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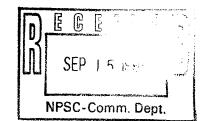
Nebraska Public Service Commission

REGULATIONS, RATES AND CHARGES APPLYING TO THE PROVISION OF ACCESS SERVICES FOR CONNECTION TO INTRASTATE COMMUNICATIONS FACILITIES FOR CUSTOMERS WITHIN THE OPERATING TERRITORY OF IOWA NETWORK SERVICES, INC.

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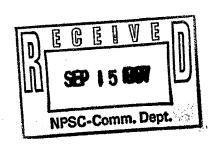
THE PROVISION OF ACCESS SERVICES FOR

CONNECTION TO INTRASTATE COMMUNICATIONS FACILITIES

FOR CUSTOMERS WITHIN THE

OPERATING TERRITORY OF

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CONCURRING CARRIERS

NO CONCURRING CARRIERS

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

MINNESOTA INDEPENDENT EQUAL ACCESS CORPORATION

Plymouth, Minnesota

REGISTERED SERVICE MARKS

REGISTERED TRADEMARKS

NONE

NONE

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# EXPLANATION OF SYMBOLS

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

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# EXPLANATION OF ABBREVIATIONS

Alternating current ac Address Complete Message ACM Actual Measured Loss AML Automatic Number Identification ANI Program Audio AP AT&T Communications AT&T-C Business Day BDBusy Hour Minutes of Capacity BHMC Centralized Automatic Reporting on Trunks CAROT Common Channel Signaling
 Common Channel Signaling
 Common Channel Signaling CCS Common Channel Signaling Access CCSA Common Channel Signaling Access Network CCSAN Changes Interface CI Central Office CO Central Office Centrex COCTX Central Office Equipment COE Continued Cont'd Customer Provided Equipment CPE Centrex Ctx Directory Assistance DA decibel dΒ Decibel Reference Noise C-Message Weighting Decibel Reference Noise C-Message Weighted O Decibel(s) Relative to 1 Volt (reference) dBrnC dBrnCO dBv Decibel(s) Relating to 1 Volt (reference) dBvl direct current đc Direct Distance Dialing DDD Envelope Delay Distortion EDD Equal Level Echo Path Loss ELEPL Expected Measured Loss EML

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# EXPLANATION OF ABBREVIATIONS (Cont'd)

EPL ERL ESS	- -	Echo Path Loss Echo Return Loss Electronic Switching System
ESSX EXM F	- -	Electronic Switching System Exchange Exit Message frequency
FID F.C.C. FX	-	Field Identifier Federal Communications Commission Foreign Exchange
HC Hz IC	- -	High Capacity Hertz Interexchange Carrier
ICB ICL kbps	· ·	Individual Case Basis Inserted Connection Loss kilobits per second
kHz LATA LIDB	-	kilohertz Local Access and Transport Area Line Information Data Base
Ma Mbps MEANS	- -	milliamperes Megabits per second Minnesota Equal Access Network Services, Inc.
MHz MMUC MRC	- - -	Megahertz Minimum Monthly Usage Charge Monthly Recurring Charge
MT MTS NPA	-	Metallic Message Telecommunications Service(s) Numbering Plan Area
NRC NTS NXX	- - -	Nonrecurring Charge Non-Traffic Sensitive Three-Digit Central Office Code

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# EXPLANATION OF ABBREVIATIONS (Cont'd)

OTPL PBX PCM	- - -	Zero Transmission Level Point Private Branch Exchange Pulse Code Modulation
PLR POT PTC	- -	Private Line Ringdown Point of Termination Participating Telephone Company
RMS RSM RSS	-	Root-Mean-Square Remote Switching Modules Remote Switching Systems
SAC SCP SNAC	- -	Service Access Code Service Control Point Signaling Network Access Connection
SPOI SRL SS7	- - -	Signaling Point of Interconnection Singing Return Loss Signaling System 7
SSN SSP STP	- - -	Switched Service Network Service Switching Point Signal Transfer Point
SWC TES TG	-	Serving Wire Center Telephone Exchange Service(s) Telegraph Grade
TLP TSPS TTP	- - -	Transmission Level Point Traffic Service Position System Toll Transfer Point
TV USOC VG	- - -	Television Uniform Service Order Code Voice Grade
V&H WATS	-	Vertical & Horizontal Wide Area Telecommunications Service(s)

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### REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this tariff and may be obtained from Bell Communications Research, Inc., Distribution Storage Center, 60 New England Ave., Piscataway, NJ 08854.

#### Technical Reference:

Multiple Exchange Carrier Access Billing (MECAB) Guidelines Issued: December, 1991 Available: December, 1991

Multiple Exchange Carrier Ordering and Design (MECOD)
Guidelines
Tssued: September, 1990 Available: September, 1990

Issued: September, 1990 Available: September, 1990

PUB 41451 High Capacity Terrestrial Digital Service Issued: January, 1983 Available: May 17, 1983

PUB 41004 Data Communications Using Voiceband Private Line Channels

Issued: October, 1973 Available: October, 1973

PUB 62310 Digital Data System Channel Interface Specification Issued: September, 1983 Available: October, 1983

PUB 62411 High Capacity Digital Service Channel Interface Specification
Issued: September, 1983 Addendum: October, 1984

TR-NWT-000334, Issue 2 Voice Grade Switched Access Service - Transmission Parameters
Issued: September, 1990 Available: September, 1990

TR-TSY-000335, Issue 2 Voice Grade Special Access - Transmission Parameter Limits and Interface Combinations Issued: May, 1990 Available: May, 1990

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# REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

Technical Reference (Cont'd)

TR-NPL-000336, Metallic and Telegraph Grade Special Access

Services

Issued: October, 1987

TR-NPL-000338, Television Special Access and Local Channel

Services

Issued: December, 1986

TR-NWT-000394

Issued: August, 1991 Available: August, 1991

TR-TSV-000905

Issued: July, 1989 Available: July, 1989

TR-TSV-000954

Issued: December, 1990 Available: December, 1990

TR-NPL-000337, Program Audio Special Access Service and

Local Channel Services

Issued: July, 1987 Available: September, 1987

TR-NPL-000341; Digital Data Special Access Service - Transmission Parameters and Interface Combinations

Issued: March, 1989 Available: March, 1989

TR-TSH-000342, High Capacity Digital Special Access Service

Issued: February, 1991 Available: February, 1991

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# REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following technical publication is referenced in this tariff and may be obtained from the Bell Communications Technical Education Center, Room B02, 6200 Route 53, Lisle, IL 60532

Telecommunications Transmission Engineering Volume 3 - Networks and Services (Chapters 6 and 7) Second Edition, 1980
Issued: June, 1980 Available: June, 1980

The following technical publication is referenced in this tariff and may be obtained from the National Exchange Carrier Association, Inc., Director - Tariff and Regulatory Matters, 100 South Jefferson Road, Whippany, NJ 07981 and the Federal Communications Commission's commercial contractor.

PUB AS No. 1, Issue II, Access Service

Issued: May, 1984 Available: May, 1984
Addendum: March, 1987 Available: March, 1987

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# 1. Application of Tariff

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of Switched Access Services and other miscellaneous services, hereinafter referred to collectively as service(s), provided by Iowa Network Services, Inc., hereinafter referred to as Iowa Network or INS, to customers.
- 1.2 The provision of such services by Iowa Network as set forth in this tariff does not constitute a joint undertaking with the customer or the Participating Telephone Companies for the furnishing of any service.

Switched access services provided under this tariff covers only the use of Iowa Network's central access tandem and the switched transport between an Iowa Network premises and such central access tandem, and the use of the Iowa Network/MEANS Common Channel Signaling Access Network. End office switches served by Iowa Network's central access tandems are operated by the appropriate Participating Telephone Company. Therefore, any switched access services ordered under this tariff must be used with a like switched access service ordered by a Participating Telephone Company and other Exchange Telephone Companies, where applicable, or vice versa.

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#### 2. General Regulations

## 2.1 Undertaking of Iowa Network

#### 2.1.1 Scope

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

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# General Regulations (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

#### 2.1.2 Limitations

- (A) The customer may not assign or transfer the use of services provided under this tariff; however, 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
  - (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 Iowa Network is required prior to such assignment or transfer which acknowledgment shall be made within fifteen (15) days from the receipt of notification. All regulations and conditions contained in this tariff shall apply to such assignee or transferee.

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- General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.2 Limitations (Cont'd)
      - (A) (Cont'd)

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) The use and restoration of services shall be in accordance with Part 64, Subpart D of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.
- to compliance with the Subject (C) mentioned in (B) preceding, the services offered herein will be provided to customers on a first-come, first-served basis. Firstcome, first-served shall be based upon the received time and date stamped by Iowa Network on customer orders which contain the information as required for each respective service as delineated in other sections of this tariff. Customer orders shall not be deemed to have been received until such Should questions information is provided. arise which preclude order issuance due to missing information or the need clarification, Iowa Network will attempt to information missing such clarification on a verbal basis.

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### General Regulations (Cont'd)

### 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

#### 2.1.3 Liability

- Iowa Network'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 (H) following, Iowa Network's liability, if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. liability for damages shall be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.
- (B) Iowa Network shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall Iowa Network for its own act or omission hold liable any other carrier or customer providing a portion of a service.
- (C) Reserved for Future Use
- (D) Reserved for Future Use

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### 2. General Regulations (Cont'd)

## 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

### 2.1.3 Liability (Cont'd)

- (E) Iowa Network shall be indemnified, defended and held harmless by the customer against any claim, loss or damage arising from its use of services offered under this tariff, involving:
  - (1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from any communications;
  - (2) Claims for patent infringement arising from combining or using the service furnished by Iowa Network in connection with facilities or equipment furnished by the customer; or
  - (3) All other claims arising out of any act or omission of the customer in the course of using services provided pursuant to this tariff.
- (F) Iowa Network does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. Iowa Network shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to the customer's use of services so provided.

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- General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.3 Liability (Cont'd)
      - (G) No license under patents (other that the limited license to use) is granted by Iowa Network or shall be implied or arise by estoppel, with respect to any service offered under this tariff. Iowa Network 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.
      - (H) Iowa Network's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against Iowa Network, acts of God and other circumstances beyond Iowa Network's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.4 following.

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## 2. <u>General Regulations</u> (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

## 2.1.4 Provision of Services

The services offered under the provisions of this tariff are subject to availability. Iowa Network, to the extent that such services are or can be made available with reasonable effort, will provide to the customer upon reasonable notice services offered in other applicable sections of this tariff at rates and charges specified therein.

# 2.1.5 <u>Installation and Termination of Services</u>

The Access Service provided under this tariff (A) includes Iowa Network's communication facilities up to the point of interconnection as defined in 2.6 following which denotes the demarcation point or network interface and (B) will be provided by Iowa Network to such point of interconnection. Any additional terminations at the customer's premises beyond such point of interconnection are the sole responsibility of the customer.

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# General Regulations (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

# 2.1.6 Maintenance of Services

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

Iowa Network shall adopt and pursue a maintenance program aimed at achieving efficient operation of its system so as to promote the rendering of safe, adequate and continuous service at all times. Maintenance shall include keeping all plant and equipment in a good state of repair consistent with safe and adequate service performance. Broken, damaged or deteriorated parts which are no longer serviceable shall be repaired or replaced. Adjustable apparatus and equipment shall be readjusted as necessary when found by preventive routines or fault location unsatisfactory operating in tests to be Electrical faults, such as noise condition. induction, cross talk, or poor transmission characteristics shall be corrected to the extent practical within the design capability of the plant affected.

Maintenance of aerial plant shall include the replacement of broken or badly deteriorated poles, brackets, and broken-down guides. Defective splices shall be replaced and adequate clearance provided.

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- General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.6 Maintenance of Services (Cont'd)

Central access tandem equipment shall be inspected and routinely tested at regular intervals, and such repairs, adjustments or replacements made as are found to be necessary and as required to ensure the proper functioning of the equipment.

Records of various tests and inspections shall be kept on file in the office of Iowa Network for a minimum of one (1) year. These records shall show the line or regulated equipment tested or inspected, the reason for the test, the general conditions under which the test was made, the general result of the test and such corrections as were made when the test indicated need for same.

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### 2. General Regulations (Cont'd)

## 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

### 2.1.7 Changes and Substitutions

Except as provided for equipment and systems subject to F.C.C. Part 68 Regulations at 47 C.F.R. Section 68.110(b), Iowa Network may, where such action is reasonably required in the operation of its business, (A) substitute, change or rearrange any facilities used in providing service under this tariff, (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of Iowa Network. In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in Section 15. following.

Iowa Network shall 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, Iowa Network 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. Iowa Network will work cooperatively with the customer to determine reasonable notification procedures.

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- General Regulations (Cont'd)
  - 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)
    - 2.1.8 Refusal and Discontinuance of Service
      - Unless the provisions of 2.2.2(B) or 2.5 (A) following apply, if the customer fails to comply with 2.1.6 preceding or 2.2.3, 2.3.1, 2.3.6, 2.3.7 or 2.4 following, including any payments to be made by it on the dates and times herein specified, Iowa Network may, on thirty (30) days written notice by Certified U.S. Mail to the person designated by the receive such notices customer to noncompliance, additional refuse applications for service and/or refuse to complete any pending orders for service at any time thereafter. If Iowa Network does refuse additional applications for service on the date specified in the thirty (30) days notice, and the customer's noncompliance continues, nothing contained herein shall preclude Iowa Network's right to refuse additional applications service without further notice to noncomplying customer.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.8 Refusal and Discontinuance of Service (Cont'd)
      - Unless the provisions of 2.2.2(B) or 2.5 following apply, if the customer fails to comply with 2.1.6 preceding or 2.2.3, 2.3.1, 2.3.6, 2.3.7 or 2.4 following, including any payments to be made by it on the dates and times herein specified, Iowa Network may, on thirty (30) days written notice by Certified U.S. Mail to the person designated by the customer to receive such notices noncompliance, discontinue the provision of involved at time services any the In the case of such thereafter. discontinuance, all applicable charges, including termination charges, shall become If Iowa Network does not discontinue due. the provision of the services involved on the date specified in the thirty (30) days notice, and the customer's noncompliance continues, nothing contained herein shall preclude Iowa Network's right to discontinue the provision of the services involved without further notice to the noncomplying customer.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.8 Refusal and Discontinuance of Service (Cont'd)
      - The notice of pending disconnection shall be (C) a written notice setting forth the reason for the notice, and the final date by which the account is to be settled or specific The notice shall taken. action considered rendered to the customer when deposited in the U.S. mail with postage prepaid. If delivery is by other than U.S. mail, the notice shall be considered rendered when delivered to the last known address of the person responsible for the payment for the service. The final date shall be not less than five (5) days after notice is rendered.
        - (1) One (1) written notice, including all reasons for the notice, shall be given where more than one (1) cause exists for refusal or disconnection of service. The notice shall also state the final date by which the account is to be settled or other specific action taken. In determining the final date, the days of notice for the causes shall be concurrent.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.8 Refusal and Discontinuance of Service (Cont'd)
      - (D) Service may be refused or disconnected for nonpayment of a bill or deposit provided that Iowa Network has made a reasonable attempt to effect collection and:
        - (1) Has provided the customer with five (5) days' prior written notice with respect to an unpaid bill and twelve (12) days prior written notice with respect to an unpaid deposit, disconnection may take place prior to the expiration of the five (5)-day unpaid bill notice period if Iowa Network determines, from verifiable data, that usage during the five (5)-day notice period is so abnormally high that a risk of irreparable revenue loss is created.
        - (2) Is prepared to reconnect the same day if disconnection is scheduled for a weekend, holiday or after 2:00 p.m.

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### 2. General Regulations (Cont'd)

## 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

### 2.1.9 Engineering

## (A) Requirement For Good Engineering Practice

The facilities of Iowa Network in Iowa shall be constructed, installed, maintained and operated subject to the provisions of the Iowa electrical safety code as defined in IAC [199], Chapter 25 (476, 476A, 478), or the requirements of any municipality having jurisdiction, whichever may be the most stringent, and in accordance with accepted practice engineering in good communication industry to assure, as far as reasonably possible, continuity of service, uniformity in the quality of service furnished, and the safety of persons and property.

## (B) Adequacy Of Service

- (1) Iowa Network shall employ recognized engineering and administrative procedures to determine the adequacy of service being provided to the customer.
- (2) Traffic studies shall be made and records maintained to determine that sufficient equipment and an adequate operating force are provided during the busy-season, busy-hour period.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)
    - 2.1.9 Engineering (Cont'd)
      - (B) Adequacy Of Service (Cont'd)
        - Iowa Network shall make reasonable provisions to meet emergencies resulting from failures of lighting or power service, sudden and prolonged increases in traffic, or from fire, storm, or Acts of God. Iowa Network shall inform employees as to procedures to be followed in the event of an emergency in order to prevent mitigate interruption or impairment of Access Service. A permanent auxiliary power unit is installed at Network's central access tandems and alarms will be maintained in proper indicate improper to condition functioning of the equipment. So that emergency calls will be given prompt attention, customers may call One Call toll free at 800-292-8989 during the twenty-four (24) hours of the day.
        - (4) Iowa Network shall employ adequate procedures for assignment of facilities. The assignment record shall be kept up-to-date and checked periodically to determine if adjustments are necessary to maintain proper balance in all groups.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.9 Engineering (Cont'd)
      - (B) Adequacy of Service (Cont'd)
        - Iowa Network shall furnish and maintain (5) adequate plant, equipment and facilities to provide satisfactory communications transmission of interexchange carriers. Transmission shall be at adequate volume levels and free of excessive distortion. of noise and cross talk shall be such as not to impair communications. interexchange trunks, Iowa Network will provide facilities so that at least ninety-five percent (95%) of telephone calls offered to the group will not encounter an all-trunks-busy condition. For toll connecting trunks, the figure shall be at least ninety-seven percent (97%).

The transmission objectives set forth herein are based upon the use of standard telephone stations connected to a forty-eight (48) volt dial central office, and measured at a frequency of one thousand (1,000) hertz. The overall transmission loss on interexchange or interoffice trunks will not be more than ten (10) decibels. Whenever feasible, the overall transmission loss on intertoll trunks and on terminating links will be no more than five (5) multiple at decibels measured frequencies between two hundred (200) and three thousand (3,000) hertz.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)
    - 2.1.9 Engineering (Cont'd)
      - (B) Adequacy of Service (Cont'd)
        - (5) (Cont'd)

Because these trunks may be only one of several connected links on some toll routes, it may be necessary to provide better facilities in order to keep the overall net circuit losses within the five (5) decibel limit so as to provide satisfactory message transmission.

Where joint construction is mutually agreed upon, it shall be subject to the provisions of the Iowa or Nebraska electrical safety code or such other appropriate regulation as may be prescribed.

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### 2. <u>General Regulations</u> (Cont'd)

### 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

#### 2.1.9 Engineering (Cont'd)

### (C) Service Interruption

- (1) Iowa Network shall make all reasonable efforts to prevent interruptions of service. When interruptions occur, Iowa Network shall reestablish service with the shortest possible delay.
- (2) Arrangements shall be made to have personnel available to receive and record trouble reports twenty-four (24) hours daily and also to clear trouble of an emergency nature; at night, on holidays, on weekends, as well as during regular working hours.
- (3) Whenever service must be interrupted during regular working hours for the purpose of working on the lines, cable or equipment, the work shall be done at a time which will cause the least inconvenience to the customers, and any who would be seriously affected by such interruption shall, so far as possible, be notified in advance.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.9 Engineering (Cont'd)
      - (C) Service Interruption (Cont'd)
        - (3) (Cont'd)

Iowa Network shall keep a written showing all interruptions affecting its Access Service or any major portion thereof for a minimum of six (6) years. This record shall show the date, time, duration, time cleared extent and cause of This record shall be interruption. available to the Commission or its authorized representatives upon request any time within the period prescribed for retention of such records.

Whenever a trouble report is received, a record will be made by Iowa Network and if repeated within a thirty (30)-day period by the same customer, this case shall be referred to a supervisor for permanent correction.

