Value (ohms)</u>	<u>Code(s)</u>
110	0
150	1
600	2
900	3+
135	5
75	6
124	7
Variable	8
100	9
Fiber	F
Radio	R

+ For those interface codes with a 4-wire transmission path at the customer designated POT, rather than a standard 900 ohm impedance the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the F.C.C. Docket No. 20099 Settlement Agreement.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces

The following tables show the Network Channel Interface codes (NCIs) which are compatible:

- (1) Held for Future Use
- (2) Held for Future Use

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS	2GS
	4DS8		2LB2		2LS
	4DX2		2LC2		4GS
	4DX3		2LO3		4LS
	4DY2		2LS2		
	4EA2-E		2LS3	2LS2	2LA2
	4EA2-M				2LB2
	4SF2	2GO2	2GS2		2LC2
	4SF3		2GS3		
	6DX2			2LS3	2LA2
	6DY2	2GO3	2GS2		2LB2
	6DY3		2GS3		2LC2
	6EA2-E				
	6EA2-M	2GS	2GS	2NO2	2DA2
	6EB2-E		2LS		2NO2
	6EB2-M		4GS		
	6EB3-E		4LS	2NO3	2NO2
	8EB2-E				2PR2
	8EB2-M	2L02	2LS2	2TF3	2TF2
	8EC2		2LS3		
	9DY2				
	9DY3	2L03	2LS2		
	9EA2		2LS3		
	9EA3				

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>	<u>Compatible CIs</u>
4AB2	2AC2 4AB2 4AC2 4SF2		
4AB3	2AC2 4AC2 4SF2		
4AC2	2AC2 4AC2		
		4DS8-	2AC2 2DA2 2DY2 2GO2 2GO3 2GS2 2GS3 2LA2 2LB2 2LC2 2LO2 2LO3 2LR2 2LS2 2LS3 2NO2 2PR2 2RV2-T 2TF2 4AC2 4DA2 4DE2 4DX2 4DX3 4DY2 4EA2-E 4EA2-M
4DA2	4DA2		4DS8- 4DG2 4LR2 4LS2 4NO2 4PR2 4RV2-T 4SF2 4SF3 4TF2 6DA2 6DY2 6DY3 6EA2-E 6EA2-M 6EB2-E 6EB2-M 6GS2 6LS2 8EB2-E 8EB2-M 9DY2 9DY3 9EA2 9EA3
4DB2	2DA2 2NO2 2PR2 4DA2 4DB2 4NO2 4PR2 6DA2		
4DD3	2DE2 4DE2		

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4DX2	2DY2	4DX2	8EB2-E	4DX3	6DY2
	2LA2		8EB2-M		6DY3
	2LB2		9DY2		6EA2-E
	2LC2		9DY3		6EA2-M
	2LO3		9EA2		6EB2-E
	2LS2		9EA3		6EB2-M
	2LS3				6LS2
	2RV2-T	4DX3	2DY2		8EB2-E
	4DX2		2LA2		8EB2-M
	4DY2		2LB2		9DY2
	4EA2-E		2LC2		9DY3
	4EA2-M		2LO3		9EA2
	4LS2		2LS2		9EA3
	4RV2-T		2LS3		
	4SF2		2RV2-T	4DY2	2DY2
	4SF3		4DX2		4DY2
	6DY2		4DX3		
	6DY3		4DY2		
	6EA2-E		4EA2-E		
	6EA2-M		4EA2-M		
	6EB2-E		4LS2		
	6EB2-M		4RV2-T		
	6LS2		4SF2		
			4SF3		

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4EA2-E 2DY2	4EA3-E 2DY2	4GO2 2GO2
4DY2	4DY2	2GO3
4EA2-E	4EA2-E	2GS2
4EA2-M	4EA2-M	2GS3
4SF2	4SF2	4GS2
6DY2	6DY2	4SF2
6DY3	6DY3	6GS2
6EB2-E	6EA2-E	
6EB2-M	6EA2-M	4GO3 2GO2
8EB2-E	6EB2-E	2GS2
8EB2-M	6EB2-M	2GS3
9DY2	8EB2-E	4GS2
9DY3	8EB2-M	4SF2
	9DY2	6GS2
4EA2-M 2DY2	9DY3	
4DY2	9EA2	
4EA2-M	9EA3	4GS 2GS
4SF2		2LS
6DY2		4GS
6DY3		4LS
6EB2-E		
6EB2-M		
8EB2-E		
8EB2-M		
9DY2		
9DY3		

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4LO2	2LS2	4LS3	2LA2	4SF2	2LO3
	2LS3		2LB2		2LR2
	4LS2		2LC2		2LS2
	4SF2		2LO2		2LS3
	6LS2		2LO3		2RV2-T
4LO3	2LS2	4NO2	4SF2		4AC2
	2LS3		2DA2		4DY2
	4LS2		2DE2		4LS2
	4SF2		2NO2		4RV2-T
	6LS2		4DA2		4SF2
4LR2	2LR2	4RV2-0	4DE2	4SF3	6DY2
	4LR2		4NO2		6DY3
	4SF2		6DA2		6GS2
					9DY2
4LR3	2LR2	4RV2-T	2RV2-T		9DY3
	4LR2		4RV2-T	4SF3	2DY2
	4SF2		4SF2		2GO3
					2GS2
4LS	2GS	4SF2	2AC2		2GS3
	2LS		2DY2		2LA2
	4GS		2GS2		2LB2
	4LS		2GS3		2LC2
			2LA2		2LO3
4LS2	2LA2		2LB2		2LR2
	2LB2		2LC2		
	2LC2				
	2LO2				
	2LO3				

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>		
4SF3	2LS2	6DA	4DA2	6DY3	2DY2	
	2LS3		6DA2		4DY2	
	2RV2-T	6DX2	2DY2		6DY2	
	4DY2				6DY3	
	4EA2-E		4DY2	6EA2-E	2AC2	
	4EA2-M		4EA2-E			
	4GS2					
	4LR2		4EA2-M			2DY2
	4LS2	4SF2	2LA2			
	4RV2-T	6DY2	2LB2			
	4SF2	6DY3	2LC2			
	4SF3	6EA2-E	2LO3			
	6DY2	6EA2-M	2LS2			
	6DY3	6EB2-E	2LS3			
	6EB2-E	6EB2-M	2RV2-T			
	6EB2-M	8EB2-E	4AC2			
	6GS2	8EB2-M	4DY2			
	6LS2	9DY2	4EA2-E			
	9DY2	9DY3	4EA2-M			
	9DY3	9EA2	4LS2			
	9EA2	9EA3	4RV2-T			
	9EA3		4SF2			
4TF2	2TF2	6DY2	2DY2	4SF3		
			4DY2	6DY2		
			DY2	6DY3		
				6EA2-E		
				6EA2-M		

