

ACCESS SERVICE

Regulations, Rates and Charges  
applying to the provision of Access Service  
for connection to intrastate communications facilities  
for Intrastate Customers within the  
operating territory of the

LA HARPE TELEPHONE COMPANY

in the State of

Illinois

as provided herein.

Rate Centers:

La Harpe  
Fountain Green

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

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

Pursuant to the Public Utilities Act, ILL. Rev. Stat., Ch. 11/2/3, para. 13-501 and 13-502, the La Harpe Telephone Company hereby declares that all services contained in this tariff are noncompetitive services. The Company reserves the right to reclassify any portion of or all of these services as competitive services from time to time in accordance with paras. 13-502 (c) and (e) of the Public Utilities Act.

FILED IN COMPLIANCE WITH  
 Order No. 93-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.

Effective: January 1, 1994

104 North Center

La Harpe, Illinois 61450

ACCESS SERVICE

Check Sheet

Title Pages and pages 1 to 14 inclusive of this tariff are effective as of the date shown. Original and revised pages as named below contain all changes from the original tariff that are in effect on the date hereof.

<u>Page</u>	<u>Revision</u>
Title Page	Original
1	17th Revised*
2	Original
3	Original
4	10th Revised*
5	9th Revised
6	4th Revised
7	5th Revised
8	6th Revised
9	1st Revised
10	1st Revised
11	1st Revised
12	1st Revised
12.1	Original
13	Original
14	Original
15	Original
16	Original
17	Original
18	Original
19	Original

**RECEIVED**

MAY 14 2008

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

\* New or Revised Page

Issued: May 14, 2008

Todd Irish  
 President  
 104 North Center  
 La Harpe, Illinois 61450

Effective: May 16, 2008

ACCESS SERVICE

RECEIVED  
DEC 30 1993

12. Rates and Charges

12.1 General

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

The rates and charges for the services offered in this tariff are shown in this section. Reference is made for each rate element to the appropriate tariff section in the Cass County Telephone Company Tariff ILL. C.C. No. 4 where the regulations describing application of the rate are located.

12.1.1 Access Tariff Concurrence

Access services are those services which are described in the Cass County Telephone Company Tariff ILL. C.C. No. 4. These services are offered by the Company to intrastate interexchange customers (ICs) in accordance with the rules and regulations specified in the Cass County Telephone Company Tariff ILL. C.C. No. 4. and approved by the Illinois Commerce Commission, and in any amendments thereto and authorized by the Illinois Commerce Commission or applicable law. The Company does not concur in the rates for access services of Cass County Telephone Company. Rates for these services are set out in the following pages of this concurrence.

12.1.2 Provision of Services

The Company, to the extent that such services are or can be made available with reasonable effort and after provisions have been made for the Company's telephone exchange services, will provide to an intrastate IC, upon reasonable notice, services of the type offered in the Cass County Telephone Company Tariff ILL. C.C. No. 4 pursuant to the terms and conditions specified therein and at the rates specified in the following pages of this concurrence. The Company's concurrence in the Cass County Telephone Company Tariff ILL. C.C. No. 4 shall not be construed or deemed a representation that all services and service components described therein are available from the Company.

FILED IN COMPLIANCE WITH  
 Order No. 23-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.  
104 North Center  
La Harpe, Illinois 61450

Effective: January 1, 1994

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.1 General (Cont'd)

12.1.3 Cancellation Rights

The Company reserves the right to cancel and make void the above concurrence statement, subject to requirements as may be ordered by the Illinois Commerce Commission, at any and such time as it appears that such cancellation is in the best interest of the Company and/or its customers.

12.1.4 References

The rates and charges for the services offered in this tariff are shown in this section. Reference is made for each rate element to the appropriate tariff section of the Cass County Tariff ILL. C.C. No. 4 where the regulations describing application of the rates are located.

12.2 Rates and Charges

12.2.1 Reserved For Future Use

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.2 Switched Access Service

	<u>Rates</u>	<u>Tariff Section Reference</u>
(A) <u>Non Recurring Charges</u>		
(1) <u>Local Transport - Installation</u>		
Per Entrance Facility		
(a) Voice Grade Four-Wire	NA	6.7.1(A)(1)
(b) High Capacity DS1	NA	6.7.1(A)(1)
(2) <u>Per Feature Group</u>		
Per End Office Facility	\$225.00	6.7.1(A) 6.2(D)(1)(b)
(3) <u>Interim NXX Translation</u>		
Per Order, Per End Office	\$76.00	6.3.6(A)(3)(a)
(B) <u>Local Transport*</u>		
<u>Premium Access</u>		
(1) <u>Entrance Facility</u>		
Per Termination		
(a) Voice Grade Four-Wire	NA	6.2(A)(1)(a)
(b) High Capacity DS1	NA	6.2(A)(1)(a)
(2) <u>Residual Interconnection Charge</u>		
Per Access Minute	\$0.00000	6.2(A)(1)(b) (R)
(3) <u>Tandem Switched Transport</u>		
(a) Tandem Transport		
Per Minute	\$0.02657	6.2(A)(1)(c)
(b) Tandem Switching		
Per Access Minute		
Per Tandem	NA	6.2(A)(1)(c)

**RECEIVED**

MAY 14 2008

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

\* The Local Transport rate includes non-chargeable Interface Groups and Optional Features as set forth in Sections 6.2(A)(3) and 6.2(A)(4), preceding.

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.2 Switched Access Service

	<u>Rates</u>	<u>Tariff Section Reference</u>	
(B) <u>Local Transport*</u> <u>Premium Access</u> (Cont'd)			
(4) <u>Direct Trunked Transport</u>			
(a) <u>Direct Trunked Facility</u> Per Mile			
- Voice Grade Four-Wire	\$ 6.74	6.2(A)(2)(a)	(I)
- High Capacity DS1	\$44.28	6.2(A)(2)(a)	(I)
(b) <u>Direct Trunked Termination</u> Per Termination			
- Voice Grade Four-Wire	\$55.08	6.2(A)(2)(a)	(R)
- High Capacity DS1	\$177.56	6.2(A)(2)(a)	(R)
(C) <u>End Office</u> <u>Premium Access</u>			
(1) <u>Local Switching</u> LS2 (All Feature Groups)	\$0.04129	6.2(B)(1)	(I)
(3) <u>Directory Assistance</u> <u>Info. Surcharge</u> (Per 100 Access Minutes)	\$0.01371	6.2(B)(3)	(R)

RECEIVED

DEC 14 2007

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

Issued: December 14, 2007

Todd Irish  
 President  
 104 North Center  
 La Harpe, Illinois 61450

Effective: December 16, 2007

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.2 Switched Access Service (Cont'd)

	<u>Rates</u>	<u>Tariff Section Reference</u>	
<u>(D) Toll Free Number Data Base Access Service</u>			
(1) <u>Basic Rate</u> - per query	\$0.00104	6.3.6(A)(3)(b)	(R)
(2) <u>Vertical Features Rate</u> - per query (replaces basic rate)	\$0.00124	6.3.6(A)(3)(b)	(R)

FILED IN COMPLIANCE WITH  
 Order No. 83-0149     Tariff Prov.  
 Law    CHECK FOR COMPLIANCE

JUL 30 1999

PUBLIC UTILITIES DIVISION  
Engineering Department

**RECEIVED**  
JUN 28 1999

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

**ACCESS SERVICE**

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.3 Special Access Service

	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>	<u>Tariff Section Reference</u>
<b>(A) <u>Voice Grade Channel</u></b>			
(1) <u>Channel Termination</u> per termination*			
Two-Wire	\$ 57.54 (R)	\$ 75.00	7.1.1(A)
Four-Wire	\$ 92.07 (R)	\$ 75.00	7.1.1(A)
(2) <u>Channel Mileage</u> <u>Facility</u> per mile			
	\$ 6.74 (I)	None	7.1.1(B)(1)
(3) <u>Channel Mileage</u> <u>Termination</u> per termination			
	\$ 55.08 (R)	None	7.1.1(B)(2)
<b>(B) <u>Metallic Channel</u></b>			
(1) <u>Channel Termination</u> per termination*			
Two-Wire	NA	NA	7.1.1(A)
(2) <u>Channel Mileage</u> <u>Facility</u> per mile			
	NA	NA	7.1.1(B)(1)
(3) <u>Channel Mileage</u> <u>Termination</u> per termination			
	NA	NA	7.1.1(B)(2)

\* The Channel Termination rate includes non-chargeable Channel Interfaces as set forth in Section 7.1.4, preceding.