When a customer's service is reported or is found to be out of order, it shall be restored as promptly as possible.

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### 2. General Regulations (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

# 2.1.10 Notification of Service-Affecting Activities

Iowa Network will provide the customer timely notification of service-affecting activities that may occur during the normal operation of its business. Such activities may include, but are or equipment facilities limited to, additions, removals or rearrangements, routine preventative maintenance and major switching machine change-out. Generally, such activities are not individual customer service specific; they affect many customer services. No specific advance notification period is applicable to all service activities. Iowa Network will work cooperatively with the customer to determine the reasonable notification requirements. With some or unplanned service-affecting emergency conditions, such as an outage resulting from cable damage, notification to the customer may not be possible.

# 2.1.11 Coordination with Respect to Network Contingencies

Iowa Network 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, subject to the Restoration Priority requirements of Part 64 of the F.C.C's Rules.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.12 Provision and Ownership of Telephone Numbers

Iowa Network reserves the reasonable right to assign, designate or change telephone numbers, any other call number designations associated with Access Service, or the Exchange Telephone Company serving central office associated with such numbers, when necessary in the conduct of its business. Should it become necessary to make a change in such number(s), Iowa Network 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). In the case of emergency conditions, however, e.g., a fire in a wire center, it may be necessary to change a telephone number without six (6) months notice in order to provide service to the customer.

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## General Regulations (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

### 2.1.13 Safety

Iowa Network shall exercise reasonable care to reduce the hazards to which its employees, its customers or users and the general public may be subjected. Iowa Network shall give reasonable assistance to the Commission in the investigation accidents and the cause of determination of suitable means of preventing accidents. Iowa Network shall maintain a summary of all reportable accidents arising from its operations. Iowa Network shall file with the Commission a report of each accident connection with the operation of its facilities in Nebraska which result in an injury temporarily disabling an employee for two (2) days or more or resulting in permanent disability or death. Prompt notice of fatal accidents shall be given to the Commission by telephone. A written report of the accident shall be filed within ten (10) the occurrence of days next following accident on forms approved by the Commission. Such written reports shall indicate the following information:

- (1) the name, address and age of the person or persons involved in the accident.
- (2) the time and place where the accident occurred.
- (3) the cause of the accident in detail.

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## General Regulations (Cont'd)

# 2.1 <u>Undertaking of Iowa Network</u> (Cont'd)

## 2.1.13 Safety (Cont'd)

Iowa Network shall adopt and execute a safety program, fitted to the size and type of its operations. At a minimum, the safety program will:

- a. require employees to use suitable tools and equipment in order that they may perform their work in a safe manner.
- b. instruct employees in safe methods of performing their work.
- c. instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation or drowning, in accepted methods of artificial respiration.

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## 2. <u>General Regulations</u> (Cont'd)

# 2.1 Undertaking of Iowa Network (Cont'd)

### 2.1.14 Held Applications

During such period of time as Iowa Network may not be able to supply initial access service to prospective customers or upgrade existing customers within thirty (30) days after the date applicant desires service, Iowa Network shall keep a record showing the name and address of each applicant for service, the date of application, the date that service is desired, the class and rate of service applied for, together with the reason for the inability to provide new service or a higher grade of service to the applicant.

### 2.1.15 Customer Information

- (A) Iowa Network shall maintain up-to-date maps, plans, or records of its network, together with such information as may be necessary to enable Iowa Network to advise prospective customers, and others entitled to the information, as to the facilities available for serving prospective customers in a serving area.
- (B) Iowa Network shall notify customers affected by a change in rates or schedule classification in accordance with the Commission's rules.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.15 <u>Customer Information</u> (Cont'd)
      - (C) Iowa Network shall post notices in a conspicuous place in each office of Iowa Network where applications for service are received, informing the public that copies of the rate schedules and rules relating to the services of Iowa Network, as filed with the Commission, are available for inspection.
      - (D) Iowa Network shall furnish such additional information as the customer may reasonably request.
      - (E) Employees responsible for the receiving of customer telephone calls and customer office visits shall be properly qualified and instructed in the screening and prompt handling of complaints to assure prompt reference of the complaint to the person or department capable of effective handling of the matter complained of and to obviate the necessity of the customer's preliminary repetition of the entire complaint to employees lacking in ability and authority to take appropriate action.

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.16 <u>Customer Complaints</u>
      - charges, the concerning Complaints (A) practices, facilities or service of Iowa Network shall be investigated promptly and Iowa Network shall keep a thoroughly. record of such complaint showing the name and address of the complainant, the date and nature of the complaint, its disposition, and all other pertinent facts dealing with the complaint, which will enable Iowa Network to review and analyze its procedure and actions. The records maintained by Iowa Network under this rule shall be available for inspection by the Commission or its staff upon request.

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By: William P. Bagley General Manager/Chief Executive Officer 4201 Corporate Drive West Des Moines, Iowa 50266-5906

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- 2. General Regulations (Cont'd)
  - 2.1 Undertaking of Iowa Network (Cont'd)
    - 2.1.16 <u>Customer Complaints</u> (Cont'd)
      - The customer must notify Iowa Network in writing of the nature and basis of any Should the complaint not be complaint. resolved by the payment date, the customer will, not withstanding the continuing existence of the dispute, pay the billed amount. Within a reasonable period of time following notification, Iowa Network will provide written notice to the customer of the status of the complaint. customer satisfies the requirements for a credit as set forth in Section 2.4.1(B) (2)(c) following, such a credit shall be remitted no later than sixty (60) calendar days following resolution. The final step the complaint hearing and review in procedure shall be a filing for Board resolution of the issues.
        - (1) The General Manager of Iowa Network is the person authorized to receive, act upon and respond to communications from the Commission and customers regarding complaints. The General Manager can be contacted by telephone at (515) 830-0110. Written complaints should be mailed to Iowa Network's address listed on the bottom of this tariff.

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- 2. General Regulations (Cont'd)
  - 2.2 Use
    - 2.2.1 Reserved for Future Use
    - 2.2.2 Interference or Impairment
      - The characteristics and methods of operation (A) of any circuits, facilities or equipment provided by other than Iowa Network and associated with the facilities utilized to provide services under this tariff shall not interfere with or impair service over any facilities of Iowa Network, its affiliated companies, or the Participating Telephone Companies involved in its services, cause damage to their plant, impair the privacy of over their any communications carried facilities or create hazards to employees of any of them or the public.
      - Except as provided for equipment or systems (B) subject to the F.C.C. Part 68 Rules in 47 68.108, i£ Section C.F.R. characteristics or methods of operation are not in accordance with (A) preceding, Iowa Network will, where practicable, notify the customer that temporary discontinuance of the use of a service may be required; is where prior notice however, practicable, nothing contained herein shall be deemed to preclude Iowa Network's right to temporarily discontinue forthwith the use of a service if such action is reasonable under the circumstances.

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# General Regulations (Cont'd)

## 2.2 <u>Use</u> (Cont'd)

# 2.2.2 <u>Interference or Impairment</u> (Cont'd)

### (B) (Cont'd)

In case of such temporary discontinuance, the customer will be promptly notified 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.

### 2.2.3 Unlawful Use

The service provided under this tariff shall not be used for an unlawful purpose.

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#### General Regulations (Cont'd) 2.

### 2.3 Obligations of the Customer

#### 2.3.1 Damages

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

# 2.3.2 Ownership of Facilities and Theft

Facilities utilized by Iowa Network to provide service under the provisions of this tariff shall remain the property of Iowa Network. facilities shall be returned to Iowa Network by the customer, whenever requested, within a reasonable period following the request in as good condition as reasonable wear will permit.

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# 2. <u>General Regulations</u> (Cont'd)

# 2.3 Obligations of the Customer (Cont'd)

# 2.3.3 <u>Interconnection</u>

The customer is responsible for and bears the burden of reaching a point of interconnection with an Iowa Network premises set forth in Section 8. following.

- 2.3.4 Reserved for Future Use
- 2.3.5 Reserved for Future Use

# 2.3.6 Availability for Testing

The services provided under this tariff shall be available to Iowa Network at times mutually agreed upon in order to permit Iowa Network to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be completed within a reasonable time. No credit will be allowed for any interruptions involved during such tests and adjustments.

## 2.3.7 Balance

All signals for transmission over the services provided under this tariff shall be delivered by the customer balanced to ground except for ground start, duplex (DX) and McCulloh-Loop (Alarm System) type signaling and dc telegraph transmission at speeds of 75 baud or less.

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- General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.8 Design of Customer Services

Subject to the provisions of 2.1.7 preceding, the customer shall 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 Iowa Network, minimum protection criteria or operating or maintenance characteristics of the facilities.

2.3.9 References to Iowa Network

The customer may advise End Users that certain services are provided by Iowa Network in connection with the service the customer furnishes to End Users; however, the customer shall not represent that Iowa Network jointly participates in the customer's services.

- 2.3.10 Reserved for Future Use
- 2.3.11 Claims and Demands for Damages
  - (A) With respect to claims of patent infringement made by third persons, the customer shall defend, indemnify, protect and save harmless Iowa Network 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.

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- 2. General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.11 Claims and Demands for Damages (Cont'd)
      - The customer shall defend, indemnify and (B) save harmless Iowa Network from and against suits, claims, losses or damages including punitive damages, attorneys' fees and court costs by third persons arising out of the operation, installation, construction, maintenance, or removal of the customer's circuits, facilities, or equipment connected to Iowa Network's services provided under this tariff, including, without limitation, Workmen's Compensation claims, actions for and/or copyright of infringement unauthorized use of program material, libel and slander actions based on the content of transmitted over communications facilities circuits, customer's 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 shall not apply to suits, provided, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortious conduct of the customer, its officers, agents or employees.

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- 2. General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.11 Claims and Demands for Damages (Cont'd)
      - (C) Reserved for Future Use
      - (D) The customer shall defend, indemnify and save harmless Iowa Network from and against any suits, claims, losses or damages, including punitive damages, attorneys' fees and court costs by the customer or third parties arising out of any act or omission of the customer in the course of using services provided under this tariff.
    - 2.3.12 Reserved for Future Use
    - 2.3.13 Coordination with Respect to Network Contingencies

The customer shall, in cooperation with Iowa Network, coordinate in planning the actions to be taken to maintain maximum network capability following natural or manmade disasters which affect telecommunications services.

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- General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 Jurisdictional Report Requirements
      - (A) Jurisdictional Reports
        - When a customer orders Feature (1) (a) Group B Switched Access Service, the customer shall state in its order the projected interstate percentage for interstate usage for each Feature Group B Switched Access Service group ordered. If the customer discontinues some but not all of the Feature Group B Switched Access Services in a it shall provide the projected interstate percentage for such services which are discontinued.
          - Federal Pursuant to (b) Communications Commission Order FCC 85-145 adopted April 16, 1985, Feature Group B 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 in a state other than that where the called station (as designated by the called station telephone number) is situated is an interstate communication.

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- 2. General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 <u>Jurisdictional Report Requirements</u> (Cont'd)
      - (A) Jurisdictional Reports (Cont'd)
        - (1) (c) The projected interstate percentages will be used by Iowa Network to apportion the usage between interstate and intrastate until a revised report is received as set forth in (7) following.
        - (2) All single Feature Group B Switched Access Service usage and charges will be apportioned by Iowa Network between interstate and intrastate. The projected interstate percentage reported as set forth in 1(a) and 1(b) preceding will be used to make such apportionment.
        - (3) For trunk group arrangements where either the interstate or the intrastate charges are based on measured usage, the interstate Feature Group B Switched Access Service(s) information reported as set forth in (1) preceding will be used to determine the charges as follows:

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· ....

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- 2. General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 <u>Jurisdictional Report Requirements</u> (Cont'd)
      - (A) Jurisdictional Reports (Cont'd)
        - (3) (Cont'd)

For all groups the number of access minutes for a group will be multiplied by the projected interstate percentage to develop the interstate access minutes. The number of access minutes for the group minus the developed interstate access minutes for the developed interstate access minutes.

(4) When a customer orders Feature Group D Switched Access Service, Iowa Network, where the jurisdiction can be determined from the call detail, will, unless the customer provides the projected interstate percentage for interstate usage for each end office group in its order, determine the projected interstate percentage as follows:

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 Jurisdictional Report Requirements (Cont'd)
      - (A) <u>Jurisdictional Reports</u> (Cont'd)
        - (4) (Cont'd)

For originating access minutes, the projected interstate percentage will be developed on a monthly basis by end the Feature Group office when Switched Access Service access minutes are measured by dividing the measured interstate 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 is adequate to detail call the determine the appropriate jurisdiction. For terminating access minutes, the data used by Iowa Network to develop the projected interstate percentage for originating access minutes will be used develop a projected interstate percentage for such terminating access minutes. When originating call details insufficient to determine jurisdiction for the call, the customer shall supply the projected interstate percentage or authorize Iowa Network to Network developed the Iowa This percentage shall be percentage. used by Iowa Network as the interstate percentage for such call detail.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 Jurisdictional Report Requirements (Cont'd)
      - (A) <u>Jurisdictional Reports</u> (Cont'd)
        - (4) (Cont'd)

INS will designate the number obtained by subtracting the projected interstate percentage for originating and terminating access minutes calculated by Iowa Network from 100 (100 - calculated projected interstate percentage = intrastate percentage) as the projected intrastate percentage of use.

- (5) Reserved for Future Use
- Except where Iowa Network measured (6) access minutes are used as set forth in (4) preceding, the customer reported interstate percentage of use, as set forth in (1) or (4) preceding, will be used until the customer reports a projected interstate different percentage for an in-service end office When the customer adds BHMC, lines or trunks to an existing end office group, the customer shall interstate projected furnish a percentage that applies to the added BHMC, lines or trunks.

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- General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 <u>Jurisdictional Report Requirements</u> (Cont'd)
      - (A) Jurisdictional Reports (Cont'd)
        - (6) (Cont'd)

When a customer discontinues BHMC, lines or trunks from an existing group, the customer shall furnish a projected interstate percentage for the discontinued 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, (7) April, July, and October of each year, customer update shall intrastate and interstate jurisdictional report. The customer shall forward to Iowa Network, to be received no later that fifteen (15) calendar days after the first of each such month, a revised report showing and intrastate interstate percentage of use for the past three (3) months ending the last day of December, March, June and September, respectively, for each service arranged for interstate use.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.14 <u>Jurisdictional Report Requirements</u> (Cont'd)
      - (A) <u>Jurisdictional Reports</u> (Cont'd)
        - (7) (Cont'd)

Except as set forth in (4) preceding, where jurisdiction can be determined from the call detail, the revised report will serve as the basis for the next three (3) months billing and will be effective on the bill date in the following month (i.e., February, May, August and November) for that service. No prorating or backbilling will be done based on the report. customer does not supply the report, assume Network will Iowa percentages to be the same as that provided in the last quarterly report. For those cases in which a quarterly report has never been received from the customer, Iowa Network will assume the percentages to be the same as that provided in the order for service as set forth in (1) preceding.

(B) The customer shall keep sufficient detail from which the percentage of interstate use can be ascertained and upon request of Iowa Network make the records available for inspection. Such a request will be initiated by Iowa Network no more than once per year. The customer shall supply the data within thirty (30) calendar days of Iowa Network's request.

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- General Regulations (Cont'd)
  - 2.3 Obligations of the Customer (Cont'd)
    - 2.3.15 <u>Determination of Intrastate Rates and Charges</u>
      <u>for Mixed Interstate and Intrastate Access</u>
      Service

When mixed interstate and intrastate Access Service is provided, all rates and charges will be prorated between interstate and intrastate. The percentages provided in the reports, as set forth in 2.3.14(A) preceding, will serve as the basis for calculating the rates and charges. The percentages of an Access Service to be charged as intrastate are 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) <u>Usage-Sensitive Charges</u>

For usage sensitive (i.e., access minutes and calls) chargeable rate elements, rates are calculated as follows:

(1) Multiply the percent intrastate use times actual use (i.e., measured or Iowa Network assumed average use) times the stated tariff rate.

The intrastate percentage will change as revised usage reports are submitted or a revised percentage is calculated as set forth in 2.3.14 preceding.

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- General Regulations (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances
    - 2.4.1 Payment of Rates, Charges and Deposits
      - Iowa Network will, in order to safeguard its (A) interests, only require a customer which has a proven history of late payments to Iowa Network or does not have established credit, except for a customer which is a successor of a company which has established credit and has no history of late payments to Iowa Network, to make a deposit prior to or at any time after the provision of a service to the customer to be held by Iowa Network as a guarantee of the payment of rates charges. Such deposit may not exceed the actual or estimated rates and charges for the service for a two-month period. fact that a deposit has been made in no way relieves the customer from complying with Iowa Network's regulations as to the prompt At such time as the payment of bills. 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 At the option of Iowa Network, refunded. such a deposit may be refunded or credited to the customer's account when the customer has established credit or 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 the case of a cash deposit, the customer will receive interest at an interest rate of seven percent (7%) per annum, compounded annually, for the period beginning with the date of deposit to the

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- 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)
      - (A) (Cont'd)

date of refund or to the date that the deposit is applied to the customer's account or to the date the customer's bill becomes permanently delinquent. The date of refund is that date on which the refund or the notice of deposit return is forwarded to the customer's last known address. The date a customer's bill becomes permanently delinquent, relative to an account treated as an uncollectible account, is the most recent date the account became delinquent.

- (1) Iowa Network shall keep records to show:
  - i. the name and address of each depositor.
  - ii. the amount and date of the deposit.
  - iii. each transaction concerning the deposit.
- (2) Iowa Network shall issue a receipt of deposit to each customer from whom a deposit is received, and shall provide means whereby a depositor may establish his claim if his receipt is lost.

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- 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)
      - (A) (Cont'd)
        - (3) The deposit shall be refunded after not more than twelve (12) consecutive months of prompt payment (which may be eleven (11) timely payments and one automatic forgiveness of late payment). The account shall be reviewed after twelve (12) months of service and if the deposit is retained it shall again be reviewed at the end of Iowa Network's accounting year or on the anniversary date of the account.
        - Iowa Network shall make a reasonable (4)effort to return each unclaimed deposit accrued interest after termination of the services for which the deposit was made. Iowa Network shall maintain a record of deposit information for at least two (2) years or until such time as the deposit, accrued interest, with together escheats to the state at which time the record and deposit, together with accrued interest less any lawful deductions, shall be sent to the State Treasurer pursuant.
        - (5) Unclaimed deposits, together with accrued interest, shall be credited to an appropriate account and will ultimately be submitted to the State.

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- General Regulations (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
      - (A) (Cont'd)
        - A new or additional deposit may be required when a deposit has been refunded or is found to be inadequate by virtue of increased access service usage or non-payment. Written notice shall be mailed advising the customer additional deposit new of The customer shall have requirement. no less than twelve (12) days from the date of mailing to comply. The new or additional deposit shall be payable at any of Iowa Network's business offices authorized agents. local appropriate receipt shall be provided. No written notice is required to be given of a deposit required as a prerequisite for commencing initial service. If access usage is abnormal, Iowa Network may require a new deposit or an increase in deposit to guarantee payment of bill. A customer who fails to comply with the deposit requirements may be disconnected. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date is credited to deposit such customer's account.

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- 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)
      - (B) The bill form or bill insert shall provide the following information:
        - The dates at the beginning and end of the billing period for access service.
        - ii. The last date for timely payment shall be clearly shown and shall be not less than twenty (20) days after the bill is rendered. The bill shall be considered rendered to the customer when deposited in the U.S. mail with postage prepaid. If the delivery is by other than U.S. mail, the bill shall be considered rendered when delivered to the last known address of the customer.
        - iii. The amount of the access charges, and of any late payment charge, with separate entries for total amounts current or in arrears. Iowa Network shall comply with reasonable requests for bill detail.