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
6EA2-E 6EB2-E	6EA2-M6DY2	6EB3-E 2DY2
6EB2-M	6DY3	4DY2
6LS2	6EA2-M	4EA2-E
8EB2-E	6EB2-E	4EA2-M
8EB2-M	6EB2-M	4SF2
9DY2	6LS2	6DY2
9DY3	8EB2-E	6DY3
	8EB2-M	6EA2-E
6EA2-M 2AC2	9DY2	6EA2-M
2DY2	9DY3	8EB2-E
2LA2		8EB2-M
2LB2	6EB2-E 2DY2	9DY2
2LC2	4DY2	9DY3
2LO3	4SF2	9EA2
2LS2	6DY2	9EA3
2LS3	6DY3	
2RV2-T	6EB2-E	6EX2-A 2GS2
4AC2	6EB2-M	2GS3
4DY2	9DY2	2LS2
4EA2-E	9DY3	2LS3
4EA2-M		4GS2
4LS2	6EB2-M 2DY2	4LS2
4RV2-T	4DY2	4SF2
4SF2	4SF2	6GS2
4SF3	6DY2	6LS2
	6DY3	
	6EB2-M	
	9DY2	
	9DY3	

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
6EX2-B 2GO3	8EB2-E 2AC2	8EB2-M 2AC2
2LA2	2DY2	2DY2
2LB2	2LA2	2LA2
2LC2	2LB2	2LB2
2LO2	2LC2	2LC2
2LO3	2LO3	2LO3
2LR2	2LS2	2LS2
4LR2	2LS3	2LS3
4SF2	2RV2-T	2RV2-T
	4AC2	4AC2
6GO2 2GO2	4DY2	4DY2
2GS2	4LS2	4LS2
2GS3	4RV2-T	4RV2-T
4GS2	4SF2	4SF2
4SF2	4SF3	4SF3
6GS2	6DY2	6DY2
	6DY3	6DY3
6LO2 2LS2	6EB2-E	6EB2-E
2LS3	6EB2-M	6EB2-M
4LS2	6LS2	6LS2
4SF2	8EB2-E	8EB2-M
6LS2	8EB2-M	9DY2
	9DY2	9DY3
6LS2 2LA2	9DY3	
2LB2		
2LC2		
2LO2		
2LO3		
4SF2		

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>			
8EC2	2DY2	9DY2	2DY2	9EA3	2DY2		
	4DY2		4DY2		4DY2		
	4EA2-E		6DY2		4EA2-E		
	4EA2-M		6DY3		4EA2-M		
	4SF2		9DY2		6DY2		
	6DY2	9DY3	2DY2		6DY3		
	6DY3				6EA2-E		
	6EA2-E				6EA2-M		
	6EA2-M				6EB2-E		
	6EB2-E		6DY2		6EB2-M		
	6EB2-M		6DY3		8EB2-E		
	8EB2-E		9DY2		8EB2-M		
	8EB2-M		9DY3		9DY2		
	9DY2	9EA2	2DY2		9DY3		
	9DY3				9EA3		
	9EA2						
	9EA3						
					4DY2		
					4EA2-E		
					4EA2-M		
			6DY2				
			6DY3				
			6EA2-E				
			6EA2-M				
			6EB2-E				
			6EB2-M				
			8EB2-E				
			8EB2-M				
		9DY2					
		9DY3					
		9EA2					
		9EA3					

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(4) Held for Future Use

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(5) Held for Future Use

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(6) Digital Data

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4DS8-15 4DS8-15+	4DU5-24 4DU5-24	6DU5-24 6DU5-24
4DU5-24		
4DU5-48	4DU5-48 4DU5-48	6DU5-48 6DU5-48
4DU5-56		
4DU5-96	4DU5-96 4DU5-96	6DU5-56 6DU5-56
6DU5-24		
6DU5-48	4DU8-56 4DU5-56	6DU5-96 6DU5-96
6DU5-96		

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company hub.

ACCESS SERVICE15. Access Service Interfaces and Transmission Specifications (Cont'd)15.2 Special Access Service (Cont'd)15.2.2 Network Channel Interface (NCI) Codes (Cont'd)(C) Compatible Network Channel Interfaces (Cont'd)(7) High Capacity

<u>Compatible CIS</u>		<u>Compatible CIS</u>	
4DS0-63	4DS0-63 4DU8-A, B or C 6DU8-A, B or C	4DS8-15J	4DU8-A 6DU8-A
4DS6-27	4DS6-27 4DU8-A, B or C 6DU8-A, B or C	4DS8-15K	4DU8-B 4DU8-C 6DU8-B 6DU8-C
4DS6-44	4DS6-44 4DU8-A, B or C 6DU8-A, B or C	4DS8-31	4DS8-31 4DU8-A, B or C 6DU8-A, B or C
4DS8-15	4DS8-15+ 4DU8-B or C 6DU8-8		4DU8-A, B 4DU8-A, B or C

(8) Synchronous Optical Channel Service

<u>Compatible CIS</u>		<u>Compatible CIS</u>	
4DS9-1S	4DU9-1S	2SOF-A	2SOF-A
4DS9-1K	4DS9-1K	2SOF-B	2SOF-B
		2SOF-C	2SCF-C
		2SOF-D	2SOF-D
		2SOF-E	2SOF-E
		2SOF-F	2SOF-F

+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.3 Held for Future Use

ACCESS SERVICE

16. Held for Future Use

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Issued: September 29, 2003

Effective: October 1, 2003

John Summersett Director of Carrier Services
Great Lakes Comnet, Inc.
6607 W. St. Joseph, Ste. 200
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ACCESS SERVICE

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ACCESS SERVICE

- 17. Rates and Charges (Contd) (D)
- 17.4 Other Services (Contd) (D)
- 17.4.7 Held for Future Use (D)

ACCESS SERVICE17GLC. Rates and Charges

Section 17GLC contains the rates and charges billable by issuing carrier Great Lakes Comnet, Inc (OCN 5164) for intrastate access services whose terms and conditions are spelled on in Section 1 through Section 16 of this tariff (C)

17GLC.1 Common Line Access Service (N)

17.1.1	<u>Carrier Common Line Access Service</u>	<u>Rate</u>	
-	Terminating Per Access Minute	\$0.0000	(N)
-	Originating Per Access Minute	\$0.0000	

ACCESS SERVICE

17GLC. Rates and Charges

17GLC.1 Held for Future Use

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Great Lakes Comnet, Inc.
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ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

This sheet holds sheet 17GLC-3 through 17GLC-9 for future use

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John Summersett Director of Carrier Services
Great Lakes Comnet, Inc.
6607 W. St. Joseph, Ste. 200
Lansing, MI 48917

ACCESS SERVICE

17GLC

Rates and Charges (Cont'd)

17GLC.2

Switched Access Service

(D)

(D)

Issued: June 26, 2015

Effective: June 27, 2015

Issued under authority of Public Act 179 of 1991 as amended, MCL 484.2101, et seq.