**RECEIVED**  
 DEC 14 2007

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

**Issued: December 14, 2007**

**Todd Irish  
 President  
 104 North Center  
 La Harpe, Illinois 61450**

**Effective: December 16, 2007**

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.3 Special Access Service (Cont'd)

	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>	<u>Tariff Section Reference</u>
(C) <u>Digital Data</u>			
(1) <u>Channel Termination</u> per termination*	\$106.19 (R)	\$150.00	7.1.1(A)
(2) <u>Channel Mileage</u> <u>Facility</u> per mile	\$ 9.08 (I)	None	7.1.1(B)(1)
(3) <u>Channel Mileage</u> <u>Termination</u> per termination	\$ 74.15 (R)	None	7.1.1(B)(2)
(D) <u>High Capacity</u>			
(1) <u>Channel Termination</u> per termination*	\$248.78 (R)	\$225.00	7.1.1(A)
(2) <u>Channel Mileage</u> <u>Facility</u> per mile	\$ 44.28 (I)	None	7.1.1(B)(1)
(3) <u>Channel Mileage</u> <u>Termination</u> per termination	\$177.58 (R)	None	7.1.1(B)(2)
(E) <u>Special Access Surcharge</u>			
Per Voice Grade Equivalent	\$ 25.00	None	7.4.4

\* The Channel Termination rate includes non-chargeable Channel Interfaces set forth in Section 7.1.4, preceding.

**RECEIVED**  
DEC 14 2007

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

---

**Issued: December 14, 2007**      **Todd Irish**      **Effective: December 16, 2007**  
**President**  
**104 North Center**  
**La Harpe, Illinois 61450**

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.4 Billing and Collection Service

	<u>Rates</u>	<u>Tariff Section Reference</u>	
(A) Recording, per customer message	\$ .0459	8.1.1(A)	(R)
(B) Assembling/Editing, per customer message	ICB	8.1.1(B)	
(C) Provision of Message Detail, per message	\$0.1273	8.1.1(C)	
(D) Magnetic Tape, per tape	\$16.61	8.1.1(C) and 8.2.1(E)	
(E) Rating Service, per message	\$ .0127	8.2.1(A)	
(F) Bill Processing Svc., per message	\$ .0436	8.2.1(B)	
(G) Special Billing Service, per bill	ICB	8.2.1(C)	
(H) Data Transmission, per message	\$ .0080	8.2.1(D)	
(I) Provision of Sample Message Date, per record processed	\$ .0155	8.2.1(E)	(R)

FILED IN 92-0041  
 Order No. 92-0041  
 Law  Tariff Prov.  
 CHECK FOR COMPLIANCE

JUL 28 1994

PUBLIC UTILITIES DIVISION  
 Engineering Department

RECEIVED

JUN 24 1994

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.4 Billing and Collection Service (Cont'd)

	<u>Rates</u>	<u>Tariff Section Reference</u>	
(J) Program Development			
- Basic per hour	\$54.85	8.2.1(F)	(R)
- Premium per hour	\$76.07	8.2.1(F)	
(K) Message Billed Service, in which one or more messages or message service related rate elements are billed, per bill rendered to a customer end user account per month	\$0.78	8.2.1(G)	(R)

FILED IN 94-0047  
 Order No. 94-0047  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

JUL 28 1994

PUBLIC UTILITIES DIVISION  
 Engineering Department

**RECEIVED**

JUN 24 1994

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

Issued: June 24, 1994

Diana Irish, Mgr.  
 104 North Center  
 La Harpe, Illinois 61450

Effective: June 25, 1994

ACCESS SERVICE

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

12. Rates and Charges (Cont'd)

NOV - 7 1996

12.2 Rates and Charges (Cont'd)

PUBLIC UTILITIES DIVISION  
Engineering Department

12.2.5 Miscellaneous Services

	Basic time, scheduled <u>working hours</u>	Overtime, outside scheduled <u>working hours</u>	Tariff Section Reference
(A) <u>Additional Engineering Periods</u>			
Per engineer, 1/2 hour or fraction thereof,	\$25.00	\$40.00	9.1
(B) <u>Additional Labor</u>			
Per technician, 1/2 hour or fraction thereof,	\$25.00	\$40.00	9.2
(C) <u>Maintenance of Service</u>			
Per technician, 1/2 hour or fraction thereof,	\$25.00	\$32.50	9.3
(D) <u>Programming Services</u>			
Per programmer, 1/2 hour or fraction thereof,	\$30.00	\$42.50	9.3

(M)  
|  
(M)

**RECEIVED**  
SEP 13 1996

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

(M) Material formerly appearing on Original Page 11 now appears on 1st Revised Page 12.

ACCESS SERVICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0148  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

12. Rates and Charges (Cont'd)

NOV - 7 1996

12.2 Rates and Charges (Cont'd)

PUBLIC UTILITIES DIVISION  
Engineering Department

12.2.5 Miscellaneous Services (Cont'd)

		Per Line Per Request	Tariff Section Reference	
(E)	<u>Presubscription*</u>	\$ 5.00	9.3.3	(C) (M)
(F)	<u>Blocking Services</u>		9.3.5	
	(1) Reserved for Future Use	NA		
	(2) 900 Blocking Service			
	(a) Blocking	\$ 0.00		
	(b) Unblocking	\$14.55		
(G)	<u>Billing Name and Address Information</u>			
		<u>Per BTN</u>		
	Per Request Incidence	\$ .80		
(H)	<u>Unauthorized PIC Change</u>		9.3.3	(N)
	- Residence/Business Per Telephone Exchange Service line or trunk	\$ 35.65		
	- Public and/or Semi- public pay telephone Per Telephone Exchange Service line or trunk	\$ 57.57		(N)

**RECEIVED**  
SEP 13 1996

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

\* This charge is billed to the end user who is the subscriber to the Telephone Exchange Service. In the event an end user is incorrectly presubscribed due to misassignment on the part of the Telephone Company, no charge shall apply. In the event an end user is incorrectly presubscribed due to misassignment on the part of the IC, the Telephone Company will apply the charge of the IC responsible for the assignment of the end user.

(M) Material previously appearing on Original Page 11 now appears on this page.