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- 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)
      - (B) (Cont'd)

Iowa Network shall bill on a current basis all rates and charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing In addition, Iowa Network shall period. bill in advance, charges for all services to be provided during the ensuing billing period except for charges associated with service usage which will be billed in The bill day (i.e., the billing arrears. 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) Iowa Network will establish a bill day monthly for each customer account. The bill will cover non-usage sensitive service rates for the ensuing billing period for which the bill is rendered, any known unbilled non-usage sensitive rates for prior periods and unbilled usage rates for the period after the last bill day through the current bill day. Any known unbilled usage rates for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
      - (B) (Cont'd)
        - (1) (Cont'd)

due as set forth in (2) following. If payment is not received by the payment date, as set forth in (2) following, in immediately available funds, a late payment penalty will apply as set forth in (2) following.

All bills dated, as set forth in (2) (a) preceding, for service provided to the customer by Iowa Network, are due thirty-one (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 twenty (20) days prior to the thirty-one (31) day payment due date, then the bill shall 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.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
      - (B) (Cont'd)
        - (2) (a) (Cont'd)

If such payment date would cause payment to be due on a Saturday, Sunday or Holiday (i.e., New Year's Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, the second Tuesday in November and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed) payment for such bills will be due from the customer as follows:

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

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- 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)
      - (B) (Cont'd)
        - Further, if any portion of the payment is received by Iowa (2) (b) Network after the payment date as set forth in (a) preceding, or if any portion of the payment is received by Iowa Network in funds immediately are not which available to Iowa Network, then a late payment penalty shall be due The late to Iowa Network. payment penalty shall be the portion of the payment received by the payment date times a late factor. The late factor shall be the lesser of:
          - the highest interest rate (I) (in decimal value) which may be levied by law for transactions, commercial compounded daily for the number of days from the date to and payment the date that including the customer actually makes the payment Iowa Network, or
          - (II) 0.000590 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 Iowa Network.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
      - (B) (Cont'd)
        - (2) (c)

In the event that a billing dispute concerning any rates or charges billed to the customer by Iowa Network is resolved in favor of Iowa Network, any payments withheld pending settlement of the dispute shall be subject to the late payment penalty set forth in (b) preceding. If the customer disputes the bill on or before the payment date, and pays undisputed amount on or the before the payment date, any late payment charge for the disputed amount will not start until ten (10) days after the payment date.

dispute event of a the Τn concerning the bill, Iowa Network may require the customer to pay a sum of money equal to the amount of the undisputed portion of the Following payment of the undisputed amount, efforts to the complaint, using resolve complaint procedures in this tariff, shall continue and for not less than forty-five (45) days after the rendering of the disputed bill, the service shall disconnected be not disputed nonpayment of the amount. The forty-five (45) days may be extended by up to sixty (60) days if requested of Iowa

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- 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)
      - (B) (Cont'd)
        - (2) (c) (Cont'd)

Network by the Commission in the event the customer files a written complaint with the Commission.

the billing dispute is Ιf in favor of the resolved customer, no late payment penalty apply to the disputed In addition, if the amount. the billed disputes customer amount and pays the total amount (i.e., the non-disputed amount and the disputed amount) on or before the payment date and the billing dispute is resolved in of the customer, the favor customer will receive a credit for a disputed amount penalty from Iowa Network if the billing dispute is not resolved within ten (10) working days following the payment date or the date the customer furnishes to Network documentation to support its claim plus ten (10) working days, whichever date is the later date. The disputed amount penalty shall be the disputed amount resolved in the customer's favor times a penalty factor. The penalty factor is as set forth in (b) preceding.

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- 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) (Cont'd)
        - (2) (d) No collection fee may be levied in addition to the late payment penalty. This does not prohibit cost-justified charges for disconnection and reconnection of service.
          - (e) If the customer makes a partial payment in a timely manner, and does not designate the service for which payment is made, the payment shall be credited pro rata between the bill for Iowa Network's services and related taxes. The late payment charge will be applied to only the outstanding balance for Iowa Network's services.
          - (f) Iowa Network may initiate collection efforts with the issuance of a final bill when the termination of service is at the customer's request. For all other bills, no collection effort other than rendering of the bill shall be undertaken until the delinquency date.
      - (C) Reserved for Future Use

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# General Regulations (Cont'd)

# 2.4 Payment Arrangements and Credit Allowances (Cont'd)

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

- (D) 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 or major fraction of days based on a thirty (30)-day month.
- (E) Iowa Network will, upon request, furnish within thirty (30) days of a request at no charge to the customer such detailed information as may reasonably be required for verification of any bill.
- (F) When a rate or charge 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).
- (G) When more than one copy of a customer bill for services provided under the provisions of this tariff is furnished to the customer, an additional charge applies for each additional copy of the bill as set forth in 13.3.5 following.

# 2.4.2 Minimum Periods

The minimum periods for which services are provided and for which rates and charges are applicable is one (1) month, except as otherwise specified.

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- 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 5.2.2(B) and 5.2.3 following.

- 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 Iowa Network result in the complete loss of service by the customer as set forth in 6.5.1 following. An interruption period starts when an inoperative service is reported to Iowa Network, 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, shall be as follows:

(1) For Switched Access Service, no credit shall be allowed for an interruption of less than twenty-four (24) hours. The customer shall be credited for an interruption of twenty-four (24) hours

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.4 <u>Credit Allowance for Service Interruptions</u> (Cont'd)
      - (B) When A Credit Allowance Applies (Cont'd)
        - (1) (Cont'd)

or more at the rate of 1/30 of any applicable monthly rates for each period of twenty-four (24) hours or major fraction thereof that the interruption continues.

- (2) The credit allowance(s) for an interruption or for a series of interruptions shall not exceed any monthly rate for the service interrupted in any one monthly billing period.
- (3) Reserved for Future Use
- (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 Iowa Network is not afforded access to the location where the service is terminated.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.4 <u>Credit Allowance for Service Interruptions</u> (Cont'd)
      - (C) When a Credit Allowance Does Not Apply (Cont'd)
        - of service (4)Interruptions а to make purposes, maintenance for the rearrangements, or implementation of an order for a change in the service during the time that was the customer. with negotiated Thereafter, a credit allowance as set forth in (B) preceding applies.
        - (5) Reserved for Future Use
        - (6) Periods when the customer continues to use the service on an impaired basis.
        - (7) Periods of temporary discontinuance as set forth in 2.2.2(B) preceding.
        - (8) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar (\$1.00).
        - (9) Periods of interruption as set forth in 13.3.1 following.
        - (10) Interruption of service caused by a customer's failure to provide notification to Iowa Network of media stimulated mass calling events as set forth in 6.6.5 following.
      - (D) Reserved for Future Use

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.4 <u>Credit Allowance for Service Interruptions</u> (Cont'd)
      - (E) Temporary Surrender of a Service

In certain instances, the customer may be requested by Iowa Network 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 thirty (30) minutes or fraction thereof that the service is surrendered. In no case will the credit allowance exceed the monthly rate for the service surrendered in any one (1) monthly billing period.

- 2.4.5 Reserved for Future Use
- 2.4.6 Reserved for Future Use
- 2.4.7 <u>Title or Ownership Rights</u>
  - (A) 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 Iowa Network in the provision of such services.

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- General Regulations (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.8 Rating and Billing of Access Services Provided by Iowa Network and Participating Telephone Companies

Iowa Network will handle rating and billing of Access Services under this tariff as follows.

- With Feature Group C, Feature Group D and (A) terminating Feature Group B Switched Access will Iowa Network Service, Centralized Equal Access Service between Iowa Network's central access tandem and the other fifteen (15) Iowa network premises set forth in Section 8. following and bill the charge in accordance with this tariff. Centralized Equal Access Service is provided as described in 6.1.3(A) following. Network's rate for the Centralized Equal Access Service element is as set forth in 6.8.1.
- Iowa Network will provide the Switched (B) Transport between two or more Iowa Network premises set forth in Section 8. following and bill the charges in accordance with its Access Service tariff. Switched Transport is provided as described in Section 6.1.3(B) Iowa Network's Switched following. Transport rate does not apply to Nebraska Iowa Network will intrastate messages. provide Switched Transport with Feature Group B, Feature Group C, and Feature Group D in both the originating and terminating directions.

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- 2. General Regulations (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.8 Rating and Billing of Access Services Provided by Iowa Network and Participating Telephone Companies (Cont'd)
      - (B) Cont'd

As a matter of clarification, the end office switches served by Iowa Network's central access tandems are operated by the appropriate Participating Telephone Company. Therefore, any switched access services ordered under this tariff must be used with a like switched access service provided by a Participating Telephone Company and, when applicable, other Exchange Telephone Companies, or vice versa.

In addition to the rates and charges set forth in Sections 6.8 and 4 (I) for the services provided by Iowa Network, the customer will also be billed access charges by Participating Telephone Companies and other Exchange Telephone Companies in compliance with their tariffs for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8. following and the end offices served by Iowa Network's central access tandems.

The facilities between a customer's premises and an Iowa Network premises set forth in Section 8. following is solely the responsibility of the customer and must be provided by the customer or ordered from another carrier.

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- 2. <u>General Regulations</u> (Cont'd)
  - 2.4 Payment Arrangements and Credit Allowances (Cont'd)
    - 2.4.8 Rating and Billing of Access Services Provided by <u>Iowa Network and Participating Telephone</u> <u>Companies</u> (Cont'd)
      - (B) Cont'd

If these facilities are ordered by the customer from another carrier, the customer may also be billed access charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for providing the access services between the customer's premises and an Iowa Network premises set forth in Section 8. following. All other appropriate charges in the tariffs of the Participating Telephone Companies are applicable.

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# 2. <u>General Regulations</u> (Cont'd)

## 2.5 Connections

#### 2.5.1 General

Equipment and systems may be connected with Switched Access Service furnished by Iowa Network where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

#### 2.5.2 Reserved for Future Use

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## General Regulations (Cont'd)

#### 2.6 Definitions

Certain terms used herein are defined as follows:

### Access Code

The term "Access Code" denotes a uniform five (5) or seven (7) digit code assigned by the Participating Telephone Company to an individual customer. The five (5) digit code has the form 10XXX, and the seven (7) digit code has the form 950-0XXX or 950-1XXX.

# Access Minutes

For the purpose of calculating chargeable usage, the term "Access Minutes" denotes customer usage of Iowa Network's facilities and 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 Iowa Network to and acknowledged as received by the customer's facilities connected with an Iowa On the terminating end of an Network premises. 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 shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

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# 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Access Tandem

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

#### Ancillary Service or Equipment

The term "Ancillary Service or Equipment" denotes any communication service or equipment not included in the definition of transmission service, terminal equipment or existing or new inside station wiring.

#### 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 interconnection as an indication that the called party has answered or disconnected.

#### Attenuation Distortion

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

#### Average Busy-Season, Busy-Hour Traffic

The term "Average Busy-Season, Busy-Hour Traffic" denotes the average traffic volume for the busy-season, busyhours.

#### Balance (100 Type) Test Line

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

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### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 <u>Definitions</u> (Cont'd)

#### <u>Bit</u>

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

#### Business Day

The term "Business Day" denotes the time 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 Iowa Network 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.

#### Busy-Hour

The term "Busy-Hour" denotes the two consecutive half hours during which the greatest volume of traffic is handled by Iowa Network's facilities.

#### 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 furnished BHMC quantity is the input data Iowa Network uses to determine the number of transmission paths for the Feature Group ordered.

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### 2. <u>General Regulations</u> (Cont'd)

## 2.6 Definitions (Cont'd)

#### Busy-Season

The term "Busy-Season" denotes that period of the year during which the greatest volume of traffic is handled by Iowa Network's facilities.

#### <u>Calls</u>

The term "Calls" denotes telephone messages attempted by customers or users.

#### CCS

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

#### Central Office

The term "Central Office" denotes a unit in an Exchange Telephone Company telephone system which provides service to the general public, having the necessary equipment and operating arrangements for terminating and interconnecting customer lines and trunks or trunks only. There may be more than one central office in a building.

#### Central Office Prefix

The term "Central Office Prefix" denotes the first three (3) digits (NXX) of the seven (7) digit telephone number assigned to a customer's Telephone Exchange Service when dialed on a local basis.

#### Channel

The term "Channel" denotes an electrical path suitable for the transmission of communications.

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### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Channelize

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

### 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.

#### Commission

The term "Commission" denotes the Nebraska Public Service Commission.

#### Common Channel Signaling Access Network (CCSAN)

The term "CCSAN" refers to the network that allows call control information to be transmitted separately, or out-of-band, from the voice communications path. SS7 is the most recent protocol used for common channel signaling.

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# General Regulations (Cont'd)

# 2.6 <u>Definitions</u> (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 Iowa Network.

### Customer(s)

The term "Customer(s)" denotes any person, firm, association, corporation, agency of the federal, state or local government, or legal entity responsible by law for payment for communications service from Iowa Network.

# 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 (2) signal powers.

# Decibel Reference Noise C-Message Weighting

The term "Decibel Reference Noise C-Message Weighting" denotes noise power measurements with C-Message weighting in decibels relative to a reference 1000 Hz tone of 90 db below one (1) milliwatt.

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## 2. <u>General Regulations</u> (Cont'd)

# 2.6 <u>Definitions</u> (Cont'd)

# Decibel Reference Noise C-Message Referenced to 0

The term "Decibel Reference Noise C-Message Referenced to 0" denotes noise power in "Decibel Reference Noise C-Message Weighting" referred to or measured at a zero transmission level point.

#### Delinquent or Delinquency

The term "Delinquent" or "Delinquency" denotes an account for which a bill or payment agreement for regulated services or equipment has not been paid in full on or before the last day for timely payment.

#### 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 Iowa Network.

#### Disconnect

The term "Disconnect" denotes the disabling of circuitry preventing both outgoing and incoming communications.

#### Due Date

The term "Due Date" denotes the last day for payment without unpaid amounts being subject to a late payment charge or additional collection efforts.

## Echo Control

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

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# 2. <u>General Regulations</u> (Cont'd)

## 2.6 Definitions (Cont'd)

## Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of interconnection 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 five hundred (500) to twenty-five hundred (2500) Hz), where talker echo is most annoying.

# End Office Switch

The term "End Office Switch" denotes an Exchange Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to trunks. Included are Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

### End User

The term "End User" means any customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier other than a telephone company shall 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 shall be deemed to be an "end user" if all resale transmissions offered by such reseller originate on the premises of such reseller.

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### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

### 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)].

#### Exchange

The term "Exchange" denotes a unit established by a telephone utility for the administration of communications services.

#### Exchange Service

The term "Exchange Service" denotes communication service furnished by means of exchange plant and facilities.

# Exchange Service Area or Exchange Area

The terms "Exchange Service Area" or "Exchange Area" denote the general area in which the telephone utility holds itself out to furnish exchange telephone service.

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# 2. <u>General Regulations</u> (Cont'd)

# 2.6 <u>Definitions</u> (Cont'd)

# Exchange Telephone Company

The term "Exchange Telephone Company" denotes a carrier that provides service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange and which is covered by the exchange service charge.

#### Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-end 1004 Hz loss on a terminated test connection between two (2) readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

### Field Identifier

The term "Field Identifier" denotes two (2) or four (4) characters that are used on service orders to convey specific instructions. Field Identifiers may or may not have associated data. Selected Field Identifiers are used in billing systems to generate non recurring charges.

# First Come - First Served

The term "First Come - First Served" denotes a procedure followed when a shortage of facilities or equipment occurs, such that a service ordered cannot be provided. The orders delayed by the shortage of facilities will be prioritized according to the sequence in which they were received. That is, when facilities or equipment become available, the first order received will be the first order processed.

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# 2. General Regulations (Cont'd)

# 2.6 <u>Definitions</u> (Cont'd)

# First Point of Switching

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

#### Former Account

The term "Former Account" denotes a customer whose service has been permanently disconnected, and the final bill either has been paid or has been written off to the reserve for uncollectible accounts.

# Frequency Shift

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

#### Grandfathered

The term "Grandfathered" denotes Terminal Equipment, Multiline Terminating Systems and Protective Circuitry directly connected to the facilities utilized to provide services under the provisions of this tariff, and which are considered Grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.

# Held Order for Service

The term "Held Order for Service" denotes an application for establishment of service not filled within thirty (30) days of the date the prospective customer desires service, provided preconditions have been met.

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## General Regulations (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### Home

The term "Home" refers to the directing of calls to a specific toll center location or Class 4 office.

#### Host Office

The term "Host Office" denotes an electronic switching system which provides call processing capabilities for one or more Remote Switching Modules or Remote Switching Systems.

## 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.

#### Impedance Balance

The term "Impedance Balance" denotes the method of expressing Echo Return Loss and Singing Return Loss at a 4-wire interface whereby the gains and/or loss of the 4-wire portion of the transmission path, including the hybrid, are not included in the specification.

#### 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.

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## 2. General Regulations (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### Inactive Account

The term "Inactive Account" denotes a customer whose service has been permanently disconnected and whose account has not been settled either by payment or refund.

#### 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.

## 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.

# <u>Interexchange Carrier (IC) or Interexchange Common Carrier</u>

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denote any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communications by wire or radio, between two (2) or more exchanges.

#### Interexchange Service

The term "Interexchange Service" denotes the provision of intrastate telecommunications services and facilities between local exchanges, and does not include extended area service.

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## 2. <u>General Regulations</u> (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

### Interexchange Utility

The term "Interexchange Utility" denotes a utility, a resale carrier or other entity that provides intrastate telecommunications services and facilities between exchanges within Iowa, without regard to how such traffic is carried. A local exchange utility that provides exchange service may also be considered an interexchange utility.

## Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the non-linearity of a channel. It is measured using four (4) tones, and evaluating the ratio (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).

## Interstate Communications

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

## Intrastate Access Services

The term "Intrastate Access Services" denotes services of telephone utilities which provide the capability to deliver intrastate toll calls which originate from end users to interexchange utilities and to deliver intrastate toll calls from interexchange utilities to end-users.

## 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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### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Line-Side Connection

The term "Line-Side Connection" denotes a connection of a transmission path to the line side of a local exchange switching system.

## Local Access and Transport Area

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.

#### Local Exchange Utility

The term "Local Exchange Utility" denotes a telephone utility that provides local service under tariff filed with the Commission. The utility may also provide other services and facilities such as access services.

#### Local Service

The term "Local Service" denotes a telephone service furnished between customers or users located within an exchange area.

### Local Tandem Switch

The term "Local Tandem Switch" denotes a local Telephone Company switching unit by which local or access telephonic communications are switched to and from an End Office Switch.

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## General Regulations (Cont'd)

## 2.6 Definitions (Cont'd)

### Loop Around Test Line

The term "Loop Around Test Line" denotes an arrangement to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two terminations, each reached by means of separate telephone numbers and does not require any specific customer equipment. Equipment subject to this test arrangement is at the discretion of the customer.

#### 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" is any period of time in excess of one half (1/2) of the stated amount of time. As an example, in considering a period of twenty-four (24) hours, a major fraction thereof would be any period of time in excess of twelve (12) hours exactly. Therefore, if a given service is interrupted for a period of thirty-six (36) hours and fifteen (15) minutes, the customer would be given a credit allowance for two (2) twenty-four (24) hour periods for a total of forty-eight (48) hours.

#### Message

The term "Message" denotes a completed telephone call by a customer or user.

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## 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

## Milliwatt (102 Type) Test Line

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

## Minnesota Equal Access Network Services, Inc. (MEANS)

The term "Minnesota Equal Access Network Services, Inc." denotes the SS7 provider who is cooperating with Iowa Network in the joint operation of the CCSAN. MEANS owns and operates an STP located in Plymouth, Minnesota, which is mated to the STP owned and operated by Iowa Network in Des Moines, Iowa.

## Minnesota Independent Equal Access Corp. (MIEAC)

The term "MIEAC" refers to a wholly-owned subsidiary of MEANS that provides centralized equal access service in Minnesota.

#### Network Control Signaling

The term "Network Control Signaling" denotes the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status, and charge signals), address signaling (e.g., dialing), calling and called number identifications, rate of flow, service selection error control and audible tone signals (call progress signals indicating re-order or busy conditions, alerting, coin denominations, coin collect and coin return tones) to control the operation of the telecommunications system.