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ACCESS SERVICE

17GLC Rates and Charges (Cont'd)

17GLC.2 Switched Access Service

(D)

(D)

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ACCESS SERVICE

17GLC Rates and Charges (Cont'd)

17GLC.2 Switched Access Service

(D)

(D)

Issued: June 26, 2015

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ACCESS SERVICE

17GLC Rates and Charges (Cont'd)

17GLC.2 Switched Access Service

(D)

(D)

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ACCESS SERVICE17GLC. Rates and Charges (Cont'd)

(N)

17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local TransportTariff
Section
Reference-Tandem Switched Transport

6.1.3(A)(3)

AT&T Exchanges (OCN 9323) – Originating Switched Access

-Tandem Switched Facility

Per Access Minute Per Mile

The rate charged by GLC is the current rate in the Ameritech Operating Companies ("AIT") Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

- Tandem Switched Termination

Per Access Minute Per Termination

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

-Tandem Switching

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

Tandem Switched Multiplexing

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

(N)

ACCESS SERVICE

17GLC. Rates and Charges (Cont'd)

(N)

17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local Transport (Cont'd)Tariff
Section
Reference-Tandem Switched Transport

6.1.3(A)(3)

AT&T Exchanges (OCN 9323) – Terminating Switched Access

-Tandem Switched Facility

Per Access Minute Per Mile

The rate charged by GLC is the current rate in the Ameritech Operating Companies (“AIT”) Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

-Tandem Switched Termination

Per Access Minute Per Termination

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

-Tandem Switching

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

Tandem Switched Multiplexing

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the AIT Tariff F.C.C. No. 2, Section 6.9.1(A), based on the applicable zone density rate.

(N)

ACCESS SERVICE17GLC. Rates and Charges (Cont'd)

(N)

17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local Transport (Cont'd)Tariff
Section
Reference-Tandem Switched Transport

6.1.3(A)(3)

Frontier Exchanges (OCN 0695, 0681, or 4417) – Originating Switched Access

-Tandem Switched Facility

Per Access Minute Per Mile

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(A) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switched Termination

Per Access Minute Per Termination

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(B) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switching

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(C) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switched Multiplexing

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(D) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

(N)

ACCESS SERVICE

17GLC. Rates and Charges (Cont'd)

(N)

17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local Transport (Cont'd)Tariff
Section
Reference-Tandem Switched Transport

6.1.3(A)(3)

Frontier Exchanges (OCN 0695, 0681, or 4417) – Terminating Switched Access

-Tandem Switched Facility

Per Access Minute Per Mile

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(A) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switched Termination

Per Access Minute Per Termination

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(B) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switching

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(C) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

-Tandem Switched Multiplexing

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the Frontier Telephone Companies Tariff FCC No. 5, Section 4.6.2(D) (OCNs 0695 or 0681), or FCC No. 2, Section 16.4 (OCN 4417).

(N)

ACCESS SERVICE

17GLC. Rates and Charges (Cont'd)

(N)

17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local Transport (Cont'd)Tariff
Section
Reference-Tandem Switched Transport

6.1.3(A)(3)

CenturyLink Exchanges (OCN 0702, 0671, 0705, or 0689) – Originating
Switched Access-Tandem Switched Facility

Per Access Minute Per Mile

The rate charged by GLC is the current rate in the CenturyLink Operating
Companies Tariff F.C.C. No. 1 (OCN 0702 or 0671) or F.C.C. No. 6 (OCN
0705 or 0689), Section 17.2.2.-Tandem Switched Termination

Per Access Minute Per Termination

The rate charged by GLC is the current rate in the CenturyLink Operating
Companies Tariff F.C.C. No. 1 (OCN 0702 or 0671) or F.C.C. No. 6 (OCN
0705 or 0689), Section 17.2.2.-Tandem Switching

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the CenturyLink Operating
Companies Tariff F.C.C. No. 1 (OCN 0702 or 0671) or F.C.C. No. 6 (OCN
0705 or 0689), Section 17.2.2.-Tandem Switched Multiplexing

Per Access Minute Per Tandem

The rate charged by GLC is the current rate in the CenturyLink Operating
Companies Tariff F.C.C. No. 1 (OCN 0702 or 0671) or F.C.C. No. 6 (OCN
0705 or 0689), Section 17.2.2.

(N)

ACCESS SERVICE17GLC. Rates and Charges (Cont'd)17GLC.2 Switched Access Service (Cont'd)17GLC.2.2 Local Transport (Cont'd)

	<u>Rate</u>	<u>Tariff Section Reference</u>	
			(D)
			(D)
(B)			
	<u>800 Data Base Access Service Queries</u>	6.10.3	
	Basic, per query	\$0.0056	(D)

Issued: June 26, 2015

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ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.2 Switched Access Service (Cont d)

17GLC.2.3 End Office

(A) Local Switching
- Per Access Minute

GLC does not currently provide this service (C)

(B) Information Surcharge
- Per 100 Access Minutes

GLC does not currently provide this service (C)

Issued: July 2, 2012

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Issued under authority of Public Act 179 of 1991 as amended and
the FCC 11-161 as revised, reconsidered, or amended

John Summersett – Vice President of Business Development
517-664-1600 compliance@glcom.net

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By Patti Witte at 8:12 am, Jul 13, 2012

ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.2 Switched Access Service (Cont d)

17GLC.2.4 Held for Future Use

ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.2 Switched Access Service (Cont d)

17GLC.2.5 Held for Future Use

ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.2 Switched Access Service (Cont d)

17GLC.2.6 Held for Future Use

17GLC.2.7 Held for Future Use

ACCESS SERVICE17GLC. Rates and Charges (Cont'd)17GLC.3 Special Access Service

The rate for Special Access Service requested are per individual contract except for those services which are provided at the tariffed rates set forth below. For Special Access Services provided under individual contract, GLC will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and GLC have not agreed upon a individual contract rate for the request local transport service, GLC will bill a market based rate for the service. This market based rate will not be more than four times the current NECA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the than current NECA rate for similar rate elements requested.

(C)
(C)17GLC.3.8 High Capacity Service

Regulations concerning High Capacity Service set forth in Section 7 preceeding.

(N)

(A) Channel Termination

-Per Termination

Monthly Rate

Non-Recurring

Charges

-DS1 1.544 Mbps

\$623.44 \$330.00

-DS3 44.736 Mbps

\$5,139.68 \$445.00

(B) Channel Mileage

(1) Channel Mileage Facility

-Per Mile

Monthly Rate

-64Kbps

\$12.40

-1.544 Mbps

\$38.56

(2) Channel Mileage Termination

-Per Termination

Monthly Rate

-64Kbps

\$124.50

-1.544 Mbps

\$200.12

(C) Term Discounts

Held for Future Use

(D) Optional Features and Functions

(1) Cross Connect

-Per Connection

Monthly Rate

\$71.25

(N)

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ACCESS SERVICE

17GLC. Rates and Charges (Cont'd)

17GLC.3.8 High Capacity Service

(N)

(C) Optional Features and Functions

(2) Multiplexing

	<u>Monthly Rate</u>
-Per Arrangement (DS3-DS1)	\$1,232.86

(N)

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ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services17GLC.4.1 Access Ordering

			Tariff Section <u>Reference</u>
--	--	--	---------------------------------------

(A)	<u>Access Order Charge</u> Per Order	\$136.00	5.4.1
-----	---	----------	-------

(B)	<u>Service Date Change Charge</u> Per occurrence	\$53.00	5.4.3
-----	---	---------	-------

A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Access Order Charge as specified in 17GLC.4.1(A) preceding does not apply.

(C)	<u>Design Change Charge</u> Per occurrence	\$53.00	5.4.3
-----	---	---------	-------

The Design Change Charge will apply on a per order per occurrence basis, for each order requiring design change.