ACCESS SERVICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.5 Miscellaneous Services (Cont'd)

		<u>Tariff</u> <u>Section</u> <u>Reference</u>
	<u>Nonrecurring Rate</u>	
(I) Originating Line Screening (OLS)/ Flex ANI Service		
- Per exchange access line	\$7.95	6.3.6

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law       Tariff Prov.  
 CHECK FOR COMPLIANCE  
 MAY 28 1998  
 PUBLIC UTILITIES DIVISION  
 Engineering Department

**RECEIVED**  
 APR 14 1998

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

ACCESS SERVICE

**RECEIVED**  
DEC 30 1993

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12.2.6 Special Federal Government Access Services Offerings

(A) Voice Grade Special Access Service

The provision of T-3 and G conditioned services contemplates station and tandem switching operations, using customer provided equipment, as well as Special Access Service. In addition to the rates and charges shown below, appropriate channel termination and mileage rates and charges for narrowband or voice grade services, where required, apply as set forth in Section 12.2.3 preceding.

<u>Voice Grade Secure Communications</u>	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>
Type I, each T-3 Conditioning,	ICB rates and charges apply	
Additional Conditioning, per service termination	ICB rates and charges apply	
Type II, each G-1 Conditioning, per service termination	ICB rates and charges apply	
Type III, each G-2 Conditioning, per service termination	ICB rates and charges apply	
Type IV, each G-3 Conditioning, per service termination	ICB rates and charges apply	

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov  
CENTRAL RECORDS SECTION

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.

Effective: January 1, 1994

104 North Center

La Harpe, Illinois 61450

ACCESS SERVICE

**RECEIVED**

DEC 30 1993

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12.2.6 Special Federal Government Access Services Offerings (Cont'd)

(B) Special Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this tariff to operate in conjunction with this service.

	<u>Recurring Charges</u>	<u>Non Recurring Charges</u>
(1) Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2)	-	ICB
(2) Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2)	-	ICB

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.  
104 North Center  
La Harpe, Illinois 61450

Effective: January 1, 1994

ACCESS SERVICE

RECEIVED  
DEC 30 1993

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12.2.6 Special Federal Government Access Services Offerings (Cont'd)

(B) Special Routing Access (Cont'd)

	<u>Recurring Charges</u>	<u>Non Recurring Charges</u>
(3) Activation or Deactivation, of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence	-	ICB
(4) Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour	ICB*	-
(5) Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent One-half Hour	ICB*	
(6) Special Routing Access Service Maintenance and Administration, Per End Office or Tandem Office Switching System, Per Month	ICB	

FILED IN COMPLIANCE WITH  
 Order No. 93-0142  
 Law  Tariff Prov  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

\* This rate is in addition to Trunk Side Premium Access Service rates, as set forth in Section 12.2.2 preceding, which apply on an ongoing basis whether SRAS is activated or not.

ACCESS SERVICE

RECEIVED

DEC 30 1993

12. Rates and Charges (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12.2 Rates and Charges (Cont'd)

12.2.6 Special Federal Government Access Services Offerings (Cont'd)

(C) Telecommunications Service Priority (TSP) System

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this tariff which operate in conjunction with the TSP System.

	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>
(1) Priority Installation (PI) of an Access Service - Invocation Includes System Development, Verification, Confirmation and Preemption*		
Prime Service Vendor	-	ICB
Subcontractor	-	ICB

(a) Expedited (Emergency or Essential) Regulations, rates and charges are the same as those set forth for the Switched or Special Access Service for which PI is required.

\* When an Access Service is ordered with both PI and PR, the associated nonrecurring charge for PR applies.

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.  
104 North Center  
La Harpe, Illinois 61450

Effective: January 1, 1994

ACCESS SERVICE

RECEIVED

DEC 30 1993

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12.2.6 Special Federal Government Access Services Offerings (Cont'd)

(C) Telecommunications Service Priority (TSP) System (Cont'd)

(1) (Cont'd)

Monthly Rates	Non Recurring Charges
------------------	--------------------------

(b) Utilizing Specially  
Constructed  
Facilities

Regulations, rates and charges are the same as those set forth in Section 10 for Special Construction of the facilities for Switched Access Service for which PI is required.

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov  
 CHIEF CLERK'S OFFICE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.  
104 North Center  
La Harpe, Illinois 61450

Effective: January 1, 1994

ACCESS SERVICE

RECEIVED  
DEC 30 1993

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.6 Special Federal Government Access Services Offerings (Cont'd) ILLINOIS COMMERCE COMMISSION  
CLERK'S OFFICE

(C) Telecommunications Service Priority (TSP) System (Cont'd)

	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>
(2) Priority Restoration (PR) Level Implementation on an Access Service		
(a) When PR level is implemented - includes System Development Verification and Confirmation*		
Prime Service Vendor	-	ICB
Subcontractor	-	ICB
(b) When the PR level is changed on an associated working Access Service - includes Verification and Confirmation		
Prime Service Vendor	-	ICB
Subcontractor	-	ICB

\* When an Access Service is ordered with both PI and PR, the associated nonrecurring charge for PR applies.

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

Issued: December 30, 1993

Diana Irish, Mgr.  
 104 North Center  
 La Harpe, Illinois 61450

Effective: January 1, 1994

RECEIVED

DEC 30 1993

ACCESS SERVICE

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

12. Rates and Charges (Cont'd)

12.2 Rates and Charges (Cont'd)

12.2.6 Special Federal Government Access Services Offerings (Cont'd)

(C) Telecommunications Service Priority (TSP) System (Cont'd)

	<u>Monthly Rates</u>	<u>Non Recurring Charges</u>
(2) (Cont'd)		
(c) Administrative and maintenance of PR Service - includes Reconciliation and Preemption		
Prime Service Vendor	ICB	-
Subcontractor	ICB	-

\* When an Access Service is ordered with both PI and PR, the associated nonrecurring charge for PR applies.

FILED IN COMPLIANCE FILES  
 Order No. 83-0142  
 Law  Tariff Prov  
CHECK FOR COMPLIANCE

JAN 24 1994

PUBLIC UTILITIES DIVISION  
Engineering Department

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces

11.1 Local Transport Interface Groups

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 Section 11.1.1 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.

Interface Group 1 is provided with Type C Transmission Specifications, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, 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 premise's interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups. The various premises interfaces which are available with the Interface Groups, and the Feature Groups with which they may be used, are set forth in Section 11.1.1 following.

11.1.1 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's premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
 Law  
 Tariff Prov.  
Check for Compliance  
JAN 24 1994  
Date  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.1 Interface Group 1 (Cont'd)

Interface Group 1 is not provided in association with FGC and FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGB, FGC or FGD when the first point of switching provides only four-wire terminations.

The transmission path between the point of termination at the customer designated premises and the first point of switching 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.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. 83-0142	<input type="checkbox"/> Tariff Prov.
<input type="checkbox"/> Law	Check for Compliance
Date	JAN 24 1994
PUBL	
ENG	

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

RECEIVED

DEC 30 1993

11.1 Local Transport Interface Groups (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

11.1.1 Interface Group 1 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC, or FGD such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

11.1.2 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.

The interface is provided with loop supervisory signaling. When the interface is associated with FGB, FGC or FGD such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

11.1.3 Interface Group 3

Interface Group 3 provides group level analog transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals between the

FILED IN COMPLIANCE WITH	<input checked="" type="checkbox"/> Order No. 83-0192	<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
	Check for Compliance		Date
	JAN 24 1994		PUBLIC UTILITIES DIVISION
			ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

RECEIVED  
DEC 30 1993

11.1 Local Transport Interface Group (Cont'd)

11.1.3 Interface Group 3 (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

frequencies of 60 to 108 kHz, with the capability to channelize up to 12 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group 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 12 transmission paths of frequency bandwidth approximately 300 to 3000 Hz.