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#### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Nonsynchronous Test Line

The term "Nonsynchronous Test Line" denotes an arrangement which provides operational tests which are not as complete as those provided by the synchronous test lines, but can be made more rapidly.

#### North American Numbering Plan

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

#### 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 which provides an ac open circuit termination of a trunk by means of an inductor of several Henries.

#### 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 Premises.

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## 2. <u>General Regulations</u> (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### Outside Plant

The term "Outside Plant" denotes the equipment and facilities installed, along, or under streets, alleys, highways, and private rights of way between customer locations, central offices, Iowa Network premises and customer locations, or Iowa Network premises and central offices.

## Participating Telephone Company

The term "Participating Telephone Company" denotes the Exchange Telephone Company in whose exchange a customer's end users' end office is located and which routes calls to and from Iowa Network's facilities.

#### Pay Telephone

The term "Pay Telephone" denotes Exchange Telephone Company provided instruments and related facilities that are available to the general public for public convenience and necessity, including public and semipublic telephones, and coinless telephones.

#### Percentage of Fill

The term "Percentage of Fill" denotes the ratio of circuits and equipment in use to the total available multiplied by 100.

#### Phase Jitter

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

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## 2. General Regulations (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### Point of Interconnection

The term "Point of Interconnection" denotes the demarcation point or network interface, at which Iowa Network's responsibility for the provision of Access Service ends.

#### Premises

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

## Remote Switching Modules and/or Remote Switching Systems

The terms "Remote Switching Modules" and/or "Remote Switching Systems" denote small, remotely controlled electronic end office switches which obtain their call processing capability from an ESS-type Host Office. The Remote Switching Modules and/or Remote Switching Systems cannot accommodate direct trunks to a customer.

#### Return Loss

The term "Return Loss" denotes a measure of the similarity between the two (2) impedances at the junction of two (2) transmission paths. The higher the return loss, the higher the similarity.

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#### 2. General Regulations (Cont'd)

#### 2.6 <u>Definitions</u> (Cont'd)

#### Registered Equipment

The term "Registered Equipment" denotes the customer's premises equipment which complies with and has been approved within the Registration Provisions of Part 68 of the F.C.C.'s Rules and Regulations.

#### Service Access Code

The term "Service Access Code" denotes a three digit code in the NPA format which is used as the first three digits of a ten 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 Control Point (SCP)

The term "Service Control Point" denotes the CCS/SS7 network node that acts as a host for various database applications and provides switching, routing, and call handling information.

#### Service Switching Point (SSP)

The term "Service Switching Point" denotes a switching office or node on the CCS/SS7 network which has the ability to launch queries to a centralized on-line database such as the 800 Database and the Line Information Database (LIDB). The SSP also performs all of the functions of the SP.

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## 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Serving Wire Center

The term "Serving Wire Center" denotes the wire center from which the customer premises would normally obtain dial tone from an Exchange Telephone Company.

## Seven Digit Manual Test Line

The term "Seven Digit Manual Test Line" denotes an arrangement which allows the customer to select balance, milliwatt and synchronous test lines by manually dialing a seven (7) digit number of the associated access connection.

## Shortage of Facilities or Equipment

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

#### Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement which provides for an ac short circuit termination of a trunk by means of a capacitor of at least four (4) microfarads.

## Signaling Network Access Connection (SNAC)

The term "Signaling Network Access Connection" denotes the link between the Signaling Point of Interconnection (SPOI) and the INS/MEANS STPs. The connection also includes the necessary ports on the INS/MEANS STPs.

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## 2. <u>General Regulations</u> (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

## Signaling Point of Interconnection (SPOI)

The term "Signaling Point of Interconnection" denotes the point of interconnection between Iowa Network and the customer for purposes of exchanging SS7 signaling messages. The SPOIs are located in the metropolitan areas of Des Moines, Iowa and Minneapolis/St. Paul, Minnesota.

#### Signal Point (SP)

The term "Signal Point" denotes a node on the CCS/SS7 network that converts non-SS7 signals to SS7 protocol, sends and receives messages from one node to another in order to establish and disconnect calls.

## 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.

## Signal Transfer Point (STP)

The term "Signal Transfer Point" denotes a packet switch that routes signaling messages between SPs, SSPs, and SCPs. Iowa Network in conjunction with MEANS provides a geographically separated mated pair of STPs for connection to the customer's SS7 network. The STPs are located in Des Moines, Iowa and Plymouth, Minnesota.

#### Singing Return Loss

The term "Singing 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 singing (instability) problems are most likely to occur.

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#### 2. 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.

#### Suspend

The term "Suspend" denotes temporary disconnection or impairment of service which shall disable either outgoing or incoming communications, or both.

#### Switching Service

The term "Switching Service" denotes switching performed for service lines.

#### Synchronous Test Line

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

#### Tariff

The term "Tariff" denotes the entire body of regulated rates, tolls, rentals, charges, classifications, rules, procedures, policies, etc., adopted and filed with the Commission by a telephone utility in fulfilling its role of furnishing communications service.

#### Telephone Utility or Utility

The terms "Telephone Utility" or "Utility" denotes any person, partnership, business association, or corporation, domestic or foreign, owning or operating any facilities for furnishing communications service to the public for compensation.

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#### 2. <u>General Regulations</u> (Cont'd)

#### 2.6 Definitions (Cont'd)

#### Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from an IC Premises to an End User Premises.

#### Timely Payment

The term "Timely Payment" denotes a payment on a customer's account made on or before the due date shown:

- (1) on a current bill for rates and charges, or
- (2) by an agreement between the customer and a utility for a series of partial payments to settle a delinquent account.

#### Toll Connecting Trunks

The term "Toll Connecting Trunks" denotes a general classification of trunks carrying toll traffic and ordinarily extending between a local office and a toll office.

#### Toll Message

The term "Toll Message" denotes a message made between different exchange areas for which a charge is made, excluding message rate service charges.

#### Toll Rate

The term "Toll Rate" denotes the tariff charge prescribed for toll messages, usually based upon the duration of the message, the distance between the exchanges, the day and time of the message and the degree of operator assistance.

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### 2. General Regulations (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### Toll Station

The term "Toll Station" denotes a telephone connected to a toll line or directly to a toll board.

#### Toll Station Service

The term "Toll Station Service" denotes telephone service rendered from a toll station.

#### Traffic

The term "Traffic" denotes telephone call volume, based on number and duration of calls.

## Traffic Grade of Service

The term "Traffic Grade of Service" denotes the decimal fraction representing the probability of a call being blocked by an all-trunks-busy condition during the average busy-season, busy-hour.

## Transmission Measuring (105 Type) Test Line/Responder

The term "Transmission Measuring (105 Type) Test Line/Responder" denotes an arrangement 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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#### 2. <u>General Regulations</u> (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 three hundred (300) to three thousand (3000) Hz. A transmission path is comprised of physical or derived channels consisting of any form or configuration of facilities plant typically used in the telecommunications industry.

### Transmission Service

The term "Transmission Service" denotes the common carrier provision of exchange access, switching, exchange transmission, intraexchange transmission and interexchange transmission, including private line service.

#### Trouble Report

The term "Trouble Report" denotes any call or written statement from a customer or user of telephone service relating to a physical defect or to difficulty or dissatisfaction with the operation of telephone facilities.

#### Trunk

The term "Trunk" denotes a transmission path connecting two (2) switching systems in a network, used in the establishment of an end-to-end connection.

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#### 2. General Regulations (Cont'd)

## 2.6 <u>Definitions</u> (Cont'd)

#### 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 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).

#### 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.

#### 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.

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- 3. <u>Services Not Currently Offered By Iowa Network Under This Tariff</u>
  - 3.1 The services listed below are not currently offered by Iowa Network under this Access Service tariff.
    - A. Carrier Common Line Access Service
    - B. Directories
    - C. Directory Assistance Service or Operator Services
    - D. Exchange Service or Local Service
    - E. Extended Area Service Arrangements
    - F. Extensions
    - G. Feature Group A Switched Access Service
    - H. Installation or Maintenance of Inside Wiring
    - I. Intercept
    - J. Special Construction
    - K. Terminal Equipment

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#### 4. RECORDING

- (A) Iowa Network will provide Recording Service in association with the offering of Feature Groups C and D Switched Access Service for customer messages that can be recorded by Iowa Network provided automatic message accounting equipment. Iowa Network will provide Recording Service in its operating territory and to the end office(s) of the Participating Telephone Companies listed in Section 9. following.
- (B) A customer message begins in the originating direction when the off-hook supervision provided by the premise of the ordering customer is received by Iowa Network recording equipment. A customer message begins in the terminating direction when answer supervision is received by Iowa Network recording equipment indicating the called party has answered. A customer message ends in the originating direction when disconnect supervision is received by Iowa Network recording equipment from the premise of the ordering customer. A customer message ends in the terminating direction when disconnect supervision is received by Iowa Network recording equipment from either the premise of the ordering customer or the called party.

#### (C) General Description

(1) Recording Service is the recording of the details of a customer message and, when requested by the customer, the provision of those details to the customer. Recording Service includes recording, assembly and editing, and provision of recorded customer message detail.

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### 4. RECORDING (Cont'd)

### (C) General Description (Cont'd)

- (2) Recording is the entering on magnetic tape or other acceptable media the details of customer messages originated through Switched Access Service for which answer and disconnect supervision has been received. Recording is provided 24 hours a day, 7 days a week.
- (3) Assembly and editing is the aggregation of the recorded customer message details to create individual messages and the verification that the data required for rating, in accordance with the standard format established by Iowa Network, is present. Assembly and editing is performed at least once a week.
- (4) Provision of customer message detail is the provision of magnetic tape containing the assembled and edited customer message detail and when requested by the customer, data-transmitting the assembled and edited customer message detail to the customer, sorting the message detail, and providing name and address information for the message detail. Except for lost or damaged records, the recorded detail will be available to the customer not more than five (5) business days after the date all the detail requested by the customer was processed by Iowa Network.

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#### 4. RECORDING (Cont'd)

#### (D) Undertaking of Iowa Network

- Iowa Network will record all customer messages carried over Feature Groups C and D Switched (1) Access Service that are available to Iowa Network provided recording equipment or operators. Iowa customer messages. Network will record all Unavailable customer messages (i.e., certain Feature Group C operator and TSPS messages which are not accessible by Iowa Network provided recording equipment or operators) will not be The recording equipment will be recorded. provided at locations selected by Iowa Network. Assembly and editing will be performed on all customer messages recorded during the billing period established by Iowa Network. Except as set forth in Sections 4(D)(6) and 4 (E) the following recorded message detail from previous billing periods will not be recovered and made available to the customer.
- (2) A standard format for the provision of the recorded customer message detail will be established by Iowa Network and provided to the customer. If, in the course of Iowa Network business, it is necessary to change the format, Iowa Network will notify the involved customers six (6) months prior to the change.

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#### 4. RECORDING (Cont'd)

- (D) <u>Undertaking of Iowa Network</u> (Cont'd)
  - (3) The recorded customer message detail provided to the customer will, when requested by the customer, be sorted to furnish detail to meet the customer's need.

Also name and address information will, when requested by the customer and to the extent the required names and addresses are available in the Iowa Network customer information databases, be provided for the recorded customer message detail.

The sorting will be provided in accordance with the specifications the customer provides when it orders recorded customer message detail with If the information necessary to sort sorting. the recorded message detail as requested by the customer is not available in the recorded message (i.e., a sort based on any other information other than calling number or called number), Iowa Network will provide the sorting if (1) the information necessary to perform the sort customer contained its in is databases, or the Wire Center Information as set forth in Exchange Carrier Association Tariff F.C.C. No. 4, or (2) the customer provides the necessary information. If the sorting is to be performed using information which is confidential due to legal, national security, end user or regulatory-imposed requirements, the information will not be used unless the customer secures written permission from the end user for Iowa Network to use such information as requested by the customer.

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#### 4. RECORDING (Cont'd)

### (D) <u>Undertaking of Iowa Network</u> (Cont'd)

#### (3) (Cont'd)

The name and address information will be provided with the recorded customer message detail and included on the magnetic tapes containing the The name and recorded customer message detail. address information will be provided in a format accordance with the specifications recorded it orders provides when customer The name and address customer message detail. information will be obtained by Iowa Network from its customer information databases. The name and address information will be provided for the calling number shown in the recorded customer message detail to the extent a name and address exists in the Iowa Network customer information databases (e.g., some calling number names and addresses may be confidential). If the name and address information for a specific calling number is confidential due to legal, national security, end user or regulatory-imposed requirements, the name and address information will not be used unless the customer secures written permission from the end user for Iowa Network to use the information as requested by the customer.

When sorting of recorded customer message detail and/or name and address information is provided to the customer, and interval, minimum period and charges to provide the sorting and/or name and address information will be determined on an individual case basis.

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## 4. <u>RECORDING</u> (Cont'd)

- (D) Undertaking of Iowa Network (Cont'd)
  - (4) Recorded customer message detail with or without sorting and names and addresses will be provided to a customer as set forth in (5) following. Iowa Network will determine the number of magnetic tapes or data files required to provide the recorded message detail to the customer.
  - (5) At the request of a customer, magnetic tapes containing the recorded customer message details with or without sorting and names and addresses will be provided to the customer as part of Recording Service. The magnetic tapes will be provided without the return of previously supplied tapes. Iowa Network will supply the magnetic tapes. Unless specified otherwise by the customer, the magnetic tapes will be sent to the customer via first class U.S. Mail service.

However, the customer may pick up the magnetic tapes at a location designated by Iowa Network or request that the detail on the magnetic tapes or in a data file be data-transmitted to the When the recorded customer message customer. to a customer details are data-transmitted premise, the data transmission charges will be determined on an individual case basis. When the customer does not wish to receive the recorded customer message details, except when sorting and name and address information is provided, and Iowa Network receives notice from the customer at least two (2) weeks prior to the date the details would be sent to the customer, the rate as set forth in Section 4.(I)(3) following does not apply.

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- 4. RECORDING (Cont'd)
  - (D) <u>Undertaking of Iowa Network</u> (Cont'd)
    - (5) (Cont'd)

When the customer does not wish to receive the recorded customer message detail, the terms and conditions will be as set forth in the individual case basis agreement.

Recorded customer message detail, which is used (6) at the request of the customer to provide Message Processing and Message Bill Processing Service, is not retained by Iowa Network for longer than The rated but unbilled forty-five (45) days. message detail and the billed message detail is retained for reference (i.e., on paper or microfiche in place of the recorded customer message detail). For recorded customer message detail not used by Message Processing Service at the customer's request, Iowa Network will make every reasonable effort to recover recorded customer message detail previously made available to the customer and make it available again for the customer. The rates and charges as set forth in Section 4(I)(3) following will apply for all such detail provided. When the recorded customer message details are data-transmitted to a customer premise, the data transmission rates will be determined on an individual case basis. Such a request must be made within thirty (30) days from the date the details were initially made available to the customer.

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#### 4. RECORDING (Cont'd)

(E) Liability of Iowa Network

Iowa Network's liability for Recording Service is as follows:

- If customer message detail is not available because Iowa Network lost or damaged tapes or (1)incurred recording system outages, Iowa Network will estimate the volume of lost customer associated revenue based and messages previously known values. This estimated customer message volume will be included along with the customer message detail provided to the customer and/or provided for Message Processing Service. In such events the extent of Iowa Network's liability for damages shall be limited to the granting of a corresponding credit adjustment to the customer amount due to account for the unbillable revenue.
- When Iowa Network is notified that, due to error or omission, incomplete data have been provided to a customer, Iowa Network will make every reasonable effort to locate and/or recover the data and provide new magnetic tapes to the customer at no additional charge. Such request to recover the data must be made within thirty (30) days from the date the details were initially made available to the customer. If the data cannot be recovered, the extent of Iowa Network's liability for damages shall be limited as set forth in (1) preceding.

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## 4. RECORDING (Cont'd)

Issued:

- (E) Liability of Iowa Network (Cont'd)
  - (3) In the absence of willful misconduct, no liability for damages to the customer or other person or entity other than as set forth in (1) or (2) preceding shall attach to Iowa Network for its action or the conduct of its employees in providing Recording Service.

## (F) Obligations of the Customer

(1) The customer shall order Recording Service under a Special Order for each state where the service is desired.

The customer shall order Recording Service at least one (1) month prior to the date when the customer message detail is to be recorded.

The customer shall order provision of recorded customer message detail without sorting or name and address information at least one (1) month prior to the date when it wishes to receive the recorded message detail. However, the customer may wish to receive magnetic tapes of the recorded customer message detail without sorting or name and address information or have the recorded detail data-transmitted to a customer premises at some times and not at others.

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- 4. RECORDING (Cont'd)
  - (F) Obligations of the Customer (Cont'd)
    - (2) (Cont'd)

Therefore, changes in the provision of recorded customer message detail without sorting and name and address information to the customer will be accommodated provided the customer gives two (2) weeks advance written notification to Iowa Network.

For recorded customer message detail with sorting and/or name and address information, the customer shall order the detail in accordance with the terms and conditions of the individual case basis established and filed in this tariff to cover the provision of recorded customer message detail with sorting and/or name and address information.

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## 4. RECORDING (Cont'd)

- (F) Obligations of the Customer (Cont'd)
  - (3) The premises of the ordering customer shall provide such signals as may be required for the proper operation of Iowa Network's automatic message accounting equipment used to perform the detail recordings.
- (G) Payment Arrangements and Audit Provision
  - Audit Provision: Upon reasonable written notice (1)by the customer to Iowa Network, the customer shall have the right through its authorized representative to examine and audit, during normal business hours and at reasonable intervals as determined by Iowa Network, all such records and accounts as may, under recognized accounting practices, contain information bearing upon the recording of messages for which amounts may be Adjustment shall be payable to the customer. made by the proper party to compensate for any errors or omissions disclosed by such examination Neither such right to examine and or audit. audit nor the right to receive such adjustment shall be affected by any statement to the appearing on checks or otherwise, contrary, unless such statement expressly waiving such in a letter signed by the right appears authorized representative of the party having such right and delivered to the other party.

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## 4. RECORDING (Cont'd)

- (G) Payment Arrangements and Audit Provision (Cont'd)
  - (1) (Cont'd)

All information received or reviewed by the customer or its authorized representative is to be considered confidential and is not to be distributed, provided or disclosed in any form to anyone not involved in the audit, nor is such information to be used for any other purpose.

Minimum Period and Minimum Monthly Charge: The minimum period for which Recording Service without sorting and/or name and address information is provided and for which charges apply is one (1) month for each state in which the service is ordered.

The minimum monthly charges are the charges for customer messages recorded, customer messages (except when Message and edited assembled Processing Service is ordered for the same monthly period) and when ordered by the customer, provision of customer message detail without sorting and/or name and address information on magnetic tape or data files. If the service is cancelled or discontinued prior to entering the customer message detail on magnetic tapes or data files, the minimum monthly charge will be the charge for all customer messages recorded, assembled and edited for a thirty (30)-day period. Iowa Network will use the most recent 30-day period for which data is available to determine the minimum charge.

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#### 4. RECORDING (Cont'd)

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- (G) Payment Arrangements and Audit Provision (Cont'd)
  - (3) Cancellation of a Special Order: A customer may cancel a Special Order for Recording Service on any date prior to the service date. The cancellation date is the date Iowa Network receives written or verbal notice from the customer that the Special Order is to be cancelled. The verbal notice must be followed by written confirmation within ten (10) days. The service date for Recording Service is the date the customer requests the recordings to start.

When a customer cancels a Special Order for Recording Service after the order date but prior to the start of service, the minimum monthly charges will apply.

When a customer Changes to Special Orders: (4)requests material changes to a pending Special Order for Recording Service, the pending Special Order will be cancelled and the requested changes will be undertaken if they can be accommodated by Iowa Network under a new Special Order. Material changes to a pending Special Order for Recording Services includes changes in the location and/or number of Iowa Network recording locations, changes in sorting parameters, provision of end user phone number and address, provision of data transmission to a customer location of customer recorded message detail, and changes schedules, dates or intervals for receipt of customer recorded message detail.