(D)	<u>Miscellaneous Service Order Charge</u> Per Miscellaneous Service Order Charge	\$53.00	5.4.2
-----	---	---------	-------

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.2 Additional Engineering

	<u>Additional Engineering Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Basic Time per engineer normally scheduled working hours	\$25.35	13.1
(B)	Overtime per engineer outside of normally scheduled working hours	\$38.02	13.1
(C)	Premium Time outside of scheduled work day, per engineer	\$50.69	13.1

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.3 Additional Labor

	<u>Additional Labor Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Installation or Repair		
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$33.03*	13.2.1 & 13.2.2
	-Premium Time, outside of scheduled work day, per technician	\$44.04*	13.2.1 & 13.2.2
(B)	Stand by		
	-Basic time, normally scheduled working hours, per technician	\$22.92	13.2.3
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$34.37*	13.2.3
	-Premium Time, outside of scheduled work day, per technician	\$45.83*	13.2.3

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.3 Additional Labor (Cont d)

	<u>Additional Labor Periods</u>	<u>Installation and Repair Technician</u>	<u>Central Office Maintenance Technician</u>	<u>Tariff Section Reference</u>
(C)	Testing and Maintenance with other Telephone Companies, or Other Labor			
	-Basic Time per technician normally scheduled working hours	\$22.02	\$23.33	13.2.4 & 13.2.5
	-Overtime per technician outside of normally scheduled working hours on a scheduled work day,	\$33.03*	\$34.99*	13.2.4 & 13.2.5
	-Premium Time per technician outside of scheduled work day	\$44.04*	\$46.65*	13.2.4 & 13.2.5

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.4 Miscellaneous Services(A) Additional Cooperative Acceptance Testing -Switched Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17GLC.4.3(C) preceding.	13.3.1(A)(1)

(B) Additional Automatic Testing -Switched AccessTo First Point
of Switching

Additional Tests

	<u>Per Test Per Transmission Path</u>	
Gain-Slope Tests	\$2.89	13.3.1(A)(2)
C-Notched Noise Tests	\$2.89	13.3.1(A)(2)
1004 Hz Loss**	\$2.89	13.3.1(A)(2)
C-Message Noise**	\$2.89	13.3.1(A)(2)
Balance (return loss)**	\$2.89	13.3.1(A)(2)

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

** 1004 Hz Loss, C-Message Noise and Balance are non-chargeable routine tests, however, they may be requested on an as needed or more than routine scheduled basis, in which case the charges herein apply.

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.4 Miscellaneous Services (Cont d)(C) Additional Manual Testing -Switched AccessTo First Point
of Switching

Additional Tests

Each Half Hour or Fraction Thereof	Tariff Section Reference
--	--------------------------------

Gain-Slope,
C-Notched Noise and
any other agreed to
tests, per technician

See the rates for Additional Labor as set forth in 17GLC.4.3(C) preceding	13.3. 1(A)(3)
---	---------------

(D) Additional Cooperative Acceptance Testing -Special Access

Each Half Hour or Fraction Thereof	Tariff Section Reference
---	--------------------------------

Testing PeriodsBasic Time, Overtime*
and Premium Time*

See the rates for Additional Labor as set forth in 17GLC.4.3(C) preceding.	13.3.1(B)(1)
--	--------------

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.4 Miscellaneous Services (Cont d)(E) Additional Manual Testing -Special Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17GLC.4.3(C) preceding.	13.3.1(B)(2)

(F) Maintenance of Service

<u>Maintenance of Service Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17GLC.4.3(C) preceding	13.3.2

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)17GLC.4.4 Miscellaneous Services (Cont d)(G) Telecommunications Service Priority

	Nonrecurring <u>Charge</u>	Tariff Section <u>Reference</u>
Per service arranged	\$54.63	13.3.3

(H) Held for Future Use

(I) Held for Future Use

(J) Held for Future Use

ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.4 Other Services (Cont d)

17GLC.4.4 Miscellaneous Services (Cont d)

- (K) Held for Future Use
- (L) Held for Future Use
- (M) Held for Future Use
- (N) Held for Future Use

ACCESS SERVICE17GLC. Rates and Charges (Cont d)17GLC.4 Other Services (Cont d)Tariff
Section
Reference17GLC.4.4 Miscellaneous Services (Cont d)

(O) Held for Future Use

(P) Local Number Portability (LNP) End User Service
Not currently offered at any GLC end offices or tandems 13.14(Q) Returned Check Charge 2.4.1(H)Per Returned Check All charges billed the Company for handling the
returned check plus twenty dollars per check
returned.

ACCESS SERVICE

17GLC. Rates and Charges (Cont d)

17GLC.4 Other Services (Cont d)

17GLC.4.5 Held for Future Use

ACCESS SERVICE

17. Rates and Charges (Cont d)

17GLC.4 Other Services (Cont d)

17GLC.4.6 Special Facilities Routing of Access Services

(A) Diversity

For each service provided in accordance with 11.1.1 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.1 and 11.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

ACCESS SERVICE17GLC. Rates and Charges (Cont'd)

17GLC.4 Other Services (Cont'd)

17GLC.4.6 Special Facilities Routing of Access Services (Cont'd)

(E) Tandem Connection Transport

For Tandem Connection Transport service that is provided in accordance with 11.1.5 preceding, the following rates and charges apply:

(1) Tandem Connection Transport Facility

-Per Mile	<u>Monthly Rate</u>
-DS1 1.544 Mbps	\$52.90
-DS3 44.736 Mbps	\$460.82

(2) Tandem Connection Transport Termination

-Per Termination	<u>Monthly Rate</u>
-DS1 1.544 Mbps	\$274.48
-DS3 44.736 Mbps	\$1,762.50

(3) Tandem Connection Transport Multiplexing

-Per Arrangement	<u>Monthly Rate</u>
-DS3-DS1	\$1,608.08

(4) Tandem Connection Transport Cross Connect

-Per Connection	<u>Monthly Rate</u>
-Cross Connect	\$71.25

(5) Trunk Connection Transport Activation

-Per Order	<u>Nonrecurring Charge</u>
-Per 24 Trunks Activated or Fraction thereof, on a Per Order Basis	\$483.61

ACCESS SERVICE

17GLC. Rates and Charges (Contd)

17GLC.4 Other Services (Contd)

17GLC.4.7 Held for Future Use

(D)



(D)

(D)



(D)

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(D)



(D)

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(D)



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ACCESS SERVICE

(D)



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(D)



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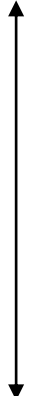
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(D)



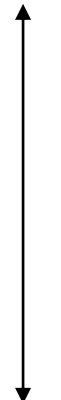
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(D)



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(D)

ACCESS SERVICE**17T2. Rates and Charges**

Section 17T2 contains the rates and charges billable by issuing carrier T² Communications (OCN 206B) for intrastate access services whose terms and conditions are spelled on in Section 1 through Section 16 of this tariff.