The interface is provided with individual transmission path SF supervisory signaling.

11.1.4 Interface Group 4

Interface Group 4 provides supergroup level analog transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals between the frequencies of 312 to 552 kHz, with the capability to channelize up to 60 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group 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 and channel bank equipment to derive 60 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interface is provided with individual transmission path SF supervisory signaling.

11.1.5 Interface Group 5

Interface Group 5 provides mastergroup level analog transmission at the point of termination at the customer designated premises.

FILED IN COMPLIANCE WITH	<input checked="" type="checkbox"/> Order No. 83-0192	<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
	Check for Compliance		
	Date JAN 24 1994		
	PUBLIC UTILITIES DIVISION ENGINEERING DEPARTMENT		

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.5 Interface Group 5 (Cont'd)

The interface is capable of transmitting electrical signals between the frequencies of 564 to 3084 kHz, with the capability to channelize up to 600 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group 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 and channel bank equipment to derive 600 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interface is provided with individual transmission path SF supervisory signaling.

11.1.6 Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to 24 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 24 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 in D3/D4 format.

The interface is provided with individual transmission path bit stream supervisory signaling.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSIC  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	<input checked="" type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Order No. 83-0142	Check for Compliance	
Date JAN 24 1994	PUBLIC UTILITIES DIVISION	
	ENGINEERING DEPARTMENT	

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.7 Interface Group 7

Interface Group 7 provides DS1C level digital transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals at a nominal 3.152 Mbps, with the capability to channelize up to 48 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 up to 48 voice frequency 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, DS1 signals in D3/D4 format.

The interface is provided with individual transmission path bit stream supervisory signaling.

11.1.8 Interface Group 8

Interface Group 8 provides DS2 level digital transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals at a nominal 6.312 Mbps, with the capability to channelize up to 96 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 in its office to derive up to 96 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 DS1 signals in D3/D4 format.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSK  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	<input checked="" type="checkbox"/> Order No. 83-0142	<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
	Check for Compliance	Date JAN 24 1994	
PUBLIC UTILITIES DIVISION ENGINEERING DEPARTMENT			

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.8 Interface Group 8 (Cont'd)

The interface is provided with individual transmission path bit stream supervisory signaling.

11.1.9 Interface Group 9

Interface Group 9 provides DS3 level digital transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals at a nominal 44.736 Mbps, with the capability to channelize up to 672 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 up to 672 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, DS1 signals in D3/D4 format.

The interface is provided with individual transmission path bit stream supervisory signaling.

11.1.10 Interface Group 10

Interface Group 10 provides DS4 level digital transmission at the point of termination at the customer designated premises. The interface is capable of transmitting electrical signals at a nominal 274.176 Mbps, with the capability to channelize up to 4032 voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog

RECEIVED

DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	<input type="checkbox"/> Tariff Prov
<input checked="" type="checkbox"/> Order No. 83-0142	<input type="checkbox"/> Check for Compliance
<input type="checkbox"/> Law	<input type="checkbox"/> Law
JAN 24 1994	
PUBLIC UTILITIES DIVISION ENGINEERING DEPARTMENT	

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.10 Interface Group 10 (Cont'd)

terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive up to 4032 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, DS1 signals in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 82-0142  
 Law  
 Tariff Prov.  
Date JAN 24 1994  
Check for Compliance  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

Issued: December 30, 1993

Donald L. Bell, V. P.

Effective: January 1, 1994

211 South Main

Virginia, Illinois 62691

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.11 Available Premises Interface Codes

Following is a matrix showing, for each Interface Group, which premises interface codes are available as a function of the Telephone Company switch supervisory signaling and Feature Group. For explanations of these codes, see the Glossary of Channel Interface Codes in Section 11.3 following.

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature Group			
			A	B	C	D
1	LO	2LS2	X			
	LO	2LS3	X			
	GO	2GS2	X			
	GO	2GS3	X			
	LO, GO	2DX3	X			
	LO, GO	4EA3-E	X			
	LO, GO	4EA3-M	X			
	LO, GO	6EB3-E	X			
	LO, GO	6EB3-M	X			
	RV, EA, EB, EC	2DX3		X	X	X
	RV, EA, EB, EC	4EA3-E		X	X	X
	RV, EA, EB, EC	4EA3-M		X	X	X
	RV, EA, EB, EC	6EB3-E		X	X	X
	RV, EA, EB, EC	6EB3-M		X	X	X
	EA, EB, EC	6EC3			X	X
	RV	2RV3-0		X	X	X
	RV	2RV3-T		X	X	X

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  
 Tariff Prov.  
 Compliance  
 Date: JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.11 Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature Group			
			A	B	C	D
2	LO, GO	4SF2	X			
	LO, GO	4SF3	X			
	LO	4LS2	X			
	LO	4LS3	X			
	LO	6LS2	X			
	GO	4GS2	X			
	GO	4GS3	X			
	GO	6GS2	X			
	LO, GO	4DX2	X			
	LO, GO	4DX3	X			
	LO, GO	6EA2-E	X			
	LO, GO	6EA2-M	X			
	LO, GO	8EB2-E	X			
	LO, GO	8EB2-M	X			
	LO, GO	6EX2-B	X			
	RV, EA, EB, EC	4SF2		X	X	X
	RV, EA, EB, EC	4SF3		X		
	RV, EA, EB, EC	4DX2		X	X	X
	RV, EA, EB, EC	4DX3		X		
	RV, EA, EB, EC	6DX2			X	
	RV, EA, EB, EC	6EA2-E		X	X	X
	RV, EA, EB, EC	6EA2-M		X	X	X
	RV, EA, EB, EC	8EB2-E		X	X	X
	RV, EA, EB, EC	8EB2-M		X	X	X
	EA, EB, EC	8EC2-M			X	X
	RV	4RV2-O		X	X	X
	RV	4RV2-T		X	X	X
	RV	4RV3-O		X	X	
	RV	4RV3-T		X	X	

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  
 Tariff Prov.  
 Date: CHA No. 241994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.11 Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company		Premises Interface Code	Feature Group			
	Switch	Supervisory Signaling		A	B	C	D
3	LO, GO		4AH5-B	X			
	RV, EA, EB, EC		4AH5-B		X	X	X
4	LO, GO		4AH6-C	X			
	RV, EA, EB, EC		4AH6-C		X	X	X
5	LO, GO		4AH6-D	X			
	RV, EA, EB, EC		4AH6-D		X	X	X
6	LO, GO		4DS9-15	X			
	LO, GO		4DS9-15L	X			
	RV, EA, EB, EC		4DS9-15		X	X	X
	RV, EA, EB, EC		4DS9-15L		X	X	X
	SS7		4DS9-15L			X	X
7	LO, GO		4DS9-31	X			
	RV, EA, EB, EC		4DS9-31		X	X	X
	LO, GO		4DS9-31L	X			
	RV, EA, EB, EC		4DS9-31L		X	X	X
	SS7		4DS9-31			X	X