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#### 4. RECORDING (Cont'd)

- (G) Payment Arrangements and Audit Provision (Cont'd)
  - (4) (Cont'd)

Non-material changes to a pending Special Order include changes in customer name, customer address and customer requests to receive Recording Service output at the Iowa Network location instead of through U.S. Mail.

All cancellation charges as set forth in (3) preceding will apply for the cancelled Special Order.

#### (H) Rate Regulations

(1) For each customer message recorded, the recording and the assembling and editing charges apply except when the customer orders Message Processing Service. When Message Processing Service is ordered for the same state and month that Recording Service is ordered, the assembling and editing charge does not apply per customer message.

The charges for recording and for assembling and editing apply per message recorded and per message assembled and edited whether or not the customer's schedule of rates specifies billing on a per message basis or any other basis.

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## 4. <u>RECORDING</u> (Cont'd)

- (H) Rate Regulations (Cont'd)
  - (2) The per Special Order charge applies for each Special Order accepted by Iowa Network for Recording Service.
  - When message detail, with or without sorting (3) and/or name and address information is entered on a data file or magnetic tape for provision of message detail to a customer, the per tape charge applies for each data file or magnetic tape prepared, and the per record charge applies for each record processed. A record is a logical grouping of information as described in the programs that process the information and load the magnetic tapes or data file. Iowa Network will determine the charges based on the number of data files or magnetic tapes prepared and on its count of the records processed. The number of records processed will be determined using the number of records input to or the number of records output from the programs that process the information and load the magnetic tapes or data file, whichever number of records is higher.

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## 4. RECORDING (Cont'd)

## (I) Rates and Charges

The rates and charges are:

		<u>USCC</u>	Rates
(1)	Recording -	BARR	
•	- per customer message		\$ 0.014
	- per Special Order		24.85
(2)	Assembling and editing - per customer message	BANA++	ICB rates and charges apply
(3)	Provision of customer message detail - unsorted without name and address information per record processed	BAC++	ICB rates and charges apply
	<ul> <li>sorted output without name and address information, per record processed</li> </ul>	BFT++	ICB rates and charges apply
	<ul> <li>unsorted output with name and address information, per record processed</li> </ul>	BFQ++	ICB rates and charges apply
	<ul> <li>sorted output with name and address information per record processed</li> </ul>	BFS++	ICB rates and charges apply
	- per tape or data file	BFP++	\$17.48
(4)	Data transmission to a customer location - per record transmitted	BTS++	\$0.0084

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## 5. Ordering Options for Switched Access Service

#### 5.1 General

This section sets forth the regulations and other related charges for Access Orders for Switched Access Service. These charges are in addition to other applicable charges as set forth in other sections of this Tariff.

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

## 5.1.1 Ordering Conditions

Switched Access Service may be ordered from Iowa Network between the points of interconnection set forth in Section 8. following. A customer may order any number of services of the same type (e.g., Feature Group, Interface Group, etc.), between Iowa Network's central access tandem and a customer point of interconnection set forth in Switched Access Service Section 8. following. between a customer's premises and the points of interconnection set forth in Section 8. following is solely the responsibility of the customer and must be provided by the customer or ordered from another carrier. Switched Access Service from the points of interconnection set forth in Section 8. following to an end office must be ordered from a Participating Telephone Company or other Exchange Telephone Company. Iowa Network will determine the facilities to be provided between an Iowa Network premises set forth in Section 8. following and Iowa Network's central access tandem on the basis of the capacity ordered.

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## 5. Ordering Options for Switched Access Service (Cont'd)

## 5.1 General (Cont'd)

## 5.1.1 Ordering Conditions (Cont'd)

The customer shall supply all the necessary information to provide service, (e.g., customer name and point of interconnection location, customer end user contact and premises location, facility interface, etc.).

When the customer orders FGD service with the CCSA option described in 6.1.1(D) and 6.1.3(B)(3) following, the customer shall provide additional information for the Signaling Network Access Connection such as STP Point codes, location identifier codes and circuit identification codes, etc., as required by Iowa Network. For FGD ordered with the CCSA option, the customer shall work cooperatively with Iowa Network to determine the configuration of SS7 Signaling Network Access Connections required to handle its signaling traffic. Iowa Network, in cooperation with MEANS, shall have the final authority for managing the joint network and ensuring optimal utilization of the SNACs including link and port facilities.

## 5.1.2 Provision of Other Services

Orders for Switched Access Service between Iowa Network's central access tandem and the points of interconnection set forth in Section 8. following shall be in both Originating and Terminating BHMCs.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.1 General (Cont'd)
    - 5.1.2 Provision of Other Services (Cont'd)
      - (A) Testing Service, Additional Labor, Restoration Priority, and other services offered under the provisions of this tariff shall be ordered with an Access Order or as set forth in (B) following. The rates and charges for these services, as set forth in other sections of this tariff, will apply in addition to the ordering charges set forth in this section and the rates and charges for the Access Service with which they are associated.
      - (B) With the agreement of Iowa Network, the items listed in (A) preceding may subsequently be added to the order at any time, up to and including the service date for the Access Service. When added subsequently, charges for a design change as set forth in 5.2.2(C) following will apply when an engineering review is required.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.1 General (Cont'd)
    - 5.1.2 Provision of Other Services (Cont'd)
      - Additional Engineering is not an ordering (C) option, but will be applied to an Access determines when Iowa Network is necessary Additional Engineering accommodate a customer request. Additional Engineering 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 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 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 ten percent (10%).

The regulations, rates and charges for Additional Engineering are as set forth in 13.1 following and are in addition to the regulations, rates and charges specified in this section.

5.1.3 Reserved for Future Use

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## 5. Ordering Options for Switched Access Service (Cont'd)

#### 5.2 Access Order

An Access order is used by Iowa Network to provide to a customer Access Service as follows:

- Switched Access Services as set forth in Section 6. following.
- Other Services as set forth in Section 5.1.2 preceding.

When placing an order for Access Service, the customer shall provide, at a minimum, the following information:

For Feature Groups B and D Switched Access Service, the customer shall specify the number of busy hour minutes of capacity (BHMC) needed to carry traffic between the end office of a Participating Telephone Company set forth in Section 9. following and the customer's point of forth in Section interconnection set following. Both the originating and terminating Feature Groups minutes shall be included. and D Switched Access Service is furnished as Originating only and traffic. two-way terminating only access service is not offered under this tariff for Feature Groups B or D. The basic traffic type must also be specified using the same categories, as described in Section 6.1.1 following, to enable efficient functions. billing provisioning and information is used to determine the number of set forth in 6.5.5 transmission paths as following.

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## 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

For Interim NXX Translation, the customer must place an order with the company who provides the Interim NXX Translation. The customer must also provide a copy of the order to the Exchange Telephone Companies subtending the Interim NXX Translation office. The minimum territory for which Iowa Network will provide Interim NXX Translation is all the appropriately equipped offices of the Participating Telephone Companies set forth in Section 9. following for which the customer has ordered Interim NXX Translation. Additionally, when new NXX(s) are to be opened up, or when such existing NXX(s) are to be deleted, coincident with the provision of Interim NXX Translation, the customer shall provide such information when placing the order for Interim NXX Translation. For additions and/or deletions of NXX(s) at any other time, the customer shall place an order for such additions deletions. All NXX assignment and administration shall be in accordance with the North American Numbering Plan (NANP). Assignment(s) will be made by the NANP Coordinator. Iowa Network will use the NXX code to identify the customer to whose point of termination the traffic is to be (i.e., at appropriately equipped delivered, 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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### 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

When a customer desires Switched Access Service to an end office of a Participating Telephone Company set forth in Section 9. following that is a remote switching office, the customer must order from Iowa Network and send a copy of the order to the host office which controls the remote switching office. Iowa Network will work cooperatively with the customer to provide the required host office and/or remote switching office information.

The customer must supply a copy of the order to each carrier involved in providing the access service.

The BHMC may be determined by the customer in the following manner. For each average business day (i.e., 8 A.M. to 11 P.M., Monday through Friday, excluding national holidays), the customer shall 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 shall, for the same hour period (i.e., busy hour) for each of twenty (20) consecutive business days, pick the twenty (20) consecutive business days in a calendar year which add up to the largest number of minutes of Both originating and terminating minutes shall be included. The customer shall 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 (20) business day period by twenty (20). This computation shall be performed for each end office the customer wishes to serve. These determinations thus establish the forecasted BHMC for each end office.

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## 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

## 5.2.1 Access Order Service Date Intervals

Access Service is provided with one of the following Service Date Intervals:

- Standard Interval
- Negotiated Interval

Whether the customer's service is subject to standard or negotiated intervals, Iowa Network will provide service interval tables and any associated relevant information to all customers within a reasonable time after a request.

To the extent the Access Service can be made available with reasonable effort, Iowa Network will provide the Access Service in accordance with the customer's requested interval, subject to the following conditions:

#### (A) Standard Interval

The day upon which the customer has provided to Iowa Network a firm commitment for the service and sufficient information to allow for the processing of the Access Order is the Application Date. On the Application Date, Iowa Network will establish a Service Date. The Service Date is the date on which service is to be made available to the customer.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.1 Access Order Service Date Intervals
      - (A) Standard Interval (Cont'd)

The time required to provision the service (i.e., the interval between the Application Date and the Service Date) is known as the service interval. Standard interval tables and associated information will be provided to customers upon request within a reasonable period of time.

Access Services provided in a Standard Interval will be installed during normally scheduled work hours. If a customer requests that installation be done outside of scheduled work hours, and Iowa Network agrees to this request, the customer will be subject to applicable Additional Labor Charges as set forth in 13.2.6(A) following.

#### (B) <u>Negotiated Interval</u>

The customer may request a service date other than that established pursuant to the standard order service interval guidelines, and Iowa Network, where possible, will establish a negotiated order service date in accordance with such request.

Iowa Network will negotiate a service date interval with the customer when:

(1) There is no Standard Interval for the service, or

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.1 Access Order Service Date Intervals
      - (B) Negotiated Interval (Cont'd)
        - (2) The customer requests a service date before or beyond the applicable Standard Interval service date, or
        - (3) The quantity of Access Services ordered exceeds the quantities specified in the Standard Intervals.

Iowa Network will offer a service date based on the type and quantity of Access Services the customer has requested. The Negotiated Interval may not exceed by more than six (6) months the Standard Interval Service date, or, when there is no Standard Interval, the Iowa Network offered service date. All services for which rates are applied on an individual case basis are provided with a Negotiated Interval.

5.2.2 Rates and Charges Associated With Access Ordering

An Access Order may be modified by the customer prior to the service date as set forth following. One or more of the following charges will apply when such modifications are undertaken.

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#### 5. Ordering Options for Switched Access Service (Cont'd)

#### 5.2 Access Order (Cont'd)

# 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)

When modifications are undertaken, Iowa Network shall specify if, in order to complete the requested modifications with the normal work force assigned to complete such an order in normal work hours, the service date will be changed. All charges for Access Order modifications will apply on a per occurrence basis.

Any increase in the number of busy hours minutes of capacity will be treated as a new Access Order (for the increased amount only).

#### (A) Service Date Change Charge

Access Order service dates may be changed, but the new service date may not exceed the original service date by more than thirty (30) calendar days. When, for any reason, the customer indicates that service cannot be accepted for a period not to exceed thirty (30) calendar days, and Iowa Network accordingly delays the start of service, a Service Date Change Charge will apply. If the customer requested service date is more than thirty (30) calendar days after the original service date, the order will be cancelled by Iowa Network and reissued with the appropriate cancellation charges applied unless the customer indicates that billing for the service is to commence as set forth in 5.2.3(A) following.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (A) Service Date Change Charge (Cont'd)

If Iowa Network determines it can accommodate the customer's request without delaying service dates for orders of other customers, a new service date may be established that is prior to the original standard or negotiated interval service date.

If the service date is changed to an earlier date, and Iowa Network determines additional labor or extraordinary costs are necessary to meet the earlier service date requested by the customer, the customer will be notified by Iowa Network that Expedited Order Charges as set forth in (D) following apply. Such charges will apply in addition to the Service Date Charge Charge.

A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The applicable charge is:

Charge

Service Date Change Charge, per order

\$27.00

## (B) Partial Cancellation Charge

Any decrease in the number of ordered busy hours minutes of capacity will be treated as a partial cancellation and the charges as set forth in 5.2.3.(B) following will apply.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (C) <u>Design Change Charge</u>

The customer may request a design change to the service ordered. A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Iowa Network personnel, of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the Design changes requested by the customer. changes include such things as the addition features deletion of optional functions or a change in the type of channel interface, type of Interface Group or technical specification package. Design changes do not include a change of customer point of interconnection, end office switch, or Feature Group 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.

Iowa Network will review the requested change, notify the customer whether the change is a design change, if it can be accommodated and if a new service date is required. If the customer authorizes Iowa Network to proceed with the design change, a Design Change Charge will apply in addition to the charge for Additional Engineering as set forth in 13.1 following.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (C) Design Change Charge (Cont'd)

If a change of a service date is required, the Service Date Change Charge as set forth in (A) preceding will also apply. The Design Change Charge will apply on a per order per occurrence basis, for each order requiring a design change. The applicable charge is:

Design Change Charge,
- per order \$27.00

(D) Expedited Order Charge

When placing an Access Order, a customer may request a service date that is prior to the standard interval service date. A customer may also request an earlier service date on a pending standard or negotiated interval Access Order. If Iowa Network determines provided on the that service can be requested date and that additional labor cost 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 estimated charges. Such percent over additional charges will be determined and billed to the customer as follows:

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## 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

# 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)

## (D) Expedited Order Charge (Cont'd)

To calculate the additional labor charges, Iowa Network 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 13.2.6(A) following.

When the request for expediting occurs subsequent to the issuance of the Access Order, a Service Date Change Charge as set forth in (A) preceding also applies.

## (E) Access Order Charge

The Access Order Charge is applied to all customer requests for new Switched Access Service. In addition, the Access Order Charge is applicable to customer requests for additions, changes or rearrangements to existing Switched Access Service with the following exceptions: the Access Order Charge does not apply:

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (E) Access Order Charge (Cont'd)
        - When a Service Date Change Charge is applicable.
        - When a Design Change Charge is applicable.
        - When an Expedited Order Charge is applicable.
        - 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 Interim NXX Translation is ordered.
        - When a Miscellaneous Service Order Charge is applicable.

The Access Order Charge will be applied on a per order basis to each order received by Iowa Network or a copy of an order received by Iowa Network pursuant to 5.2 preceding and is in addition to other applicable charges as set forth in this and other sections of this tariff.

Access Order Charge

per order

\$70.00

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (F) Miscellaneous Service Order Charge

A Miscellaneous Service Order Charge, applies to any service, or combination of services ordered simultaneously from Section 13. of this 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),
- Stand-by 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 (13.3.1).

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.2 Rates and Charges Associated With Access Ordering (Cont'd)
      - (F) <u>Miscellaneous Service Order Charge</u> (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),
- Stand-by 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 (13.3.4(A)(1)).

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.3 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 Iowa Network 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 ten (10) days. If a customer is unable to accept Access Service within thirty (30) calendar days of the original service date, the customer has the choice of the following options:
        - The Access Order shall be cancelled and charges set forth in (B) following will apply, or
        - Billing for the service will commence.

If no cancellation request is received within the specified thirty (30) calendar days, 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, shall be the thirty-first (31st) day beyond the original service date of the Access Order.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.3 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 Service facilities is considered to have started when Iowa Network 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 shall 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, shall apply.
          - (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such charge is determined as detailed in (4) following.
          - (b) The charge for the minimum period of Switched Access Service ordered by the customer.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.2 Access Order (Cont'd)
    - 5.2.3 Cancellation of an Access Order (Cont'd)
      - (B) (Cont'd)
        - (4) Charges applicable as specified in (3)(a) preceding include the nonrecoverable cost of equipment and material ordered, provided or used, plus the non-recoverable cost of installation and removal including the costs of engineering, labor supervision, transportation, rights-ofway and other associated costs.
      - (C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.
      - (D) If Iowa Network misses a service date by more than thirty (30) days due to circumstances over which it has direct control (excluding, e.g., acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Order without incurring cancellation charges.

## 5.2.4 <u>Selection of Facilities for Access Orders</u>

(A) For all Access Orders, the option to request a specific transmission path is not provided.

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# 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

## 5.2.5 Minimum Period

- (A) The minimum period for which Access Service is provided and for which charges are applicable, is one (1) month.
- (B) Administrative Changes as set forth in 6.7.1(B) following for Switched Access Service may be made without a change in minimum period requirements.
- (C) Changes other than those identified in 6.7.1(B) following will be treated as a discontinuance of the existing service and an installation of a new service. All associated nonrecurring charges will apply for the new service. A new minimum period will be established for the new service. The customer will also remain responsible for all outstanding minimum period obligations associated with the disconnected service.

The changes listed below are those which will be treated as a discontinuance and installation of service and for which a new minimum period will be established.

- (1) A change in type of service (i.e., one type of Switched Access Feature Group to another except as set forth in 6.7.5 following),
- (2) A change in the service to reconfigure FGD trunks to add or discontinue SS7 signaling capability.

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# 5. Ordering Options for Switched Access Service (Cont'd)

## 5.2 Access Order (Cont'd)

## 5.2.6 Minimum Period Charges

When Access Service is disconnected prior to the expiration of the minimum period, rates and charges are applicable for the balance of the minimum period. A disconnect constitutes facilities being returned to available inventory.

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

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

## 5.2.7 Reserved for Future Use

## 5.3 <u>Available Inventory</u>

Available inventory is limited and does not include facilities used to provide working services or facilities previously ordered, reserved for pending orders or held as maintenance spare. Available inventory is the Iowa Network and Participating Telephone Company facilities (e.g., loop pairs, interoffice pairs, carrier channels, circuit equipment, trunk equipment, and switching equipment) in place, when the customer places an order, or under construction to be ready to meet future customer orders.

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# 5. Ordering Options for Switched Access Service (Cont'd)

5.3 Available Inventory (Cont'd)

The available date for facilities under construction is the date such facility construction is completed, including line up and testing, and made available to meet customer needs. Iowa Network will make every reasonable effort to maintain sufficient available inventory to provide Access Service in accordance with customers' requested service date intervals. To the extent that service can be provided, Access Orders will be satisfied from available inventory.

# 5.4 <u>Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies</u>

Access Services provided by Iowa Network and Exchange Telephone Companies are services where one end of the Local Transport element is in the operating territory of an Exchange Telephone Company and Iowa Network provides a portion or all of the facilities between two or more of the Iowa Network premises listed in Section 8. following or where the Interim NXX Translation service is provided by Iowa Network. Iowa Network will coordinate and arrange for the provision of the services ordered. In addition to the rates and charges billed by Iowa Network as set forth in Section 6. following, each Exchange Telephone Company will provide the portion of the Local Transport element in its operating territory and will bill its charges.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies
    - (A) (Cont'd)
      - (1) When Switched Access Services are ordered to Iowa Network's central access tandem, the customer will place the order with Iowa Network. The customer must also supply a copy of the order to each Exchange Telephone Company involved in providing the service and subtending Iowa Network's central access tandem.
      - (2) When Switched Access Services are ordered to a point of interconnection listed in Section 8. following other than Iowa Network's central access tandem, the customer will place the order as follows:
        - Switched Group В Feature For (a) Access Service, the customer must place the order with Iowa Network. customer must also supply a copy of the order to each Exchange Telephone Company involved in providing the subtending and service Network's central access tandem.
        - (b) For Feature Group D Switched Access Service, the customer must place the order with the Exchange Telephone Company in whose territory the end office is located. The customer must also supply a copy of the order to Iowa Network.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies
    - (A) (Cont'd)
      - for the Switched Access Services ordered set forth in (1) and (2) preceding, the customer must also supply a copy of the order to the Exchange Telephone Company in whose operating territory a customer premises is located and any other Exchange Telephone Company involved in providing the service.
      - changes or additions, initiation, deletions to the Interim NXX Translation (4)code(s), the customer must place an order with the carrier who provides the Interim The customer must also NXX Translation. provide a copy of the order to the Exchange Telephone Companies subtending the Interim NXX Translation office. When Feature Group Interim ordered the with is Translation optional feature, the customer shall specify the Service Access Code(s) (e.g., 800 or 900) and their associated NXX Code(s) to be translated within the entire The initial and LATA or Market Area. subsequent orders to add, change, or delete Interim NXX Translation codes shall placed separately or in combination with orders to change Feature Group D Switched Access BHMC. Customer assigned NXX codes which have not been ordered will be blocked.