17T2.1 Common Line Access Service

17.1.1 <u>Carrier Common Line Access Service</u>		<u>Rate</u>	
-	Terminating Per Access Minute	\$0.000000	(R)
-	Originating Per Access Minute	\$0.000000	(R)

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John Summersett – Vice President of Business Development
517-664-1600 compliance@glcom.net

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East Lansing, MI 48823
By Patti Witte at 8:12 am, Jul 13, 2012

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

17T2.1 Held for Future Use

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

This sheet holds sheet 17T2-3 through 17T2-9 for future use

ACCESS SERVICE17T2. Rates and Charges (Cont'd)17T2.2 Switched Access Service

17T2.2.1	<u>Nonrecurring Charges</u>	<u>Rate</u>	<u>Tariff Section Reference</u>	
(A)	<u>Local Transport -Installation Per Entrance Facility</u>		6.4.1(B)(1)	
	-High Capacity DS1	Individual Contract		
	-High Capacity DS3	Individual Contract		
	-Synchronous Optical Channel OC3	Individual Contract		
	-Synchronous Optical Channel OC12	Individual Contract		
(C)	<u>Interim NXX Translation Per Order</u>			
	Per LATA or Market Area	Rate in GLC FCC Tariff No. 20	6.4.1(B)(2)	(C) (N)
(D)	Held for Future Use			
(E)	<u>Trunk Activation Per Order</u>			
	-Per 24 Trunks Activated or Fraction thereof, on a Per Order Basis	Individual Contract	6.4.1(B)(1)	
(F)	Held for Future Use			
(G)	Held for Future Use			

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John Summersett – Vice President of Business Development
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ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.2 Switched Access Service (Cont d)

17T2.2.2	<u>Local Transport</u>	<u>Rate</u>	<u>Tariff Section Reference</u>
-	<u>Entrance Facility</u> Per Termination		6.1.3(A)(1)
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	
	<u>-Direct Trunked Transport</u>		6.1.3(A)(2)
	<u>- Direct Trunked Facility, Per Mile</u>		
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	
	<u>- Direct Trunked Termination, Per Termination</u>		
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	

*For local transport services provided under individual contract, the Company will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NECA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the than current NECA rate for similar rate elements requested.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.2 Switched Access Service (Cont d)

17T2.2.2	<u>Local Transport</u> (Cont d)	Tariff Section Reference
-	<u>Multiplexing</u> Per Arrangement	6.1.3(A)(5) Individual Contract*
-	<u>Customer Node</u> Per Node	6.1.3(A)(7) Individual Contract*
The recurring and nonrecurring rates charged by the Company is the applicable current rate, based on the type of Switched Access Customer Node ordered, at NECA Tariff F.C.C. No. 5, Section 17.2.2, Premium Access-Customer Node.		
-	<u>Customer Premises Port</u> Per Port	6.1.3(A)(7) Individual Contract*
-	<u>Add/ Drop Multiplexing</u> <u>Central Office Port</u> Per Port	6.1.3(A)(6) Individual Contract*

*For local transport services provided under individual contract, the Company will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NECA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the than current NECA rate for similar rate elements requested.

ACCESS SERVICE17T2. Rates and Charges (Cont'd)17T2.2 Switched Access Service (Cont'd)

17T2.2.2	<u>Local Transport</u> (Cont'd)	Tariff Section Reference	
-	<u>Tandem Switched Transport</u> -Tandem Switched Facility Per Access Minute Per Mile	6.1.3(A)(3)	Rate in GLC FCC Tariff No. 20 (C)
	-Tandem Switched Termination Per Access Minute Per Termination		Rate in GLC FCC Tariff No. 20 (C)
	-Tandem Switching Per Access Minute Per Tandem		Rate in GLC FCC Tariff No. 20 (C)
	-Tandem Switched Multiplexing Per Access Minute		Rate in GLC FCC Tariff No. 20 (C)
	-Transport Interconnection Charge Per Access Minute	6.1.3(A)(4)	Rate in GLC FCC Tariff No. 20 (C)
	<u>Network Blocking Per Blocked Call</u> Per call	6.8.6	Rate in GLC FCC Tariff No. 20 (C)

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ACCESS SERVICE17T2. Rates and Charges (Cont'd)17T2.2 Switched Access Service (Cont'd)17T2.2.2 Local Transport (Cont'd)(A) Common Channel Signaling Network Connection

	<u>Rate</u>	<u>Tariff Section Reference</u>
(1) <u>Signaling Network Access Link</u>		6.10.3
-Signaling Mileage Facility per mile	Individual Contract	
-Signaling Mileage Termination per Termination	Individual Contract	
-Signaling Entrance Facility per Facility	Individual Contract	
	<u>Nonrecurring Charge</u>	
	Individual Contract	
(2) <u>STP Port</u>		
-Per port	Individual Contract	

(B) 800 Data Base Access Service Queries

- Basic Query	Rate in GLC FCC Tariff No. 20	(C)
- Vertical	Rate in GLC FCC Tariff No. 20	(C)

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ACCESS SERVICE17T2. Rates and Charges (Cont'd)17T2.2 Switched Access Service (Cont'd)17T2.2.3 End Office

(A)	<u>Local Switching</u> - Per Access Minute	Rate in GLC FCC Tariff No. 20	(C)
(B)	<u>Information Surcharge</u> - Per 100 Access Minutes	Rate in GLC FCC Tariff No. 20	(C)
(C)	<u>Common/Shared Trunk Port</u> - Per Access Minute	Rate in GLC FCC Tariff No. 20	(C)
(D)	<u>SS7 Signaling Usage Charges</u> - Per IAM		
	Signal Formulation	Rate in GLC FCC Tariff No. 20	(C)
	Signal Transport	Rate in GLC FCC Tariff No. 20	(C)
	Signal Switching	Rate in GLC FCC Tariff No. 20	(C)
	Signal Tandem Switching	Rate in GLC FCC Tariff No. 20	(C)

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17T2. Rates and Charges (Cont d)

17T2.2 Switched Access Service (Cont d)

17T2.2.4 Held for Future Use

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

17T2.2 Switched Access Service (Cont d)

17T2.2.5 Held for Future Use

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

17T2.2 Switched Access Service (Cont d)

17T2.2.6 Held for Future Use

17T2.2.7 Held for Future Use

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.3 Special Access Service

The rate for Special Access Service requested are per individual contract. For Special Access Services provided under individual contract, the Company will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NECA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the than current NECA rate for similar rate elements requested.

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

Sheets 17T2-15 to Sheet 17T2-29 Held for Future Use

Issued: April 30, 2004

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John Summersett Director of Carrier Services
Great Lakes Comnet, Inc.
6607 W. St. Joseph, Ste. 200
Lansing, MI 48917

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services17T2.4.1 Access Ordering

			<u>Tariff Section Reference</u>
(A)	<u>Access Order Charge</u> Per Order	\$136.00	5.4.1
(B)	<u>Service Date Change Charge</u> Per occurrence	\$53.00	5.4.3
A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Access Order Charge as specified in 17T2.4.1(A) preceding does not apply.			
(C)	<u>Design Change Charge</u> Per occurrence	\$53.00	5.4.3
The Design Change Charge will apply on a per order per occurrence basis, for each order requiring design change.			
(D)	<u>Miscellaneous Service Order Charge</u> Per Miscellaneous Service Order Charge	\$53.00	5.4.2

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.2 Additional Engineering

	<u>Additional Engineering Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Basic Time per engineer normally scheduled working hours	\$25.35	13.1
(B)	Overtime per engineer outside of normally scheduled working hours	\$38.02	13.1
(C)	Premium Time outside of scheduled work day, per engineer	\$50.69	13.1