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	<input checked="" type="checkbox"/> Order No. 83-0142	<input type="checkbox"/> Tariff Prov.
		<input type="checkbox"/> Law
		<input type="checkbox"/> for Compliance
	<b>JAN 24 1994</b>	
		PUBLIC UTILITIES DIVISION
		ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.11 Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company Switch Supervisory Signaling	Premises Interface Code	Feature Group			
			A	B	C	D
8	LO, GO	4DS0-63	X			
	LO, GO	4DS0-63L	X			
	RV, EA, EB, EC	4DS0-63		X	X	X
	RV, EA, EB, EC	4DS0-63L		X	X	X
	SS7	4DS0-63			X	X
9	LO, GO	4DS6-44	X			
	LO, GO	4DS6-44L	X			
	RV, EA, EB, EC	4DS6-44		X	X	X
	RV, EA, EB, EC	4DS6-44L		X	X	X
	SS7	4DS6-44			X	X
10	LO, GO	4DS6-27	X			
	LO, GO	4DS6-27L	X			
	RV, EA, EB, EC	4DS6-27		X	X	X
	RV, EA, EB, EC	4DS6-27L		X	X	X

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

11.1.12 Supervisory Signaling

- For Interface Groups 1 and 2

DX Supervisory Signaling,  
E&M Type I Supervisory Signaling,  
E&M Type II Supervisory Signaling, or  
E&M Type III Supervisory Signaling

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  Tariff Prov.  
 Law  
Date JAN 24 1994 Check for Compliance  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.1 Local Transport Interface Groups (Cont'd)

11.1.12 Supervisory Signaling (Cont'd)

- For Interface Group 2  
SF Supervisory Signaling, or  
Tandem Supervisory Signaling

- For Interface Groups 6 through 10

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. 83-0142	
<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Check for Compliance	
Date: JAN 24 1994	
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

These Interface Groups may be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company central offices. Generally, such signaling is available only where the entry switch provides an analog, i.e., non digital, interface to the transport termination, and is not available in combination with the SS7 Signaling option.

11.2 Transmission Specifications Switched Access Service

11.2.1 Standard Transmission Specifications

Following are descriptions of the three Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups and Interface Groups with which the Feature Group Standard Transmission Specifications are provided are set forth in Section 6.5. preceding.

(A) 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  $\pm$  2.0 dB.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.2 Transmission Specifications Switched Access Service**

**11.2.1 Standard Transmission Specifications**

**(A) Type A Transmission Specifications**

**(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:

Route Miles	C-Message Noise
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.

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.2 Transmission Specifications Switched Access Service (Cont'd)**

**11.2.1 Standard Transmission Specifications (Cont'd)**

**(A) 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
(for FGB only)		

(Z)

**FILED IN COMPLIANCE WITH**  
 Order No. 83-0142  
 Law                       Tariff Prov.  
 CHECK FOR COMPLIANCE

NOV - 8 1996

**PUBLIC UTILITIES DIVISION**  
 Engineering Department

**RECEIVED**  
 SEP 16 1996

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)**

**11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)**

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
GO -		ground start loop signalling - open end function by customer or customer's end user.	(Z)
GS -		Ground start loop signaling - closed end function by customer or customer's end user.	
IA -		E.I.A. (25 pin RS-232)	
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.	
PG -		program transmission - no dc signaling.	
-	1	nominal frequency from 50 to 15000 Hz.	
-	3	nominal frequency from 200 to 3500 Hz.	
-	5	nominal frequency from 100 to 5000 Hz.	
-	8	nominal frequency from 50 to 8000 Hz.	
PR		protective relaying*.	

\* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

**RECEIVED**  
 SEP 16 1996

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.1 Standard Transmission Specifications (Cont'd)

(A) Type B Transmission Specifications (Cont'd)

(3) C-Message Noise (Cont'd)

Route Miles	C-Message Noise*	
	Type B2	Type B1
less than 50	35 dBmCO	32 dBmCO
51 to 100	37 dBmCO	33 dBmCO
101 to 200	40 dBmCO	35 dBmCO
201 to 400	43 dBmCO	37 dBmCO
401 to 1000	45 dBmCO	39 dBmCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBmCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss for FGC and FGD 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 differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

\* For Feature Group C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or B2 will be provided as set forth in Technical Reference TR-NPL-000334.

**RECEIVED**  
 DEC 30 1993  
 ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.2 Transmission Specifications Switched Access Service (Cont'd)**

**11.2.1 Standard Transmission Specifications (Cont'd)**

**(A) Type B Transmission Specifications (Cont'd)**

**(5) Echo Control (Cont'd)**

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

<u>Loss</u>	<u>Echo Return Loss</u>	<u>Singing Return</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
- Via Access Tandem		
For FGB access	8 dB	4 dB
For FGC access (Effective 4-wire trans- mission path at end office)	16 dB	11 dB
For FGC access (Effective 2-Wire trans- mission path at end office)	13 dB	6 dB

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
 Law  
 Staff Prov.  
Check for Compliance  
Date JAN 24 1994  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

Issued: December 30, 1993

Donald L. Bell, V. P.  
211 South Main  
Virginia, Illinois 62691

Effective: January 1, 1994

**ACCESS SERVICE**

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.1 Standard Transmission Specifications (Cont'd)

(A) 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:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
Date JAN 24 1994 Check for Compliance  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.1 Standard Transmission Specifications (Cont'd)

(B) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is plus or minus 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.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

Route Miles	C-Message Noise*	
	Type C2	Type C1
less than 50	38 dBmCO	32 dBmCO
51 to 100	39 dBmCO	33 dBmCO
101 to 200	41 dBmCO	35 dBmCO
201 to 400	43 dBmCO	37 dBmCO
401 to 1000	45 dBmCO	39 dBmCO

\* For Feature Group C and D only type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference TR-NPL-000334.

FILED IN COMPLIANCE WITH  
Clear No. 83-0112  
JAN 24 1994  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.2 Transmission Specifications Switched Access Service (Cont'd)**

**11.2.1 Standard Transmission Specifications (Cont'd)**

**(B) Type C Transmission Specifications (Cont'd)**

**(4) C-Notch Noise**

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBmCO.

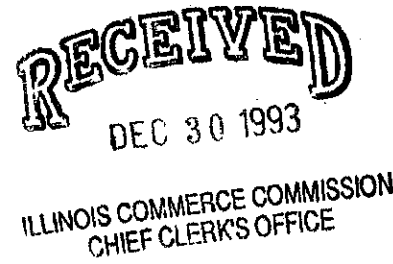
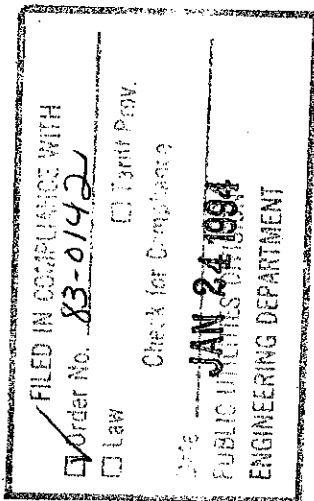
**(5) Echo Control**

Echo Control, identified as Return Loss and expressed as Echo 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>Loss</u>	<u>Echo Return Loss</u>	<u>Singing Return</u>
POT to Access Tandem	13 dB	6 dB
Pot to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem (for FGB only)	8 dB	4 dB

**11.2.2 Data Transmission Parameters**

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. The specific applications in terms of the Feature Groups with which they are provided are set forth in Section 6.5 preceding. Following are descriptions of each:



ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.2 Data Transmission Parameters (Cont'd)

(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.