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- 5. Ordering Options for Switched Access Service (Cont'd)
  - 5.4 Access Orders for Services Provided by Iowa Network and Exchange Telephone Companies
    - (A) (Cont'd)
      - (4) (Cont'd)

Orders for the Interim NXX Translation optional feature shall not be required until such time as a customer other than an MTS/WATS provider requests Interim NXX Translation of Service Access Codes. Upon receipt of such order, Iowa Network shall notify the MTS/WATS provider of the activation of the Interim NXX Translation Service for the Service Access Code. Following such initial activation, all customers are required to place orders for Interim NXX Translation of the Service Access Code and the Interim NXX Translation charge for the Service Access Code shall apply as set forth in 6.8.4 following.

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## 6. <u>Switched Access Service</u>

#### 6.1 <u>General</u>

Switched Access Service, when combined with the services offered by Exchange Telephone Companies, is available to customers for their use in furnishing their services to end users. Iowa Network provides a two-point electrical communications path between a point of interconnection with the transmission facilities of an Exchange Telephone Company at a location listed in Section 8. following and Iowa Network's central access tandem where the customer's traffic is switched to originate or terminate its It also provides for the switching communications. facilities at Iowa Network's central access tandem. Iowa Network's central access tandem is Iowa Network's Iowa that in Des Moines, switching system located access and egual the software for concentration and distribution function for originating and terminating traffic between the end offices of Participating Telephone Companies listed in Section 9. interconnection following and a customer's point of The customer's in Section 8. following. forth point of interconnection is the demarcation point or network interface between Iowa Network's communications facilities and customer provided facilities.

Rates and charges for Switched Access Service are set forth in 6.8 following. The application of rates for Switched Access Service is described in 6.1.3 and 6.7 following.

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## 6. <u>Switched Access Service</u> (Cont'd)

## 6.1 General (Cont'd)

# 6.1.1 <u>Access Service Arrangements and Manner of Provision</u>

Switched Access Service is provided in service categories called Feature Groups. These technical their by differentiated characteristics and the manner in which an end user accesses them in originating calling, e.g., with or without an access code. Centralized Equal Access Service is provided with Feature Group D and terminating Feature Group B Switched Access Service. In addition, Common Channel Signaling Access and Interim NXX Translation is available with Feature Group D Switched Access Following is a brief description of each Feature Group arrangement, Centralized Equal Access Service, and the CCSA and Interim NXX Translation optional features.

## (A) Centralized Equal Access Service

Customer's ordering Feature Group D and terminating Feature Group B Switched Access Service will receive Centralized Equal Access Service provides the concentration and distribution function for originating and terminating Feature Group D traffic and terminating Feature Group B traffic between the exchanges of the Participating Telephone Companies listed in Section 9.1 following and one or more of the Iowa Network premises set forth in Section 8. following.

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- 6. Switched Access Service (Cont'd)
  - 6.1 <u>General</u> (Cont'd)
    - 6.1.1 Access Service Arrangements and Manner of Provision (Cont'd)
      - (A) Centralized Equal Access Service (Cont'd)

Centralized Equal Access Service enable the end users in these exchanges to originate calls to a customer using a uniform 10XXX access code or, if the end user's telephone exchange service is arranged presubscription to that customer, to originate calls to that customer with no Centralized Equal Access access code. Service also provides a centralizing function for terminating traffic that is similar to the centralizing function that it provides for originating traffic. A customer receiving Centralized Equal Access Service is able to terminate its Feature Group B and Feature Group D calls in the the Participating Telephone exchanges of Companies listed in Section 9. following by merely connecting at one or more of the Iowa Network premises listed in Section 8. traffic, following. For this terminating Centralized Equal Access Service will ο£ actual measurement provide the terminating minutes of use.

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## 6. Switched Access Service (Cont'd)

## 6.1 General (Cont'd)

# 6.1.1 <u>Access Service Arrangements and Manner of Provision</u> (Cont'd)

## (B) Feature Group B (FGB)

FGB Access, which is available to all customers, provides trunk side access at a customer's point of interconnection with an associated uniform 950-0XXX or 950-1XXX access code for the customer's use in originating communications. In addition, the measurement of actual minutes of use is provided with FGB Access in the terminating direction. A more detailed description of FGB Access is Provided in 6.2.2 following.

## (C) Feature Group D (FGD)

FGD Access, which is available to all customers, provides trunk side access at a customer's point of interconnection with an associated uniform 10XXX access code for the in originating customer's use communications unless terminating Participating Telephone Company's end office is unable to provide a uniform 10XXX code. The end offices of Participating Telephone Companies that are unable to provide a uniform 10XXX code are set forth in Section addition, In following. 6.2.4 measurement of actual terminating minutes of use is provided with FGD Access in the terminating direction. A more detailed description of FGD Access is provided in 6.2.4 following.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 <u>Access Service Arrangements and Manner of Provision</u> (Cont'd)
      - (D) <u>Joint Provision of Common Channel Signaling</u> <u>Access (CCSA)</u>

CCSA is a nonchargeable optional feature available with FGD access service. CCSA allows the customer to establish a connection with the Iowa Network/MEANS jointly operated CCSAN at the Signaling Points of Interconnection (SPOIs) in the metropolitan areas of Des Moines, Iowa and Minneapolis/St. Paul, Minnesota for transporting call control information. Transmission specifications, diversity requirements, and testing parameters are set forth in Technical Reverence TR-TSV-000905 and TR-TSV-000954.

An STP in Des Moines, Iowa will be owned and operated by Iowa Network, for CCSA in Iowa while an STP in Plymouth, Minnesota will be owned and operated by MEANS for CCSA in Minnesota. However, Iowa Network and MEANS will cooperate to provide redundancy to their respective CCSA networks. Iowa Network and MEANS will jointly provide the SNACs which include the ports on Iowa Network and MEANS STPs and the link facilities between the STPs.

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- 6. Switched Access Service (Cont'd)
  - 6.1 <u>General</u> (Cont'd)
    - 6.1.1 Access Service Arrangements and Manner of Provision (Cont'd)
      - (D) <u>Joint Provision of Common Channel Signaling</u> <u>Access (CCSA)</u> (Cont'd)

The CCSAN consists of a mated pair of STPs which operate completely parallel to each other, a pair of diverse facilities connecting the STPs, and access links to each of the local telephone company SP/SSPs from each STP. This configuration ensures network reliability by providing geographic diversity and redundancy of signal switching and transport.

Iowa Network will provide the signaling facilities between the Iowa Network Routing Exchange Carrier end offices and the Des Moines, Iowa STP. MEANS will provide the facilities between the MEANS signaling Routing Exchange Carrier end offices and the The interstate Plymouth, Minnesota STP. facilities connecting the two STPs will be jointly provided by Iowa Network and MEANS. The access link to the MEANS STP from the Iowa Network Routing Exchange Carrier end offices is provided by Iowa Network to the centralized access tandem and then jointly by Iowa Network and MEANS to the MEANS STP. Likewise, the access link to the Iowa Network STP from the MEANS Routing Exchange Carriers is provided over MEANS facilities the MEANS centralized equal access to tandem, and then over jointly provided facilities to the Iowa Network STP.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 <u>Access Service Arrangements and Manner of Provision</u> (Cont'd)
      - (D) <u>Joint Provision of Common Channel Signaling</u> <u>Access (CCSA)</u> (Cont'd)

The interexchange carrier is responsible for facilities signaling interexchange carrier's STPs, which shall consist of a quad (4) of 56 Kbps links, to the SPOIs on the Iowa Network/MEANS network. Iowa Network and MEANS will each provide a pair of Signaling Network Access Connections facilities any includes which (SNACs) required between the Iowa Network/MEANS STPs and the interexchange carrier SPOIs and the ports on the mated STPs. An interexchange carrier who wishes to connect a single SP or SSP to the CCSAN may do so by providing a pair of 56 Kbps links, one to a SPOI in Des SPOI to one the and Moines, Minneapolis/St. Paul, and Iowa Network and MEANS will provide the corresponding SNACs.

The use of the SNAC and the STP Port will be bi-directional in that SS7 message sequences may be originated from either the interexchange carrier's network or from the INS network.

The message sequences initiated from the INS network may include ISDN User Part (ISUP) messages, Transaction Capabilities Application Part (TCAP) messages, in support of functions such as 800 Database queries and Line Information Data Base (LIDB) queries, and other messages in support of services for which the networks of both the interexchange carrier and Iowa Network are used.

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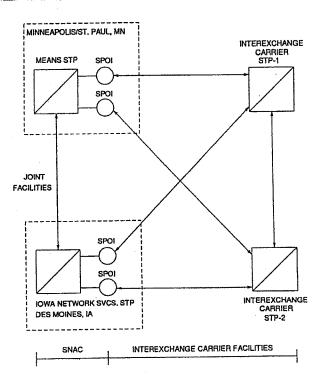
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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 <u>Access Service Arrangements and Manner of Provision</u> (Cont'd)
      - (D) <u>Joint Provision of Common Channel Signaling</u> <u>Access (CCSA)</u> (Cont'd)

The following diagram illustrates how the Iowa Network/MEANS SS7 network will interconnect with the interexchange carrier's network, independent of the voice Centralized Equal Access communications path.



SNAC - SIGNALING NETWORK ACCESS CONNECTION SPOI - SIGNALING POINT OF INTERCONNECTION STP - SIGNAL TRANSFER POINT

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 Access Service Arrangements and Manner of Provision (Cont'd)
      - (E) Interim NXX Translation

The Interim NXX Translation optional feature 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 an 1+800+NXX-XXXX or an 1+900+NXX+XXXX call is originated by an end Iowa Network or a Participating 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 customer provide the equipped to. identification function, the call will be routed to an end office at which function is available or Iowa Network's customer Once central access tandem. identification has been established, the call will be routed to the 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 from coin telephones, 0+, 0-, 10XXX, Inmate Service, Hotel/Motel Service and calling card calls will be blocked.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 Access Service Arrangement and Manner of Provision (Cont'd)
      - (E) Interim NXX Translation (Cont'd)

The charge for Interim NXX Translation is as set forth in Section 6.8.4 following.

(F) Manner of Provision

Switched Access is furnished in both Originating and Terminating BHMCs. Iowa Network will determine the facilities to be provided on he basis of the busy hour minutes of capacity ordered as set forth in 5.2 preceding. Feature Groups B and D Switched Access Service is furnished as a two-way access service between customer's premises and the points of interconnection set forth in Section 8. Originating only and following. terminating only Feature Groups B and D access service is not offered under this tariff.

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 Iowa Network to properly design Switched Access Service to meet the traffic carrying capacity requirement of the customer.

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- 6. Switched Access Service (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.1 <u>Access Service Arrangement and Manner of</u> Provision (Cont'd)
      - (F) Manner of Provision (Cont'd)

major BHMC categories There are two identified as: Originating and Terminating. Originating BHMCs represent access capacity for carrying traffic from the end user to the customer's point of interconnection set forth in Section 8. following. Terminating capacity BHMCs represent access customer's the carrying traffic from of interconnection set forth in point Section 8. following to the end user. When ordering capacity for Switched Access Service, the customer must at a minimum specify such access capacity in terms of both Originating BHMCs and Terminating both Originating BHMCs BHMCs.

Because some customers will wish to further segregate their originating traffic into separate trunk groups, Originating BHMCs are further categorized into Domestic, 800, 900, and IDDD. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 800 and 900 traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 800 and 900 access capacity represent BHMCs carrying, respectively, only 800 and 900 traffic. When ordering such types of access capacity, the customer must Domestic, 800, 900, or IDDD BHMCs.

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### 6. Switched Access Service (Cont'd)

#### 6.1 General (Cont'd)

### 6.1.3 Rate Categories

There are four rate categories which apply to Switched Access Service:

- Centralized Equal Access Service (described in 6.1.3(A) following)
- Switched Transport (described in 6.1.3(B) following)
- Non-chargeable Optional Features (described in 6.1.3(B)(2) following)
- Chargeable Optional Features (described in 6.1.3(C) following)

### (A) Centralized Equal Access Service

The Centralized Equal Access Service rate category establishes the charges related to transmission and tandem switching the facilities that provide a concentration and distribution function for originating and terminating traffic between an Iowa Network premises listed in Section 8. following and Iowa Network's central access Centralized Equal Access Service is assessed on a per access minute basis at the rate set forth in 6.8.1 following. This Centralized Equal Access Service rate is applicable to Feature Group D Switched Access Service in originating and terminating the directions and to Feature Group B Switched Access Service in the terminating direction only.

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# 6. <u>Switched Access Service</u> (Cont'd)

### 6.1 General (Cont'd)

# 6.1.3 Rate Categories (Cont'd)

(A) Centralized Equal Access Service (Cont'd)

The Centralized Equal Access Service rate applies to all terminating traffic. The application of the Centralized Equal Access rate to each feature group is described in Sections 6.7.1(D) and 6.7.1(E) following.

## (B) Switched Transport

Switched Transport is a High Capacity (1.544 Mbps) frequency transmission path composed of facilities determined by Iowa Network. The two-way frequency transmission path permits the transport of calls as follows:

- (1) In the originating direction from an Iowa Network premises set forth in Section 8. following to Iowa Network's central access tandem, when the customer's point of interconnection is located at Iowa Network's central access tandem.
- (2) In the terminating direction, from Iowa Network's central access tandem to an Iowa Network premises set forth in Section 8. following when the customer's point of interconnection is located at Iowa Network's central access tandem.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) <u>Switched Transport</u> (Cont'd)
        - (3) In both the originating and terminating directions, between two Iowa Network premises set forth in Section 8. following that are not located at Iowa Network's central access tandem.

The Switched Transport rate category establishes the rate related to the tandem switching transmission and provide facilities used to transport of calls as described above. Switched Transport is assessed on a per access minute per mile basis at the set forth in Section rate The application of the following. Switched Transport rate to each Feature Group is described in Sections 6.7.1(D) and 6.7.1(E) following.

Switched Transport is provided by Iowa Network at a customer's point of interconnection. A customer's point of interconnection may be located at Iowa Network's central access tandem or another Iowa Network premises as set forth in Section 8. following.

International dialing may be provided as a capability associated with 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 standard FGD equipment.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) Switched Transport (Cont'd)
        - (1) Interface Groups

One Interface Group is provided for terminating the Switched Transport at the customer's point of interconnection: Interface Group 6. Where transmission facilities permit, the individual transmission path between Iowa Network's central access tandem and another Iowa Network premises listed in Section 8. following may at the option of the customer be provided with optional features as set forth in (2)(a) and (b) following.

Interface Group 6 is provided with Type A or B Transmission Specifications depending on the Feature Group. All Interface Groups are provided with Data Transmission Parameters.

Only certain interfaces are available at the customer's point of interconnection. The various interfaces which are available are set forth in 1(j) following and Section 15.1.11.

- (a) Reserved for Future Use
- (b) Reserved for Future Use

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 <u>General</u> (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) Switched Transport (Cont'd)
        - (1) Interface Groups (Cont'd)
          - (c) Reserved for Future Use
          - (d) Reserved for Future Use
          - (e) Reserved for Future Use
          - (f) Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the customer's point The interface interconnection. capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to twenty-four (24) voice frequency transmission When analog switching utilizing analog terminations is Iowa Network will provided, provide multiplex and channel bank equipment to derive twentyfour (24) transmission paths of a width band frequency approximately three hundred (300) three thousand (3000) Hz. When digital switching or analog switching with digital carrier terminations is provided, Iowa Network will provide a DS1 signal in D3/D4 format

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) Switched Transport (Cont'd)
        - (1) Interface Groups (Cont'd)
          - (f) Interface Group 6 (Cont'd)

            The interface is provided with individual transmission path bit

stream supervisory signaling.

- (g) Reserved for Future Use
- (h) Reserved for Future Use
- (i) Reserved for Future Use
- (j) Available Interface Codes

Following is a matrix showing which interface codes are available as a function of the switch supervisory signaling and Feature Group. For explanations of these codes, see the Glossary of Channel Interface Codes in 15.3.1 following.

Interface Group	Switch Supervisory Signaling	Interface Code	Feature Group B D
6	RV, EA, EB, EC RV, EA, EB, EC	4DS9-15 4DS9-15L	$\begin{array}{ccc} X & X \\ X & X \end{array}$

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) Switched Transport (Cont'd)
        - (2) Nonchargeable Optional Features

Where transmission facilities permit, Iowa Network will, at the option of the customer, provide the following nonchargeable optional features in association with Switched Transport.

### (a) Supervisory Signaling

Where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability, the customer may order an optional supervisory signaling arrangement for each transmission path provided as follows:

Interface Group 6 may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Iowa Network's central access tandem.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) <u>Switched Transport</u> (Cont'd)
        - (2) <u>Nonchargeable Optional Features</u> (Cont'd)
          - (a) <u>Supervisory Signaling</u> (Cont'd)

Generally, such signaling is available only where Iowa Network's central access tandem provides an analog, i.e., non-digital, interface and a portion of the facility provided by the customer between Iowa Network's central access tandem and the customer's premises is analog.

(b) <u>Customer Specified Entry Switch</u> Receive Level

This feature allows the customer to specify the receive transmission level at Iowa Network's central access tandem. The range of transmission levels which may be specified is described in Technical Reference TR-NPL-000334. This feature is available for Feature Group B.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 General (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (B) <u>Switched Transport</u> (Cont'd)
        - (2) <u>Nonchargeable Optional Features</u> (Cont'd)
          - (c) <u>Joint Provision of Common Channel</u> <u>Signaling Access (CCSA)</u>

There are no recurring charges for this feature. Ιf customer requests Iowa Network to reconfigure FGD trunks with inband signaling to provide FGD service with the CCSA option, the request will be treated as a of existing discontinuance service and the installation of a new service and the installation charges set forth in 6.8.4(A) following will apply on a per SNAC basis.

(C) Chargeable Optional Features

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

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.1 <u>General</u> (Cont'd)
    - 6.1.3 Rate Categories (Cont'd)
      - (C) Chargeable Optional Features (Cont'd)
        - (1) Interim NXX Translation

The Interim NXX Translation element provides for customer identification when calls are directed by end users in the 1+SAC+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 Bellcore NANP Coordinator. Iowa Network 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 contracted through or tandems 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. A nonrecurring charge, as set forth in 6.8.4 following is associated with this optional feature. nonrecurring charge is assessed by Iowa Network on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in 5.2.2 preceding.

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- 6. <u>Switched Access Service</u> (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)

The nonrecurring charge is assessed only by a company that provides the final translation function. A 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 D is as set forth in 6.7.1(B)(2) following.

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## 6. <u>Switched Access Service</u> (Cont'd)

### 6.1 General (Cont'd)

## 6.1.4 Design Layout Report

At the request of the customer, Iowa Network will provide to the customer the makeup of the facilities and services provided. 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.

### 6.1.5 Acceptance Testing

At no additional charge, Iowa Network will, at the customer's request, cooperatively test, at the time service is initiated, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling.

#### 6.1.6 Routine Testing

At no additional charge, Iowa Network will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C-message noise and Balance (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 Iowa Network, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test.

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## 6. <u>Switched Access Service</u> (Cont'd)

## 6.1 General (Cont'd)

## 6.1.6 Routine Testing (Cont'd)

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 13.3.4 following. Charges for these additional tests are set forth in 13.3.4 (C) following.

## 6.1.7 Ordering Options and Conditions

Switched 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 Switched Access Service (e.g., Service Date Charges, Cancellation Charges, etc.).