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.3 Additional Labor

	<u>Additional Labor Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Installation or Repair		
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$33.03*	13.2.1 & 13.2.2
	-Premium Time, outside of scheduled work day, per technician	\$44.04*	13.2.1 & 13.2.2
(B)	Stand by		
	-Basic time, normally scheduled working hours, per technician	\$22.92	13.2.3
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$34.37*	13.2.3
	-Premium Time, outside of scheduled work day, per technician	\$45.83*	13.2.3

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.3 Additional Labor (Cont d)

<u>Additional Labor Periods</u>		<u>Installation and Repair Technician</u>	<u>Central Office Maintenance Technician</u>	<u>Tariff Section Reference</u>
(C)	Testing and Maintenance with other Telephone Companies, or Other Labor			
	-Basic Time per technician normally scheduled working hours	\$22.02	\$23.33	13.2.4 & 13.2.5
	-Overtime per technician outside of normally scheduled working hours on a scheduled work day,	\$33.03*	\$34.99*	13.2.4 & 13.2.5
	-Premium Time per technician outside of scheduled work day	\$44.04*	\$46.65*	13.2.4 & 13.2.5

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.4 Miscellaneous Services(A) Additional Cooperative Acceptance Testing -Switched Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17T2.4.3(C) preceding.	13.3.1(A)(1)

(B) Additional Automatic Testing -Switched AccessTo First Point
of Switching

Additional Tests

	<u>Per Test Per Transmission Path</u>	
Gain-Slope Tests	\$2.89	13.3.1(A)(2)
C-Notched Noise Tests	\$2.89	13.3.1(A)(2)
1004 Hz Loss**	\$2.89	13.3.1(A)(2)
C-Message Noise**	\$2.89	13.3.1(A)(2)
Balance (return loss)**	\$2.89	13.3.1(A)(2)

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

** 1004 Hz Loss, C-Message Noise and Balance are non-chargeable routine tests, however, they may be requested on an as needed or more than routine scheduled basis, in which case the charges herein apply.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.4 Miscellaneous Services (Cont d)(C) Additional Manual Testing -Switched AccessTo First Point
of Switching

Additional Tests

Each Half Hour or Fraction Thereof	Tariff Section Reference
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Gain-Slope,
C-Notched Noise and
any other agreed to
tests, per technician

See the rates for Additional Labor as set forth in 17T2.4.3(C) preceding	13.3. 1(A)(3)
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(D) Additional Cooperative Acceptance Testing -Special Access

Each Half Hour or Fraction Thereof	Tariff Section Reference
---	--------------------------------

Testing PeriodsBasic Time, Overtime*
and Premium Time*

See the rates for Additional Labor as set forth in 17T2.4.3(C) preceding.	13.3.1(B)(1)
---	--------------

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.4 Miscellaneous Services (Cont d)(E) Additional Manual Testing -Special Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17T2.4.3(C) preceding.	13.3.1(B)(2)

(F) Maintenance of Service

<u>Maintenance of Service Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17T2.4.3(C) preceding	13.3.2

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.4 Miscellaneous Services (Cont d)

(G) <u>Telecommunications Service Priority</u>		Nonrecurring <u>Charge</u>	Tariff Section <u>Reference</u>
	Per service arranged	\$54.63	13.3.3
(H) Held for Future Use			
(I) <u>Presubscription</u>		Nonrecurring <u>Charge</u>	
	Per Telephone Exchange Service line or trunk*	\$ 5.00	13.4
(J) Held for Future Use			

* This charge is generally billed to the end user who is the subscriber to the Telephone Exchange Service. In those instances where the IC both requests the presubscription change, and requests the associated charge be billed to it, the Telephone Company will bill the IC. In the event the subscriber is incorrectly presubscribed due to misassignment on the part of the Telephone Company, no charge shall apply. In the event the subscriber denies requesting a presubscription change, the Telephone Company will credit the subscriber's account for the presubscription change charge associated with the alleged unauthorized change, if such charge was billed to the subscriber. The Telephone Company will then bill the IC responsible for the alleged unauthorized change a presubscription change charge to return the subscriber to its previous authorized carrier and, if initially billed to the subscriber, the presubscription change charge for the alleged unauthorized change.

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.4 Miscellaneous Services (Cont d)

(K) Held for Future Use

(L) Held for Future Use

(M) Billing Name and Address Service

	Nonrecurring <u>Charge</u>	Tariff Section <u>Reference</u>
- Per BNA Order	\$50.94	13.9.4(A)
- Per BNA Record	\$ 0.33	13.9.4(A)
- Optional Magnetic Tape Charge-Per Magnetic Tape	\$91.44	13.9.4(B)
- Optional Format Programming Charge - Per each half hour or fraction thereof	\$37.20	13.9.4(C)

(N) Held for Future Use

ACCESS SERVICE17T2. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)Tariff
Section
Reference17T2.4.4 Miscellaneous Services (Cont d)

(O) Held for Future Use

(P) Held for Future Use

(Q) Returned Check Charge 2.4.1(H)Per Returned Check All charges billed the Company for handling the
returned check plus twenty dollars per check
returned.(R) Local Number Portability Query Service

1)	Rate Per Query	\$ 0.0050	13.14.2
2)	LNP Order Charge	\$ 50.00	
3)	LNP Billing Charge	\$300.00	

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

17T2.4 Other Services (Cont d)

17T2.4.5 Held for Future Use

ACCESS SERVICE17. Rates and Charges (Cont d)17T2.4 Other Services (Cont d)17T2.4.6 Special Facilities Routing of Access Services(A) Diversity

For each service provided in accordance with 11.1.1 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.1 and 11.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.

(Reserved for Future Use.)

ACCESS SERVICE

17T2. Rates and Charges (Cont d)

17T2.4 Other Services (Cont d)

17T2.4.7 Held for Future Use

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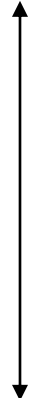
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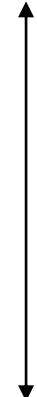
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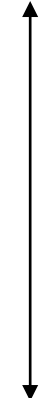
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ACCESS SERVICE**17CL. Rates and Charges**

Section 17CL contains the rates and charges billable by issuing carrier Comlink, LLC (OCN 644C) for intrastate access services. The conditions and rates for the provision of intrastate access services are as specified in the Great Lakes Comnet, Inc. F.C.C Tariff No. 20, Section 17CL, as it now exists, and as it may be revised, added to or supplemented, except for those exceptions as so listed within their respective sections within this tariff. All rates and charges for the provision of intrastate access services specified as exceptions are in the respective sections within this tariff.

17CL.1 Common Line Access Service and Federal Universal Service Charge**17CL.1.1 End User Access Service**

There are no intrastate End User Common Line or Complex Line Port charges.

17CL.1.2 Federal Universal Service Charge (FUSC)

There is no intrastate Federal Universal Service Charge (FUSC)

17CL.2 Switched Access Service

There are no exceptions for Switched Access Service.

17CL.3 Special Access Service

There are no exceptions for Special Access Service.

17CL.4 Other Services

There are no exceptions for Other Services.

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ACCESS SERVICE

17DFTC. Rates and Charges

Section 17DFTC contains the rates and charges billable by issuing carrier Deerfield Farmers Telephone Company (OCN 558A) for intrastate access services whose terms and conditions are spelled on in Section 1 through Section 16 of this tariff

17DFTC.1 Common Line Access Service

17.1.1 <u>Carrier Common Line Access Service</u>		<u>Rate</u>	
-	Terminating Per Access Minute	\$0.00000	(R)
-	Originating Per Access Minute	\$0.00000	(R)

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John Summersett – Chief Operating Officer
517-664-1600 compliance@glcom.net

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ACCESS SERVICE

17DFTC. Rates and Charges

This sheet holds sheets 17DFTC-2 through 17DFTC-9 for future use.