(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

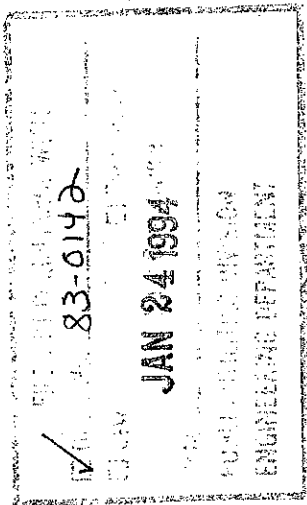
The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2) 33 dB

Third Order (R3) 37 dB

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE



ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.2 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

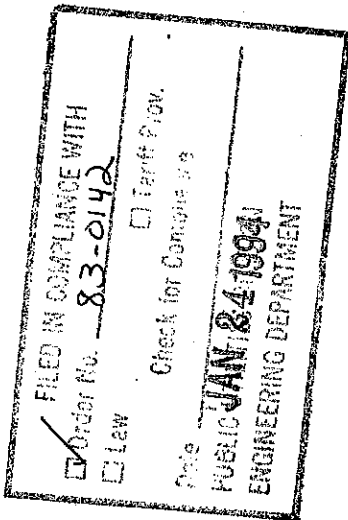
Equal to or greater than

50 route miles

500 microseconds

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE



ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.2 Transmission Specifications Switched Access Service (Cont'd)

11.2.2 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 7 degrees peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSIC  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. 83-0142	
<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Date	JAN 21 1994
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

Issued: December 30, 1993

Donald L. Bell, V. P.

Effective: January 1, 1994

211 South Main

Virginia, Illinois 62691

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes

This section explains the Channel Interface codes and Network Channel codes that the customer must specify when ordering Special Access Service, Switched Access Entrance Facilities, and Voice Grade and High Capacity Direct Trunked Transport. Included is an example which explains the specific characters of the code, a glossary of Channel Interface codes, impedance levels, Network Channel codes and compatible Channel Interfaces.

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 specification 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.

Example: If the customer specifies a NT Network Channel Code and a 2DC8-3 Channel Interface at the customer's premises, the following is being requested:

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. 83-0142	
<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Check for Compliance	
Date	JAN 24 1994
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

Issued: December 30, 1993

Donald L. Bell, V. P.  
211 South Main  
Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

- NT = Metallic Channel with a Predefined Technical Specification Package (1)
- 2 = Number of physical wires at customer premises
- DC = Facility interface for direct current or voltage
- 8 = Variable impedance level
- 3 = Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)

**RECEIVED**  
DEC 30 1993  
ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

11.3.1 Glossary of Channel Interface Codes and Options

<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
CT -		Centrex Tie Trunk Termination
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
DC -		direct current or voltage
-	1	monitoring interface with services RC combination (McCulloh format)
-	2	Telephone Company energized alarm channel
-	3	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)

FILED IN COMPLIANCE WITH  
Order No. 83-0145  
 Law       Tariff Prov.  
Check for Compliance  
Date JAN 24 1994  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
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
-	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

**RECEIVED**  
 DEC 30 1993  
 ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-014  
 Law  
 Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
-	48	4.8 kbps
-	56	56.0 kbps
-	96	9.6 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 farming format
DX -		duplex signaling interface at customer's point of termination
DY -		duplex signaling interface at customer's end user's point of termination
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.

**RECEIVED**  
DEC 30 1993  
ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

✓ COMPLIANCE WITH  
ILL. J.C. No. 83-0142  
Check for Compliance  
Date **JAN 24 1994**  
PUBLIC UTILITIES COMMISSION  
ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
GO -		ground start loop signalling - open end function by customer or customer's end user.	(Z)
GS -		Ground start loop signaling - closed end function by customer or customer's end user.	
IA -		E.I.A. (25 pin RS-232)	
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.	
PG -		program transmission - no dc signaling.	
-	1	nominal frequency from 50 to 15000 Hz.	
-	3	nominal frequency from 200 to 3500 Hz.	
-	5	nominal frequency from 100 to 5000 Hz.	
-	8	nominal frequency from 50 to 8000 Hz.	
PR		protective relaying*.	

\* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

NOV - 7 1996

PUBLIC UTILITIES DIVISION  
Engineering Department

RECEIVED  
SEP 16 1996

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
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.
TF -		telephotograph interface.
TT -		telegraph/teletypewriter interface at either customer POT or customer's end user POT.
-	2	20.0 milliamperes.
-	3	3.0 milliamperes.
-	6	62.5 milliamperes.
TV -		television interface.
-	1	combined (diplexed) video and one audio signal.
-	2	combined (diplexed) video and two audio signals.
-	5	video plus one (or two) audio 5 kHz signal(s) or one (or two) two-wire.
-	15	video plus one (or two) audio 15 kHz signal(s).

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

**ACCESS SERVICE**

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.2 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

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

+ 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**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)**

**11.3.3 Digital Hierarchy Channel Interface Codes (4DS)**

Customers selecting the multiplexed four-wire DSX-1 or higher facility interface option at the customer designated premises will be requested to provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the channel interface code 4DS8, 4DS0 or 4DS6 plus the speed options indicated below:

<u>Interface Code and Speed Option</u>	<u>Nominal Bit Rate (Mbps)</u>	<u>Digital Hierarchy Level</u>
4DS8-15	1.544	DS1
4DS8-31	3.152	DS1C
4DS0-63	6.312	DS2
4DS6-44	44.736	DS3
4DS6-27	274.176	DS4

**RECEIVED**  
DEC 30 1993

**11.3.4 Service Designator/Network Channel Code Conversion Table**

The purpose of this table is to show the relationship between the service designator codes (e.g., VGC, MT2, etc.) and the network channel codes that are used for:

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

<u>Service Designator Code</u>	<u>Network Channel Code</u>
MTC	MQ
MT1	NT
MT2	NU
MT3	NV
TGC	NQ
TG1	NW
TG2	NY
VGC	LQ
VGW	SE
VG1	LB

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. <u>83-0142</u>	
<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Check for Compliance	
Date	<u>JAN 24 1994</u>
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.4 Service Designator/Network Channel Code Conversion Table (Cont'd)

<u>Service Designator Code</u>	<u>Network Channel Code</u>
VG2	LC
VG3	LD
VG4	LE
VG5	LF
VG6	LG
VG7	LH
VG8	LJ
VG9	LK
VG10	LN
VG11	LP
VG12	LR
APC	PQ
AP1	PE
AP2	PF
AP3	PJ
AP4	PK
TVC	TQ
TV1	TV
TV2	TW
DA1	XA
DA2	XB
DA3	XG
DA4	XH
HCO	HS
HC1	HC
HC1C	HD
HC2	HE
HC3	HF
HC4	HG

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces

The following tables show the channel interface codes (CIs) which are compatible:

(A) Metallic

Compatible CIs

2DC8-1 2DC8-2

2DC8-3 2DC8-3

4DS8-\* 2DC8-1

4DS8-\* 2DC8-2

\* See Section 11.3.3 preceding for explanation.

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. <u>83-0142</u>	
<input type="checkbox"/> Law	<input type="checkbox"/> Tariff Prov.
Check for Compliance	
Date <u>JAN 24 1994</u>	
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

**RECEIVED**  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade

Compatible CIs      Compatible CIs      Compatible CIs

2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS2	2LA2
	4DS8*		2LB2		2LB2
	4DX2		2LC2		2LC2
	4DX3		2LO3		
	4DY2		2LS2	2LS3	2LA2
	4EA2-E		2LS3		2LB2
	4EA2-M				2LC2
	4SF2	2GO2	2GS2		
	4SF3		2GS3	2NO2	2DA2
	6DX2				2NO2
	6DY2	2GO3	2GS2		
	6DY3		2GS3	2NO3	2NO2
	6EA2-E				2PR2
	6EA2-M	2LO2	2LS2		
	6EB2-E		2LS3	2TF3	2TF2
	6EB2-M				
	6EB3-E	2LO3	2LS2		
	8EB2-E		2LS3		
	8EB2-M				
	8EC2				
	9DY2				
	9DY3				
	9EA2				
	9EA3				

FILED IN COMPLIANCE WITH  
 Order No. 83-0112  
 Law  
 Tarif Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
 DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

\* See Section 11.3.3 preceding for explanation.