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### 6. <u>Switched Access Service</u> (Cont'd)

## 6.2 <u>Provision and Description of Switched Access Service</u> <u>Feature Groups</u>

Switched Access Service is provided in two different Feature Group arrangements. There are two (2) specific transmission performances (i.e., Types A and B) that have been identified for the provision of Feature Groups. The parameters for the transmission specifications are set forth in 6.4.1 following and Section 15.2.1.

Feature Groups are arranged with Access Service for two way calling. Originating calling permits the delivery of calls from Telephone Exchange Service locations to a customer's point of interconnection. Terminating calling permits the delivery of calls from the customer's Point of interconnection to Telephone Exchange Service locations. Two way calling permits the delivery of calls in both directions, but not simultaneously.

Following are detailed descriptions of each of the available Feature Groups. Each Feature Group is described in terms of its specific physical characteristics and calling patterns, the transmission specifications with which it is provided, and the standard testing capabilities.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> <u>Feature Groups</u> (Cont'd)

### 6.2.2 Feature Group B (FGB)

#### (A) <u>Description</u>

- (1) FGB is provided as trunk side switching through the use of access tandem switch trunk equipment at Iowa Network's central access tandem. The switch trunk equipment is provided Iowa Network Services, Inc. with wink start pulsing signals and answer and disconnect supervisory signaling.
- frequency address signaling in the originating direction only. Any other address signaling in the originating direction, if required by the customer, must be provided by the customer's end user using inband tone signaling techniques. Such inband tone address signals will not be regenerated by Iowa Network and will be subject to the ordinary transmission capabilities of the Switched Transport provided.
- (3) The access code for FGB switching is a uniform access code. The form of the uniform access code is 950-0XXX or 950-1XXX for customers. These uniform access codes will be the assigned access numbers of all FGB Switched Access Service provided to the customer by Iowa Network.

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- 6. Switched Access Service (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature <u>Groups</u> (Cont'd)
    - 6.2.2 <u>Feature Group B (FGB)</u> (Cont'd)
      - (A) Description (Cont'd)
        - (4) The customer will also be billed additional non access charges for calls to certain community information services for which rates are applicable, e.g., 976 (DIAL-IT) Network Service. Additionally, non access charges will also be billed for calls from a FGB trunk to another customer's service in accordance with that customer's applicable service rate when Iowa Network performs the billing function for that customer.

Calls in the terminating direction will not be completed to 950-1XXX or 950-0XXX access codes, local operator assistance (0- and 0+) or 911 or 10XXX access codes. FGB may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C and D.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)
    - 6.2.2 Feature Group B (FGB) (Cont'd)
      - (A) Description (Cont'd)
        - (4) (Cont'd)

As a matter of clarification, addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access charges by Participating Telephone Companies and, when applicable, other Telephone Companies Exchange compliance with their tariffs for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8. following and the end offices served by Iowa Network's central access tandem. In addition, the customer may also be by the billed access charges Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of access services between an Towa Network premises set forth in Section 8. following and the customer's premises.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature <u>Groups</u> (Cont'd)
    - 6.2.2 Feature Group B (FGB) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (5) FGB switching, when used in the terminating direction, provides the measurement of actual terminating minutes of use. The actual terminating minutes of use will be provided to the Participating Telephone Companies listed in Section 9. following to allow the customer to receive accurate and verifiable bills for Switched Access Service.
      - (B) Transmission Specifications

FGB is provided with Type B Transmission Specifications. The specifications for the associated parameters are guaranteed to the end office when routed directly or to the first point of switching when routed via an access tandem. Type DB Data Transmission Parameters are provided with FGB to Iowa Network's central access tandem.

(C) Testing Capabilities

In addition to the tests described in 6.1.5 preceding which are included with the installation of service, Additional Cooperative Acceptance Testing and Additional Automatic Testing will be provided as set forth in 13.3.4 following.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)
    - 6.2.3 Reserved for Future Use

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- 6. Switched Access Service (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature <u>Groups</u> (Cont'd)
    - 6.2.4 Feature Group D (FGD)
      - (A) <u>Description</u>
        - (1) FGD is provided at Iowa Network's central access tandems.
        - (2) FGD is provided as trunk side switching through the use of access tandem switch trunk equipment at Iowa Network's central access tandem. The switch trunk equipment is provided with wink start pulsing signals and answer and disconnect supervisory signaling. SS7 signaling is provided instead of multifrequency address signaling when the CCSA optional feature is ordered.
        - FGD switching is provided with multi-(3) frequency address or SS7 signaling. Up to twelve (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 Iowa Network equipment to customer's point the interconnection. Such address signals will be subject to the ordinary transmission capabilities of Iowa Network's facilities.

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- 6. Switched Access Service (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> <u>Feature Groups</u> (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - FGD switching, when used in the (4)terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of a Telephone Company, Participating 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. Only those valid NXX codes served by end office switches subtending Iowa Network's central access tandem may be accessed.

The customer will also be billed additional non-access charges for calls certain community information to services, for which rates applicable, e.g., 976 (DIAL-IT) Network Additionally, non-access Services. charges will also be billed for calls from a FGD trunk to another customer's service in accordance with customer's applicable service rates when Iowa Network performs the billing function for that customer.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> <u>Feature Groups</u> (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (4) (Cont'd)

Calls in the terminating direction will not be completed to 950-0XXX or 950-1XXX access codes, local operator assistance (0- and 0+), and 10XXX access codes. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C and D.

As a matter of clarification, in addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access charges by Participating Telephone Companies and, when applicable, other Exchange Telephone Companies in compliance with their tariffs for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8 following and the end offices served by Iowa Network's central access tandems.

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- 6. Switched Access Service (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature <u>Groups</u> (Cont'd)
    - 6.2.4 <u>Feature Group D (FGD)</u> (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (4) (Cont'd)

In addition, the customer may also be billed access charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of access services between an Iowa Network premises set forth in Section 8 following and the customer's premises.

(5) The access code for FGD switching is a uniform access code of the form 10XXX unless a Participating Telephone Company's end office switch is unable to provide a uniform 10XXX code. A single access code will be the assigned number of all FGD access provided to the customer by Iowa Network. 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.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature Groups (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (5) (Cont'd)

Where no access code is required, the number dialed by the end user shall be a seven (7) to ten (10) digit number, where appropriate, for calls in the North American Numbering Plan (NANP). The form of the numbers dialed by the end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA+NXX-XXXXX, 0 or 1+ NPA + NXX+XXXX, and for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

The end offices of the Participating Telephone Companies that are listed below are unable to provide a uniform 10XXX code.

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- 6. Switched Access Service (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature <u>Groups</u> (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (5) (Cont'd)

When a uniform 10XXX code is unavailable, the end user has a choice of the following dialing procedures:

- i. 1+950+0XXX+customer authorization code
- ii. 1+950+1XXX+customer authorization code
- iii. 1+800+7 digits+customer authorization code

When the 10XXX access code is used, FGD switching also provides for dialing the digit 0 (zero) for access to the customer's operator, or the end-of-dialing digit (#) for cut-through access to the customer's premises, or 911 for access to the emergency reporting service of a Participating Telephone Company.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> <u>Feature Groups</u> (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - (6) FGD switching, when used in the terminating direction, provides the measurement of actual terminating minutes of use. The actual terminating minutes of use will be provided to the Participating Telephone Companies listed in Section 9. following to allow the customer to receive accurate and verifiable bills for Switched Access Service.
        - (7) When a customer has had FGB access and subsequently replaces the FGB access with FGD access, at the customer's request and where facilities permit, Iowa Network will, for a period of ninety (90) days, direct calls dialed by the customer's end users using the customer's previous FGB access code to the customer's FGD access service. The customer must be prepared to handle normally dialed FGD calls as well as calls dialed with FGB access code which require the customer to receive additional address signaling from the end user. Such calls will be rated as FGD.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature Groups (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (A) <u>Description</u> (Cont'd)
        - technical prohibited bу (8) Unless limitations, the customer's Interim NXX Translation traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-Interim NXX Translation When required by technical traffic. limitations, or at the request of the customer, a separate trunk group will Interim NXX for be established translation traffic.
      - (B) Transmission Performance

FGD is provided with Type A Transmission Specifications.

Type DA Data Transmission Parameters are provided for the transmission path between the customer's premises and the access tandem and between the access tandem and the end office.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.2 <u>Provision and Description of Switched Access Service</u> Feature Groups (Cont'd)
    - 6.2.4 Feature Group D (FGD) (Cont'd)
      - (C) Testing Capabilities

is provided, in the terminating direction where equipment is available, with seven (7) 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, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.1.5 preceding which are included with the Additional of service, installation testing Acceptance Cooperative Additional Automatic Testing will provided for FGD as set forth in 13.3.4 following.

the ordered with FGD is When option, network compatibility and other will be performed operational tests cooperatively with Iowa Network, MEANS, and the interexchange carrier at locations, dates, and times as specified by Iowa Network in consultation with the interexchange These tests must ensure the carrier. of the INS/MEANS and connection signaling networks meets or exceeds industry service before CCSA standards established.

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## 6. <u>Switched Access Service</u> (Cont'd)

# 6.4 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are two different standard specifications (Types A and B). The standard for the transmission path is dependent on the Feature Group. The available transmission specifications are set forth in 6.4.1 and 15.2.1 following. Data Transmission Parameters are also provided with the Switched Access Service transmission path. Iowa Network will, upon notification by the customer that the data parameters set forth in 6.4.2(A), 6.4.2(B) or 15.2.2 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.

All service configurations operated by Iowa Network after the effective date of this tariff will conform to the transmission specifications contained in this tariff.

The transmission specifications contained in this Section are immediate action limits. Acceptance limits are set forth in Technical Reference TR-NPL-000334. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

# 6.4.1 Standard Transmission Specifications

Following are descriptions of the two Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups and Interface Group with which the Feature Group Standard Transmission Performances are provided are set forth in 6.2.2(B) and 6.2.4(B) preceding.

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# 6. <u>Switched Access Service</u> (Cont'd)

# 6.4 Transmission Specifications (Cont'd)

# 6.4.1 Standard Transmission Specifications (Cont'd)

# (A) Type A Transmission Specifications

Type A 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  $\pm 2.0$  dB.

## (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. dB.

### (3) <u>C-Message Noise</u>

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

Route Miles	<u>C-Message Noise</u>
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

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- 6. Switched Access Service (Cont'd)
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.1 <u>Standard Transmission Specifications</u> (Cont'd)
      - (A) Type A Transmission Specifications (Cont'd)
        - (4) <u>C-Notched Noise</u>

The maximum C-Notched Noise, utilizing a -16 dBm0 holding tone, is less than or equal to 45 dBrnCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss is equal to or greater than the following:

Echo Return	Singing Return		
Loss	Loss		
16 dB	11 dB		

(B) 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  $\pm$  2.5 dB.

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# 6. <u>Switched Access Service</u> (Cont'd)

# 6.4 <u>Transmission Specifications</u> (Cont'd)

# 6.4.1 <u>Standard Transmission Specifications</u> (Cont'd)

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

## (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:

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

### (4) C-Notched Noise

The maximum C-Notched Noise, utilizing a -16 dBmO holding tone is less than or equal to 47 dBrnCO.

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

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.1 Standard Transmission Specifications (Cont'd)
      - (B) Type B Transmission Specifications (Cont'd)
        - (5) Echo Control

Echo Control is identified as Impedance Balance for FGB and Equal Level Echo Path Loss for FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL). The ERL and SRL also differ by Feature Group. They are greater than or equal to the following:

					Return	Loss	3
			Ec	cho	_	Sir	nging
For	FGB	access	8	đВ		4	dВ

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- Switched Access Service (Cont'd) 6.
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.2 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 6.2.2(B) and 6.2.4(B) preceding. Following are descriptions of each.

- Data Transmission Parameters Type DA
  - Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

Envelope Delay Distortion (2)

> The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604	to	2804	$_{\mathrm{Hz}}$

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

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.2 <u>Data Transmission Parameters</u> (Cont'd)
      - (A) <u>Data Transmission Parameters Type DA</u> (Cont'd)
        - (3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBrnCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

(4) <u>Intermodulation Distortion</u>

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

(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.

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- Switched Access Service (Cont'd) 6.
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.2 <u>Data Transmission Parameters</u> (Cont'd)
      - 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.

Envelope Delay Distortion (2)

> 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

Impulse Noise Counts (3)

> The Impulse Noise Counts exceeding a 67 dBrnCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.4 Transmission Specifications (Cont'd)
    - 6.4.2 <u>Data Transmission Parameters</u> (Cont'd)
      - (B) <u>Data Transmission Parameters Type DB</u> (Cont'd)
        - (4) <u>Intermodulation Distortion</u>

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.

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## 6. <u>Switched Access Service</u> (Cont'd)

## 6.5 Obligations of Iowa Network

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

### 6.5.1 Network Management

Iowa Network will administer its network to ensure the provision of acceptable service levels users of all telecommunications Network's services. Iowa Network maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, 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 Iowa Network or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by Iowa Network result in the complete loss of service by the customer, the customer will be a Credit Allowance for Service granted Interruption as set forth in 2.4.4(B)(1) preceding.

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### 6. <u>Switched Access Service</u> (Cont'd)

## 6.5 Obligations of Iowa Network

# 6.5.2 <u>Design and Traffic Routing of Switched Access</u> <u>Service</u>

In compliance with their tariffs and the Commission's Orders issued on October 18, 1988 and December 7, 1988 in Docket No. RPU-88-2, the Participating Telephone Companies listed in Section 9. following shall design and determine the routing of Switched Access 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 of the Participating Telephone Companies serving the customer. The Participating Telephone Companies shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups.

Finally, Iowa Network will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment. Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and the Iowa Network traffic routing plans.

If the customer desires routing or directionality different from that determined by the Participating Telephone Companies, Iowa Network will work cooperatively with the customer in determining the directionality of the service.

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### 6. Switched Access Service (Cont'd)

### 6.5 Obligations of Iowa Network

## 6.5.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to Iowa Network 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.

## 6.5.4 Trunk Group Measurement Reports

Subject to availability, Iowa Network 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.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.5 Obligations of Iowa Network
    - 6.5.5 Determination of Number of Transmission Paths

Iowa Network will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Groups A transmission path is a derived communication path of a frequency bandwidth of approximately 300 Hz to 3000 Hz provided over a high speed digital facility between a customer's point of interconnection listed in Section 8. following and Iowa Network's central access tandem. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in 6.1.1(F) preceding) for each Feature Group ordered to Iowa Network's central access tandem. The total busy hour minutes of capacity by type for the Feature Group will be converted to transmission paths using standard traffic engineering methods.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.5 Obligations of Iowa Network (Cont'd)
    - 6.5.6 Reserved for Future Use
    - 6.5.7 Design Blocking Probability

Iowa Network will design the facilities used in the provision of Switched Access Service to meet the blocking probability criteria as set forth in (A) through (C) following.

- (A) For Feature Group B, no design blocking criteria apply.
- (B) For Feature Group D, the design blocking objective will be no greater than one percent (1%) between the customer's point of interconnection set forth in Section 8. following and Iowa Network's central 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 Iowa Network to determine the number of transmission paths required to achieve this level of blocking.
- (C) Iowa Network will perform routine measurement functions to assure that an adequate number of transmission paths are in service.

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### 6. <u>Switched Access Service</u> (Cont'd)

## 6.5 Obligations of Iowa Network (Cont'd)

## 6.5.7 Design Blocking Probability (Cont'd)

### (C) (Cont'd)

Iowa Network will recommend that additional busy hour minutes of capacity be ordered by the customer when additional paths are required to reduce the measured blocking to the design blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routing measurements show that the measured blocking does not exceed the threshold listed in the following table.

Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Average Business Day:

Number				
Transmission				
Paths	Per			
Trunk	Group			

## Measurements Per Trunk Group: Blocking Thresholds

	<u> 15-20</u>	<u>11-14</u>	<u>7-10</u>	<u>3- 6</u>
2 3 4 5-6 7 or more	.045 .035 .035 .025 .020	.055 .040 .040 .035 .025	.060 .045 .045 .040 .030	.095 .060 .055 .045

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## 6. <u>Switched Access Service</u> (Cont'd)

### 6.6 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:

### 6.6.1 Report Requirements

Customers are responsible for providing the following reports to Iowa Network when applicable.

### (A) <u>Jurisdictional Reports</u>

When a customer orders Switched Access Service for both interstate and intrastate use, the customer is responsible for providing reports as set forth in 2.3.14 preceding. Charges will be apportioned in accordance with those reports. The method to be used for determining the intrastate charges is set forth in 2.3.15 preceding.

### (B) NXX Code Reports

When a customer orders the Interim NXX Translation optional feature, it must report the appropriate NXX codes which will be instituted at Iowa Network's central access tandems, or when available, at an end office switch of a Participating Telephone Company at which the carrier identification function is performed. The report must be updated each time a change occurs, i.e., when a new code is added or an existing code is deleted.

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## 6. <u>Switched Access Service</u> (Cont'd)

## 6.6 Obligations of the Customer (Cont'd)

### 6.6.2 <u>Supervisory Signaling</u>

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

## 6.6.3 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 Iowa Network. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

## 6.6.4 Design of Switched Access Services

When a customer orders Switched Access Service, the customer shall take reasonable steps to assure that sufficient access services have been ordered to handle its traffic.

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### 6. <u>Switched Access Service</u> (Cont'd)

## 6.6 Obligations of the Customer (Cont'd)

## 6.6.5 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 Iowa Network and the affected Participating Telephone Companies listed in Section 9. following 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, Iowa Network may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. Iowa Network will work cooperatively with the customer to determine the appropriate level of such control.

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### 6. <u>Switched Access Service</u> (Cont'd)

### 6.7 Rate Regulations

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

## 6.7.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service. These are usage rates and nonrecurring charges. These rates and charges are applied differently to the various rate elements.

### (A) <u>Usage Rates</u>

Usage rates for Switched Access Service are rates that apply on a per access minute basis when a specific rate element is used except for Network Blocking which is applied on a per call blocked basis beyond the blocking threshold. Access minute rates and network blocking rates are accumulated over a monthly period.

### (B) 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 to Switched Access Service are: installation of service, Interim NXX Translation optional feature, and service rearrangements.

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- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (B) <u>Nonrecurring Charges</u> (Cont'd)
        - (1) <u>Installation of Service</u>

Nonrecurring charges apply to each Switched Access Service installed. For FGB and FGD, which are ordered on a busy hour minutes of capacity basis, the charge is applied on a per trunk basis but the charge applies only when the capacity ordered requires the installation or activation of an additional trunk(s) which is uniquely identified for the sole use of the ordering customer.

The nonrecurring charges associated with the initial conversion of FGD trunks from multi-frequency (MF) to common channel signaling are the installation charges at 6.8.4(A) following applied on a per SNAC basis. No additional nonrecurring charges are applied to FGD trunk conversions from MF to SS7 signaling subsequent to the installation of the SNACs.

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- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (B) Nonrecurring Charges (Cont'd)
        - (2) <u>Interim NXX Translation Optional</u> <u>Feature</u>

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 installed is optional feature any time coincident with or at subsequent to the commencement of Switched Access Service. This charge is applied by Iowa Network per order. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the company that provides the final translation identifies which function customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.

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- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 Description and Application of Rates and Charges (Cont'd)
      - (B) Nonrecurring Charges (Cont'd)
        - (3) <u>Service Rearrangements</u>

All changes to existing services, other than changes involving administrative activities listed in (C) following, 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. No additional nonrecurring charges apply to FGD trunk conversions from MF to SS7 signaling subsequent to the installation of the SNACs.

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### 6. <u>Switched Access Service</u> (Cont'd)

- 6.7 Rate Regulations (Cont'd)
  - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
    - (C) Administrative Changes

Changes which result in the establishment of new minimum period obligations are treated as discontinuances of existing service and installations of new service.

Administrative changes as follow will be made without changes to minimum period obligations:

- 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.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 Description and Application of Rates and Charges (Cont'd)
      - (D) Rates Applicable to Feature Group B
        - (1) When the customer's point of interconnection is located at Iowa Network's central access tandem:
          - The Switched Transport rate does not apply to Nebraska intrastate calls.
          - The Centralized Equal Access Service rate set forth in Section 6.8.1 following also applies to Feature Group B Switched Access Service in the terminating direction.