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Great Lakes Comnet, Inc.
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East Lansing, MI 48823

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)17DFTC.2 Switched Access Service

		Tariff	
		Section	
		Reference	
17DFTC.2.1	<u>Nonrecurring Charges</u>		
		<u>Rate</u>	
(A)	<u>Local Transport -Installation</u>		
	<u>Per Entrance Facility</u>		6.4.1(B)(1)
	-High Capacity DS1	Individual Contract	
	-High Capacity DS3	Individual Contract	
	-Synchronous Optical		
	Channel OC3	Individual Contract	
	-Synchronous Optical		
	Channel OC12	Individual Contract	
(C)	<u>Interim NXX Translation Per Order</u>		
	Per LATA or Market Area	\$203.20	6.4.1(B)(2) (I)
(D)	Held for Future Use		
(E)	<u>Trunk Activation Per Order</u>		
	-Per 24 Trunks Activated		6.4.1(B)(1)
	or Fraction thereof, on		
	a Per Order Basis	Individual Contract	
(F)	Held for Future Use		
(G)	Held for Future Use		

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.2 Switched Access Service (Cont'd)

17DFTC.2.2	<u>Local Transport</u>	<u>Rate</u>	<u>Tariff Section Reference</u>
-	<u>Entrance Facility</u> Per Termination		6.1.3(A)(1)
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	
-	<u>Direct Trunked Transport</u>		6.1.3(A)(2)
	- <u>Direct Trunked Facility</u> , Per Mile		
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	
	- <u>Direct Trunked Termination</u> , Per Termination		
	-High Capacity DS1	Individual Contract*	
	-High Capacity DS3	Individual Contract*	
	-Synchronous Optical Channel OC3	Individual Contract*	
	-Synchronous Optical Channel OC12	Individual Contract*	

- * For local transport services provided under individual contract, the Company will begin processing connection of the requested service before an individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NE CA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the then current NECA rate for similar rate elements requested.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.2 Switched Access Service (Cont'd)17DFTC.2.2 Local Transport (Cont'd)Tariff
Section
Reference

-	<u>Multiplexing</u> Per Arrangement	Individual Contract*	6.1.3(A)(5)
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-	<u>Customer Node</u> Per Node	Individual Contract*	6.1.3(A)(7)
---	----------------------------------	----------------------	-------------

The recurring and nonrecurring rates charged by the Company is the applicable current rate, based on the type of Switched Access Customer Node ordered, at NECA Tariff F.C.C. No. 5, Section 17.2.2, Premium Access-Customer Node.

-	<u>Customer Premises Port</u> Per Port	Individual Contract*	6.1.3(A)(7)
---	---	----------------------	-------------

-	<u>Add/ Drop Multiplexing</u> <u>Central Office Port</u> Per Port	Individual Contract*	6.1.3(A)(6)
---	---	----------------------	-------------

- * For local transport services provided under individual contract, the Company will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NE CA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the then current NECA rate for similar rate elements requested.

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)17DFTC.2 Switched Access Service (Cont'd)17DFTC.2.2 Local Transport (Cont'd)

Tariff

Section

ReferenceTandem Switched Transport

6.1.3(A)(3)

(C)

-Tandem Switched Facility

The rate charged by Deerfield Farmers' Telephone Company is the applicable current highest rateband at NECA FCC No. 5, Section 17.2.2. - Tandem Switched Facility.

Tandem Switched Termination

The rate charged by Deerfield Farmers' Telephone Company is the applicable current highest rateband at NECA FCC No. 5, Section 17.2.2. - Tandem Switched Termination.

Tandem Switching

The rate charged by Deerfield Farmers' Telephone Company is the applicable current highest rateband at NECA FCC No. 5, Section 17.2.2. - Tandem Switching.

6.1.3(A)(4)

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6.8.6

Network Blocking Per Blocked Call

The rate charged by Deerfield Farmers' Telephone Company is the applicable current highest rateband at NECA FCC No. 5, Section 17.2.2. - Network Blocking Per Blocked Call.

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)17DFTC.2 Switched Access Service (Cont'd)17DFTC.2.2 Local Transport (Cont'd)(A) Common Channel Signaling Network Connection

		Tariff Section
	<u>Rate</u>	<u>Reference</u>
(1) <u>Signaling Network Access Link</u>		6.10.3
-Signaling Mileage		
Facility per mile		Individual Contract
-Signaling Mileage Termination		
per Termination		Individual Contract
-Signaling Entrance Facility		
per Facility		Individual Contract
<u>STP Port</u>		
-Per port		Individual Contract

(B) 800 Data Base Access Service Queries

The rate charged by Deerfield Farmers' Telephone Company is
the applicable current highest rateband at NECA FCC No. 5,
Section 17.2.2. - 800 Data Base Access Service Queries.

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)

17DFTC.2 Switched Access Service (Cont'd)

17DFTC.2.3 End Office

(A) Local Switching

The rate charged by Deerfield Farmers' Telephone Company is the applicable current highest rateband at NECA FCC No.5, Section 17.2.3.(A) - Local Switching Premium and Non Premium.

(B) Information Surcharge

The rate charged by Deerfield Farmers' Telephone Company is the applicable (C) current rate at NECA FCC No.5, Section 17.2.3.(B) - Information Surcharge. (C)

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17DFTC. Rates and Charges (Cont'd)

17DFTC.2 Switched Access Service (Cont'd)

17DFTC.2.4 Held for Future Use

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17DFTC. Rates and Charges (Cont'd)

17DFTC.2 Switched Access Service (Cont'd)

17DFTC.2.5 Held for Future Use

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)

17DFTC.2 Switched Access Service (Cont'd)

17DFTC.2.6 Held for Future Use

17DFTC.2.7 Held for Future Use

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.3 Special Access Service

The rate for each Special Access Service requested are per individual contract. For Special Access Services provided under individual contract, the Company will begin processing connection of the requested service before a individual contract rate has been negotiated. If the Customer and the Company have not agreed upon a individual contract rate for the request local transport service, the Company will bill a market based rate for the service. This market based rate will not be more than four times the current NECA rate for similar rate elements provided and will not be less than the current NECA rate for similar rate elements provided. For purposes of calculating the minimum period charge when an individual contract rate has not been agreed to, the minimum period charge will be based on one hundred and fifty percent (150%) of the then current NECA rate for similar rate elements requested.