ACCESS SERVICE

11. Interface Groups, Transmission Specification and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

Compatible CIs

4AB2 2AC2  
4AB2  
4AC2  
4SF2

4AB3 2AC2  
4AC2  
4SF2

4AC2 2AC2  
4AC2

FILED IN COMPLIANCE WITH	
<input checked="" type="checkbox"/> Order No. 83-0142	<input type="checkbox"/> Tariff Prov.
<input type="checkbox"/> Law	Check for Compliance
Date	JAN 24 1994
PUBLIC UTILITIES DIVISION	
ENGINEERING DEPARTMENT	

RECEIVED

DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
	4DS8-*2AC2	4DS8-*4DG2
	2DA2	4LR2
	2DY2	4LS2
	2GO2	4NO2
4DA2 4DA2	2GO3	4PR2
	2GS2	4RV2-T
4DB2 2DA2	2GS3	4SF2
	2LA2	4SF3
	2LB2	4TF2
	2LC2	6DA2
	2LO2	6DY2
	2LO3	6DY3
	2LR2	6EA2-E
	2LS2	6EA2-M
	2LS3	6EB2-E
4DD3 2DE2	2NO2	6EB2-M
4DE2	2PR2	6GS2
	2RV2-T	6LS2
	2TF2	8EB2-E
	4AC2	8EB2-M
	4DA2	9DY2
	4DE2	9DY3
	4DX2	9EA2
	4DX3	9EA3
	4DY2	
	4EA2-E	
	4EA2-M	

FILED IN 11-11-93

Order No. 83-014

Law

Date JAN 24 1994

PUBLIC UTILITY COMMISSION

ENGINEERING DEPARTMENT

\* See Section 11.3.3 preceding for explanation.

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.  
211 South Main  
Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) 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		

THIS CHECK RELEASE WITH  
 83-0-8  
 Check for C. J. Bell  
 JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
 DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.  
 211 South Main  
 Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) 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	9EB2-M	4SF2
	9DY2	6GS2
4EA2-M 2DY2	9DY3	
4DY2	9EA2	
4EA2-M	9EA3	4GS 2GS
4SF2		2LS
		4GS
		4LS
6DY2		
6DY3		
6EB2-E		
6EB2-M		
8EB2-E		
8EB2-M		
9DY2		
9DY3		

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  
 Tariff Prov.  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
 DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.  
 211 South Main  
 Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) 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
			4SF2		4AC2
4LO3	2LS2				4DY2
	2LS3	4NO2	2DA2		4LS2
	4LS2		2DE2		4RV2-T
	4SF2		2NO2		4SF2
	6LS2		4DA2		6DY2
			4DE2		6DY3
4LR2	2LR2		4NO2		6GS2
	4LR2		6DA2		9DY2
	4SF2				9DY3
		4RV2-O	2RV2-T		
4LR3	2LR2		4RV2-T	4SF3	2DY2
	4LR2		4SF2		2GO3
	4SF2				2GS2
		4SF2	2AC2		2GS3
4LS2	2LA2		2DY2		2LA2
	2LB2		2GS2		2LB2
	2LC2		2GS3		2LC2
	2LO2		2LA2		2LO3
	2LO3		2BL2		2LR2
			2LC2		

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
Law  
Date  
 Tariff Prov.  
 Check for Compliance  
PULASKI COUNTY DIVISION  
ENGINEERING DEPARTMENT  
JAN 1 1994

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.  
211 South Main  
Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

**RECEIVED**

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

DEC 30 1993

11.3.5 Compatible Channel Interfaces (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

(B) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4SF3	2LS2	6DA
	2LS3	4DA2
	2RV2-T	6DA2
	4DY2	6DY2
	4EA2-E	6DY3
	4EA2-M	6DX2
	4GS2	2DY2
	4LR2	4DY2
	4LS2	4EA2-E
	4RV2-T	6EA2-E
	4SF2	2AC2
	4SF3	4EA2-M
	6DY2	2DY2
	6DY3	4SF2
	6EB2-E	6DY2
		6DY3
2RV2-T		2LC2
		2LO3
		2LS2
		2LS3
		6EB2-M
		8EB2-E
		4AC2
		4DY2
		8EB2-M
		9DY2
		9DY3
		9DY3
		9EA2
		4LS2
		9EA3
		9EA3
		4SF2
		4SF3
		6DY2
		2DY2

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
Check for Compliance  
PUBLIC UTILITIES DIVISION  
ENGINEERING DEPARTMENT  
JAN 24 1994

Issued: December 30, 1993

Donald L. Bell, V. P.  
211 South Main  
Virginia, Illinois 62691

Effective: January 1, 1994

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

RECEIVED

DEC 30 1993

(B) Voice Grade (Cont'd)

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4TF2	2TF2		4DY2		6DY2
	4TF2		6DY2		6DY3
					6EA2-E
					6EA2-M
6EA2-E	6EB2-E	6EA2-M	6DY2	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	6EB2-E	2DY2		8EB2-M
	2LB2		4DY2		9DY2
	2LC2		4SF2		9DY3
	2LO3		6DY2		9EA2
	2LS2		6DY3		9EA3
	2LS3		6EB2-E	6EX2-A	2GS2
	2RV2-T		6EB2-M		2GS3
	4AC2		9DY2		2LS2
	4DY2		9DY3		2LS3
	4EA2-E				4GS2
	4EA2-M				4LS2
	4LS2	6EB2-M	2DY2		4SF2
	4RV2-T		4DY2		6GS2
	4SF2		4SF2		

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Low JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4SF3	6DY2 6DY3 6EB2-M 9DY2 9DY3	6LS2

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.

Effective: January 1, 1994

211 South Main  
Virginia, Illinois 62691

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) 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		

✓ COMPLIANCE WITH  
 83-0192  
 JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
 DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P.