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)

Sheets 17DFTC-15 to Sheet 17DFTC-29 Held for Future Use

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services17DFTC.4.1 Access Ordering

			<u>Tariff Section Reference</u>
(A)	<u>Access Order Charge</u> Per Order	\$136.00	5.4.1
(B)	<u>Service Date Change Charge</u> Per occurrence	\$53.00	5.4.3
A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Access Order Charge as specified in 17DFTC.4.1(A) preceding does not apply.			
(C)	<u>Design Change Charge</u> Per occurrence	\$53.00	5.4.3
The Design Change Charge will apply on a per order per occurrence basis, for each order requiring design change.			
(D)	<u>Miscellaneous Service Order Charge</u> Per Miscellaneous Service Order Charge	\$53.00	5.4.2

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.2 Additional Engineering

	<u>Additional Engineering Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
(A)	Basic Time per engineer normally scheduled working hours	\$25.34	13.1
(B)	Overtime per engineer outside of normally scheduled working hours	\$38.02	13.1
(C)	Premium Time outside of scheduled work day, per engineer	\$50.69	13.1

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.3 Additional Labor

		Each Half Hour or Fraction Thereof	Tariff Section Reference
<u>Additional Labor Periods</u>			
(A)	Installation or Repair		
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$33.03*	13.2.1 & 13.2.2
	-Premium Time, outside of scheduled work day, per technician	\$44.04*	13.2.1 & 13.2.2
(B)	Stand by		
	-Basic time, normally scheduled working hours, per technician	\$22.92*	13.2.3
	-Overtime, outside of normally scheduled working hours on a scheduled work day, per technician	\$34.37*	13.2.3
	-Premium Time, outside of scheduled work day, per technician	\$45.83*	13.2.3

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.3 Additional Labor (Cont'd)

<u>Additional Labor Periods</u>	<u>Installation and Repair Technician</u>	<u>Central Office Maintenance Technician</u>	<u>Tariff Section Reference</u>
(C) Testing and Maintenance with other Telephone Companies, or Other Labor			
-Basic Time per technician normally scheduled working hours	\$22.02	\$23.33	13.2.4 & 13.2.5
-Overtime per technician outside of normally scheduled working hours on a scheduled work day	\$33.03	\$24.99*	13.2.4 & 13.2.5
-Premium Time per technician outside of scheduled work day	\$44.04*	\$46.65*	13.2.4 & 13.2.5

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.4 Miscellaneous Services(A) Additional Cooperative Acceptance Testing - Switched Access

<u>Testing Periods</u>	<u>Each Half Hour or Fraction Thereof</u>	<u>Tariff Section Reference</u>
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17DFTC.4.3(C) preceding.	13.3.1(A)(1)

(B) Additional Automatic Testing -Switched AccessTo First Point of Switching

Additional Tests

	<u>Per Test Per Transmission Path</u>	
Gain-Slope Tests	\$2.89	13.3.1(A)(2)
C-Notched Noise Tests	\$2.89	13.3.1(A)(2)
1004 Hz Loss**	\$2.89	13.3.1(A)(2)
C-Message Noise**	\$2.89	13.3.1(A)(2)
Balance (return loss)**	\$2.89	13.3.1(A)(2)

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

** 1004 Hz Loss, C-Message Noise and Balance are non-chargeable routine tests, however, they may be requested on an as needed or more than routine scheduled basis, in which case the charges herein apply.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.4 Miscellaneous Services (Cont'd)(C) Additional Manual Testing -Switched AccessTo First Point
of Switching

Additional Tests

	Each Half Hour or Fraction Thereof	Tariff Section Reference
Gain-Slope, C-Notched Noise and any other agreed to tests, per technician	See the rates for Additional Labor as set forth in 17DFTC.4.3(C) preceding	13.3. 1(A)(3)

(D) Additional Cooperative Acceptance Testing -Special Access

	Each Half Hour or Fraction Thereof	Tariff Section Reference
<u>Testing Periods</u>		
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17DFTC.4.3(C) preceding.	13.3.1(B)(1)

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.4 Miscellaneous Services (Cont'd)(E) Additional Manual Testing -Special Access

<u>Testing Periods</u>	Each Half Hour or Fraction Thereof	Tariff Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17DFTC.4.3(C) preceding.	13.3.1(B)(2)

(F) Maintenance of Service

Maintenance of Service <u>Periods</u>	Each Half Hour or Tariff Fraction Thereof	Section Reference
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 17DFTC.4.3(C) preceding	13.3.2

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.4 Miscellaneous Services (Cont'd)(G) Telecommunications Service Priority

	Nonrecurring <u>Charge</u>	Tariff Section <u>Reference</u>
Per service arranged	\$54.63	13.3.3

(H) Held for Future Use

(I) Held for Future Use

(J) Held for Future Use

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ACCESS SERVICE

17DFTC. Rates and Charges (Cont'd)

17DFTC.4 Other Services (Cont'd)

17DFTC.4.4 Miscellaneous Services (Cont'd)

(K) Held for Future Use

(L) Held for Future Use

(M) Held for Future Use

(N) Held for Future Use

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)Tariff
Section
Reference17DFTC.4.4 Miscellaneous Services (Cont'd)

(O) Held for Future Use

(P) Held for Future Use

(Q) Returned Check Charge 2.4.1(H)Per Returned Check All charges billed the Company for handling the
returned check plus twenty dollars per
check returned.(R) Local Number Portability (LNP) Query Service 13.14.2

Rate Per Database Query \$ 0.005460

Rate Per N-1 Default Query \$ 0.006000

(R)

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17DFTC.4 Other Services (Cont'd)

17DFTC.4.5 Held for Future Use

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ACCESS SERVICE17DFTC. Rates and Charges (Cont'd)17DFTC.4 Other Services (Cont'd)17DFTC.4.6 Special Facilities Routing of Access Services(A) Diversity

For each service provided in accordance with 11.1.1 preceding, the rates and charges will be developed on an individual case basis.

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.1 and 11.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.

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17DFTC. Rates and Charges (Cont'd)

17DFTC.4 Other Services (Cont'd)

17DFTC.4.7 Held for Future Use

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ACCESS SERVICE**17CTC. Rates and Charges**

Section 17CTC contains the rates and charges billable by issuing carrier Climax Telephone Company (OCN 8331) for intrastate access services. The conditions and rates for the provision of intrastate access services are as specified in the Great Lakes Comnet, Inc. F.C.C Tariff No. 20, Section 17CTC, as it now exists, and as it may be revised, added to or supplemented, except for those exceptions as so listed within their respective sections within this tariff. All rates and charges for the provision of intrastate access services specified as exceptions are in the respective sections within this tariff.

17CTC.1 Common Line Access Service and Federal Universal Service Charge**17CTC.1.1 End User Access Service**

There are no intrastate End User Common Line or Complex Line Port charges.

17CTC.1.2 Federal Universal Service Charge (FUSC)

There is no intrastate Federal Universal Service Charge (FUSC)

17CTC.1.3 <u>Carrier Common Line Access Service</u>	<u>Rate</u>	
Terminating Per Access Minute	\$0.000000	
Originating Per Access Minute	\$0.000000	(R)

ACCESS SERVICE

17CTC. Rates and Charges (Cont'd)

17CTC.2 Switched Access Service

17CTC.2.2 Local Transport

Rate

Tariff
Section
Reference
6.1.3(A)(3)

There are no exceptions.

(C)

(D)



(D)

ACCESS SERVICE

17CTC. Rates and Charges (Cont'd)

17CTC.2 Switched Access Service (Cont'd)

17CTC.2.3 End Office

(A) There are no exceptions.

6.1.3(B)

(C)

(D)



17CTC.4 Other Services

17CTC.4.4 Miscellaneous Services

There are no exceptions.

(D)

Tariff
Section
Reference
13.14.2

(C)