Effective: January 1, 1994

211 South Main  
 Virginia, Illinois 62691

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) 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				6DY3
	6DY3	9DY3	2DY2		6EA2-E
	6EA2-E		4DY2		6EA2-M
	6EA2-M		6DY2		6EB2-E
	6EB2-E		6DY3		6EB2-M
	6EB2-M		9DY2		8EB2-E
	8EB2-E		9DY3		8EB2-M
	8EB2-M				9DY2
	9DY2	9EA2	2DY2		9DY3
	9DY3		4DY2		9EA3
	9EA2		4EA2-E		
	9EA3		4EA2-M		
			6DY2		
			6DY3		
			6EA2-E		
			6EA2-M		
			6EB2-E		
			6EB2-M		
			8EB2-E		
			8EB2-M		
			9DY2		
			9DY3		
			9EA2		
			9EA3		

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

RECEIVED  
 DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
 CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

RECEIVED  
SEP 13 1996

(C) Program Audio

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2PG2-1	2PG1-1 2PG2-1	4DS8-15E	2PG1-3 2PG2-3
2PG2-3	2PG1-3 2PG2-3	4DS8-15F	2PG1-5 2PG2-5
2PG2-5	2PG1-5 2PG2-5	4DS8-15G	2PG1-8 2PG2-8
2PG2-8	2PG1-8 2PG2-8	4DA8-15H	2PG1-1 2PG2-1

(M)

FILED IN COMPLIANCE WITH  
Order No. 83-0142  
 Law  Tariff Prov.  
CHECK FOR COMPLIANCE

NOV - 7 1996

PUBLIC UTILITIES DIVISION  
Engineering Department

(M)

(M) Material formerly appearing on Original Page 354, now appears on Original Page 354.1

(M) (N)

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(D) 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	4DU5-28	6DU5-48
		6DU5-48			
		4DU5-96	4DU5-96	4DU5-96	
		6DU24			
		6DU5-48	4DU5-56	4DU5-56	6DU5-96
		6DU5-96			
		6DU5-96			
		4DU5-56	4DU8-56		6DU5-56
		6DU5-56	6DU5-56		6DU5-56

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 Law  Tariff Prov.  
GROUP FOR COMPLIANCE

NOV - 7 1996

PUBLIC UTILITIES DIVISION  
Engineering Department

(C)  
(C)

High Capacity

	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	
	4DSO-63	4DSO-63	4DS8-15J	4DU8-A
		4DU8-A,B or C		6DU8-A
		6DU8-A,B or C		
			4DS8-15K	4DU8-B
	4DS6-27	4DS6-27		4DU8-C
		4DU8-A,B or C		6DU8-B
		6DU8-A,B or C		6DU8-C
			4DS8-31	4DS8-31
	4DS6-44	4DS6-44		4DU8-A,B or C
		4DU8-A,B or C		6DU8-A,B or C
		6DU8-A,B or C		
			4DU8-A,B	
	4DS8-15	4DS8-15+	or C	4DU8-A,B
		4DU8-8		
		6DU8-8		

+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

(M) Material previously appearing on Original Page 354 now appears on this page.

**RECEIVED**  
SEP 13 1996

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.4 WATS Access Line Standard Transmission Specifications

11.4.1 Standard Two-Wire Voice Transmission Specifications

(A) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is plus or minus 4.0 dB.

(B) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz in -3.0 dB to +9.0 dB.

(C) 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 dBmCO
51 to 100	37 dBmCO
101 to 200	40 dBmCO
201 to 400	43 dBmCO
401 to 1000	45 dBmCO

(D) Echo Control

Return Loss for both Echo Return Loss (ERL) and Return Loss (SRL), is equal to or greater than:

ERL	6.0 dB
SRL	3.0 dB

RECEIVED

DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

FILED IN COMPLIANCE WITH  
 Order No. 83-0142  
 LAW  
 Tariff Prov.  
 Check for Compliance  
 Date JAN 24 1994  
 PUBLIC UTILITIES DIVISION  
 ENGINEERING DEPARTMENT

Cass County Telephone Company

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.4 WATS Access Line Standard Transmission Specifications (Cont'd)**

**11.4.2 Standard Four-Wire Voice Transmission Specifications**

**(A) Loss Deviation**

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -3.0 dB to +3.0 dB.

**(B) Attenuation Distortion**

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -1.0 dB to +4.5 dB.

**(C) C-Message Noise**

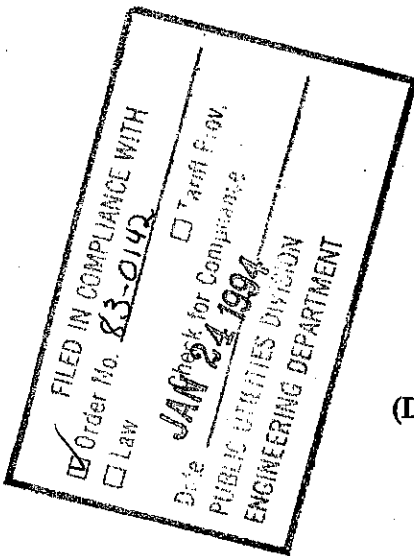
The Maximum C-Message Noise for the transmission path at the route miles listed is less than:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	35 dBmCO
51 to 100	37 dBmCO
101 to 200	40 dBmCO
201 to 400	43 dBmCO
401 to 1000	45 dBmCO

**(D) Echo Control**

The Equal Level Echo Path Loss for both Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL	15.0 dB
SRL	9.0 dB



**RECEIVED**

DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

Issued: December 30, 1993

Donald L. Bell, V. P. Effective: January 1, 1994  
211 South Main  
Virginia, Illinois 62691

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)

11.5 WATS Access Line Data Transmission Parameters

11.5.1 Signal to C-Notched Noise Ratio

The maximum Signal-to-C-Notched Noise Ratio is 30 dB.

11.5.2 Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands specified is:

- 1000 microseconds 604 to 2804 Hz
- 500 microseconds 1000 to 2404 Hz

11.5.3 Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in 1 minutes is no more than 15 counts.

Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

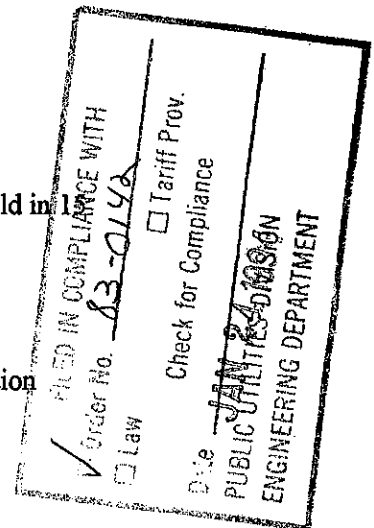
- Second Order (R2) 31 dB
- Third Order (R3) 34 dB

11.5.4 Phase Jitter

The Phase Jitter over the 4 to 300 Hz frequency band is less than or equal to 7 degrees peak-to-peak.

11.5.5 Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.



ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE

**ACCESS SERVICE**

**11. Interface Groups, Transmission Specifications and Channel Interfaces (Cont'd)**

**11.6 WATS Access Line Transmission Specifications**

**11.6.1 Improved Two-Wire Voice Transmission Specifications**

**(A) Loss Deviation**

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0 to +4.0 dB.

**(B) 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.

**(C) C-Message Noise**

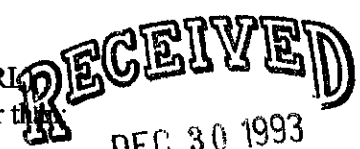
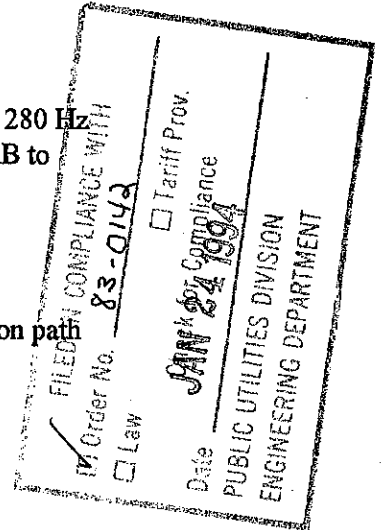
The maximum C-Message Noise for the transmission path at the route miles listed is less than:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	35 dBmCO
51 to 100	37 dBmCO
101 to 200	40 dBmCO
201 to 400	43 dBmCO
401 to 1000	45 dBmCO

**(D) 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



DEC 30 1993

ILLINOIS COMMERCE COMMISSION  
CHIEF CLERK'S OFFICE