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- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (1) (Cont'd)

a matter of clarification, As addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access rates and charges by Participating and, Companies Telephone applicable, other Exchange Telephone Companies in compliance with their tariffs for the provision of access service in their operating territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem. For purposes of Local Transport determining measurement, distance will be measured by the Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office Participating the switch(es) of Telephone Companies.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (1) (Cont'd)

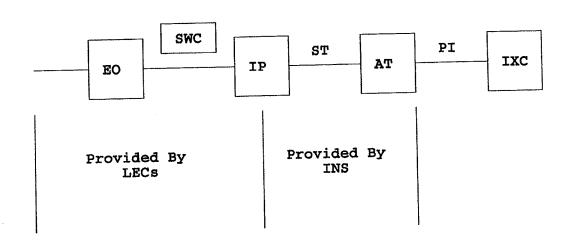
In addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of access services between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that apply for Feature Group B Switched Access Service when the customer's point of interconnection is located at Iowa Network's central access tandem.

Iowa Network Services, Inc.

Original Page 233

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)(1) (Cont'd)



For originating FGB ... ST rate does not apply to Nebraska intrastate calls.

For terminating FGB ... CEA rate applies.

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Iowa Network Services, Inc.

Original Page 234

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (1) (Cont'd)

#### Glossary

AT - Iowa Network's Central Access Tandem
EO - End Office of an Exchange Telephone
Company

INS - Iowa Network Services, Inc.

IP - Iowa Network Premises
IXC - Interexchange Carrier
LEC - Local Exchange Carrier

LEC - Local Exchange Carrier
PI - Customer's Point of Interconnection

ST - Switched Transport

SWC - Customer's Serving Wire Center

(2) The Switched Transport rate does not apply to Feature Group B whenever Iowa Network transports a call from an Iowa Network premises to Iowa Network's central access tandem and back to the same Iowa Network premises. In addition, the Centralized Equal Access Service rate set forth in Section 6.8.1 following also does not apply to originating Feature Group B calls.

Iowa Network Services, Inc.

Original Page 235

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (2) (Cont'd)

The customer will be charged the Centralized Equal Access Service rate set forth in Section 6.8.1 for Feature Group B Switched Access Service provided in the terminating direction.

a matter of clarification, addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will be billed access rates and charges by Participating Telephone Companies and, when applicable, other Telephone Companies Exchange compliance with their tariffs for the provision of Feature Group B Switched Access Service in their operating territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem. For purposes of determining Local Transport measurement, distance will be measured by Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office Participating the of switch(es) Telephone Companies.

Iowa Network Services, Inc.

Original Page 236

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (2) (Cont'd)

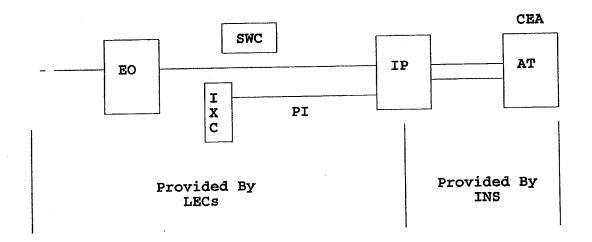
In addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group B Switched Access Service between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that apply to Feature Group B Switched Access Service when Iowa Network transports a call from an Iowa Network premises to its central access tandem and back to the same Iowa Network premises.

Iowa Network Services, Inc.

Original Page 237

- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (2) (Cont'd)



For originating FGB ... No Iowa Network rates or charges apply. For terminating FGB ... Iowa Network CEA rate applies.

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Iowa Network Services, Inc.

Original Page 238

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (2) (Cont'd)

#### Glossary

AT - Iowa Network's Central Access Tandem CEA - Centralized Equal Access

EO - End Office of an Exchange Telephone Company

INS - Iowa Network Services, Inc.

IP - Iowa Network Premises
IXC - Interexchange Carrier
LEC - Local Exchange Carrier

PI - Customer's Point of Interconnection

SWC - Customer's Serving Wire Center

(3) No Switched Transport rate applies to Nebraska intrastate calls.

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Original Page 239

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (3) (Cont'd)

The customer will be charged the Centralized Equal Access Service rate set forth in Section 6.8.1 following for Feature Group B Switched Access Service provided in the terminating direction.

a matter of clarification, As addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access rates and charges by Participating and, Companies Telephone applicable, other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group B Switched Access Service in their operating territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem.

Iowa Network Services, Inc.

Original Page 240

- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (3) (Cont'd)

For purposes of determining Local Transport measurement, distance will be measured by Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office switch(es) of the Participating Telephone Companies.

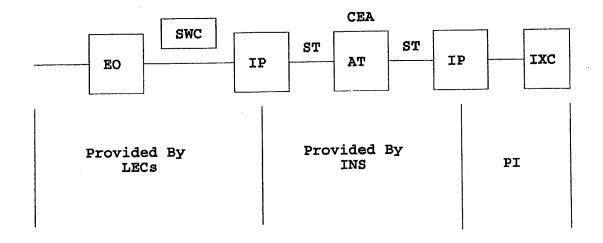
In addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group B Switched Access Service between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that apply when Iowa Network transports an originating Feature Group B call between two Iowa Network premises that are not located at Iowa Network's central access tandem.

Iowa Network Services, Inc.

Original Page 241

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (3) (Cont'd)



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Original Page 242

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (D) Rates Applicable to Feature Group B (Cont'd)
        - (3) (Cont'd)

For traffic picked up by Iowa Network at one IP and handed off at another IP.

Switched Transport (ST) and Centralized Equal Access (CEA) is provided by Iowa Network. The ST rate does not apply to Nebraska intrastate calls.

For terminating FGB ... CEA rate applies.

#### Glossary

AT - Iowa Network's Central Access Tandem

CEA - Centralized Equal Access

EO - End Office of an Exchange Telephone

Company

INS - Iowa Network Services, Inc.

IP - Iowa Network PremisesIXC - Interexchange CarrierLEC - Local Exchange Carrier

PI - Customer's Point of Interconnection

ST - Switched Transport

SWC - Customer's Serving Wire Center

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D
        - (1) The Switched Transport rate does not apply to Nebraska intrastate calls.

The Centralized Equal Access Service rate set forth in Section 6.8.1 following applies to Feature Group D Switched Access Service.

a matter of clarification, addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access rates and charges by Participating Telephone Companies and, if applicable, other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group D Switched Service in their operating Access territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem. purposes of determining Local Transport measurement, distance will be measured by the Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office Participating switch(es) of the Telephone Companies.

Iowa Network Services, Inc.

Original Page 244

- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (1) (Cont'd)

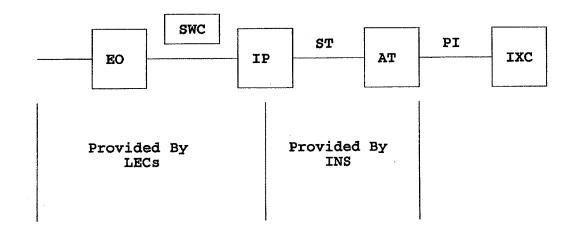
In addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of access services between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that are applicable when the customer's point of interconnection for Feature Group D is located at Iowa Network's central access tandem.

Iowa Network Services, Inc.

Original Page 245

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (1) (Cont'd)



Iowa Network's CEA rate applies.

The ST rate does not apply to Nebraska intrastate calls.

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- Switched Access Service (Cont'd) 6.
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 Description and Application of Rates and Charges (Cont'd)
      - Rates Applicable to Feature Group D (Cont'd)
        - (Cont'd) (1)

#### Glossary

Iowa Network's Central Access Tandem TA

Centralized Equal Access CEA

End Office of an Exchange Telephone ΕO

Company

Iowa Network Services, Inc. INS

Iowa Network Premises ΙP IXC - Interexchange Carrier LEC - Local Exchange Carrier

PI - Customer's Point of Interconnection

Switched Transport ST

- Customer's Serving Wire Center SWC

By: William P. Bagley General Manager/Chief Executive Officer

Effective:

4201 Corporate Drive

West Des Moines, Iowa 50266-5906

Iowa Network Services, Inc.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (2) Iowa Network will not assess the Switched Transport rate set forth in Section 6.8.3 following when Iowa Network transports a Feature Group D call from an Iowa Network premises set forth in Section 8. following to Iowa Network's central access tandem and back to the same Iowa Network premises. The customer will be charged the Centralized Equal Access Service rate set forth in Section 6.8.1 following for Feature Group D Switched Access Service.

As a matter of clarification, addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will be billed access rates and charges by Participating Telephone Companies and, if applicable, other Telephone Companies Exchange compliance with their tariffs for the provision of Feature Group D Switched Access Service in their operating territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem.

Iowa Network Services, Inc.

Original Page 248

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 <u>Rate Regulations</u> (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (2) (Cont'd)

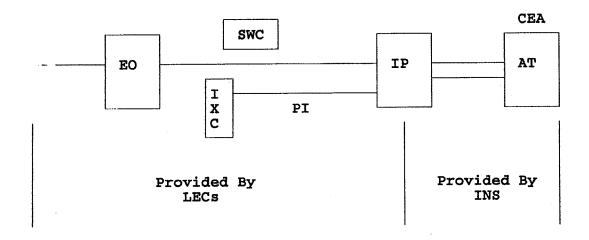
For purposes of determining Local Transport measurement, distance will be measured by the Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office switch(es) of the Participating Telephone Companies. addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of access services between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that apply to Feature Group D Switched Access Service when Iowa Network transports a call from an Iowa Network premises set forth in Section 8. following to Iowa Network's central access tandem and back to the same Iowa Network premises.

Iowa Network Services, Inc.

Original Page 249

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) <u>Rates Applicable to Feature Group D</u> (Cont'd)
        - (2) (Cont'd)



Iowa Network CEA rate applies.

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- 6. Switched Access Service (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (2) (Cont'd)

#### Glossary

AT - Iowa Network's Central Access Tandem

CEA - Centralized Equal Access

EO - End Office of an Exchange Telephone

Company

INS - Iowa Network Services, Inc.

IP - Iowa Network Premises
IXC - Interexchange Carrier
LEC - Local Exchange Carrier

PI - Customer's Point of Interconnection

SWC - Customer's Serving Wire Center

(3) The Switched Transport rate does not apply to Nebraska intrastate calls.

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Iowa Network Services, Inc.

Original Page 251

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (3) (Cont'd)

The customer will be charged the Centralized Equal Access Service rate set forth in Section 6.8.1 following for Feature Group D Switched Access Service.

clarification, a matter of addition to the rates and charges set forth in Sections 6.8 and 4(I) for the services provided by Iowa Network, the customer will also be billed access rates and charges by Participating Companies and, Telephone applicable, other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group D Switched Access Service in their operating territories between an Iowa Network premises listed in Section 8. following and the end office(s) served by Iowa Network's central access tandem. For purposes of determining Local Transport measurement, distance will be measured by the Exchange Telephone Companies in compliance with their tariffs from the wire center that normally serves the customer premises to the end office switch (es) of the Participating Telephone Companies.

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Original Page 252

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (3) (Cont'd)

In addition, the customer may also be billed access rates and charges by the Participating Telephone Companies or other Exchange Telephone Companies in compliance with their tariffs for the provision of Feature Group D Switched Access Service between an Iowa Network premises set forth in Section 8. following and the customer's premises.

The following diagram depicts a generic view of the rates that are applicable when Iowa Network transports a Feature Group D call between two Iowa Network Premises set forth in Section 8. following that are not located at Iowa Network's central access tandem.

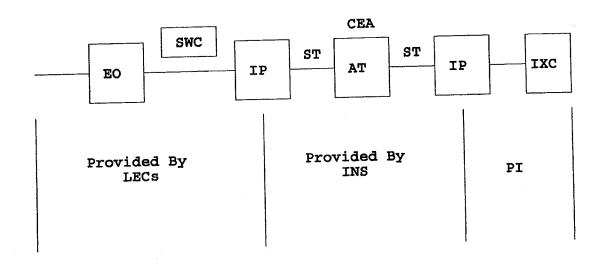
Issued: September 15, 1997

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Iowa Network Services, Inc.

Original Page 253

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (3) (Cont'd)



For traffic picked up by Iowa Network at one IP and handed off at another IP.

Switched Transport (ST) and Centralized Equal Access (CEA) is provided by Iowa Network. The ST rate does not apply to Nebraska intrastate calls.

For FGD ... CEA rate applies.

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Iowa Network Services, Inc.

Original Page 254

- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.1 <u>Description and Application of Rates and Charges</u> (Cont'd)
      - (E) Rates Applicable to Feature Group D (Cont'd)
        - (3) (Cont'd)

#### Glossary

AT - Iowa Network's Central Access Tandem

CEA - Centralized Equal Access

EO - End Office of an Exchange Telephone

Company

INS - Iowa Network Services, Inc

IP - Iowa Network PremisesIXC - Interexchange CarrierLEC - Local Exchange Carrier

ST - Switched Transport

SWC - Customer's Serving Wire Center

The nonrecurring charge, as set forth in Section 6.8.4 following, applies to Feature Group D Switched Access Service for the installation of the Interim NXX Translation optional feature and for each subsequent order received to add or change NXX translation codes.

Iowa Network Services, Inc.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.2 Minimum Period

Switched Access Service is provided for a minimum period of one (1) month.

- 6.7.3 Reserved for Future Use
- 6.7.4 Reserved for Future Use
- 6.7.5 Change of Feature Group Type

Changes from one type of Feature Group to another will be treated as a discontinuance of one type of service and a start of another. When a customer upgrades a Feature Group B service to Feature Group D service, minimum period obligations will not change, i.e., the time elapsed in the existing minimum period obligations will be credited to the minimum period obligations for Feature Group D service. For all other changes from one type of Feature Group to another, new minimum period obligations will be established.

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### 6. Switched Access Service (Cont'd)

#### 6.7 Rate Regulations (Cont'd)

#### 6.7.6 <u>Mileage Measurement</u>

The mileage to be used to determine the monthly rate for Iowa Network's Switched Transport Rate is calculated on the airline distance between an Iowa Network premises listed in Section 8. following where the call carried by Iowa Network is delivered or received and another Iowa Network premises listed in Section 8. following. The V&H coordinates method is used to determine mileage between two Iowa Network premises. The V&H coordinates for Iowa Network premises are set forth in Section 8. following.

The mileage rate is as set forth in 6.8.3 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. The Switched Transport rate is applied to Feature Group B and Feature Group D Switched Access Services when Iowa Network provides transport in the manner described in Sections 6.1.3(B), 6.7.1(D), and 6.7.1(E) preceding.

Iowa Network Services, Inc.

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### 6. <u>Switched Access Service</u> (Cont'd)

### 6.7 Rate Regulations (Cont'd)

#### 6.7.6 Mileage Measurement

#### (A) Five-Mile Rule

When a non-AT&T customer premises or a non-U S WEST Telephone Company premises is within five (5) miles of an AT&T Class 4 office or a U S WEST toll office, the Local Transport mileage for a call which is carried over a Switched Access Service of an Exchange originating Company, Telephone terminating through an end office switch of a Participating Telephone Company listed in Section 9. following, shall be the distance as would be determined from that end office switch to the serving wire center for that AT&T Class 4 office or U S WEST toll station unless the customer specifies that for an it wants all measurements entire LATA, determined from its serving wire center. This designation (i.e., which serving wire center to use in calculating mileage) may be changed only once in any twelve (12) month Such change will be made without period. charge(s) to the customer.

Iowa Network Services, Inc.

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### 6. <u>Switched Access Service</u> (Cont'd)

### 6.7 Rate Regulations (Cont'd)

### 6.7.7 Measuring Access Minutes

of Customer traffic to end offices Participating Telephone Companies set forth in Section 9. following will be measured (i.e., recorded) by Iowa Network at its central access tandem. Originating and terminating calls will be measured (i.e., recorded) by Iowa Network to determine the basis for computing chargeable In the event the customer access minutes. message detail is not available because Iowa Network lost or damaged tapes or incurred recording system outages, Iowa Network will estimate the volume of lost customer access minutes of use based on previously known values. For terminating and originating calls over FGB and FGD, the measured minutes are the chargeable access minutes.

FGB and FGD access minutes or fractions 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.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.7 Measuring Access Minutes (Cont'd)
      - (A) Reserved for Future Use
      - (B) Feature Group B Usage Measurement

For originating calls over FGB, usage measurement begins when Iowa Network's central access tandem receives trunk seizure acknowledgement from the customer's switch indicating the customer is ready to receive the call.

The measurement of originating call usage over FGB ends when Iowa Network's central access tandem receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

over FGB, terminating calls For measurement of access minutes begins when the terminating FGB first point of switching supervision from receives answer office, user's end end terminating indicating the terminating end user has answered.

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.7 Measuring Access Minutes (Cont'd)
      - (B) Feature Group B Usage Measurement (Cont'd)

The measurement of terminating call usage over FGB ends when Iowa Network's central access tandem receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

(C) Reserved for Future Use

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- 6. <u>Switched Access Service</u> (Cont'd)
  - 6.7 Rate Regulations (Cont'd)
    - 6.7.7 Measuring Access Minutes (Cont'd)
      - (D) Feature Group D Usage Measurement

For originating calls over FGD with multiaddress signaling, frequency measurement begins when Iowa Network's central access tandem receives the first wink supervisory signal forwarded from the customer's switch. For originating calls over FGD with CCSA, usage measurement begins when either the Exit Message (EXM) or Address Complete Message (ACM) is received. The measurement of originating call usage over FGD ends when Iowa Network's central receives disconnect tandem access supervision from either the originating end user's end office, indicating originating end user has disconnected, or the customer's switch, whichever recognized first by Iowa Network's central access tandem.

For terminating calls over FGD, the measurement of 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.

Iowa Network Services, Inc.

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#### 6. Switched Access Service (Cont'd)

#### 6.7 Rate Regulations (Cont'd)

#### 6.7.7 Measuring Access Minutes (Cont'd)

#### (D) <u>Feature Group D Usage Measurement</u> (Cont'd)

The measurement of terminating call usage over FGD ends when Iowa Network's central access tandem receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's switch, whichever is recognized first by Iowa Network's central access tandem.

#### 6.7.8 Network Blocking Rate for Feature Group D

The customer will be notified by Iowa Network to increase its busy hour minutes of capacity when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured for that access minutes hour exceed that purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on consistent, hourly measurements over a thirty (30) day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by Iowa Network within fifteen (15) days of the notification, Iowa Network will bill the customer, at the rate set forth in 6.8.2 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 avenge originating or two-way usage for the same clock hour exceeds the capacity purchased.

Iowa Network Services, Inc.

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#### 6. <u>Switched Access Service</u> (Cont'd)

#### 6.7 Rate Regulations (Cont'd)

## 6.7.8 <u>Network Blocking Rate for Feature Group D</u> (Cont'd)

#### Blocking Thresholds

Trunks in Service	1/2%
1-2	.045
3 - 4	.035
5 - 6	.025
7 or greater	.020

- 6.7.9 Reserved for Future Use
- 6.4.10 Reserved for Future Use
- 6.4.11 Reserved for Future Use
- 6.4.12 Reserved for Future Use
- 6.4.13 Reserved for Future Use

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\$192.21

6. Sw	itched	Access	<u>Service</u>	(Cont'd)
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Switche	ed Ac	cess S	ervice (Cont'd)		
6.8 <u>Ra</u>	ates	and Ch	arges		
6	.8.1	Centr	alized Equal Access Service	<u>Per</u>	Rate Access Minute
					\$0.0152
6	.8.2	<u>Netwo</u>	ork Blocking	Per	Rate Call Blocked
					\$0.0075
6	.8.3	Swite	ched Transport*	Per	Rate Access Minute Per Mile
					\$0.00
6	.8.4	Nonre	ecurring Charges		
		(A)	Installation	<u>P</u>	Rate <u>er Trunk</u>
			Activation of the first trunk or SNAC contained in an the order.	\$	514.68
			Activation of each additional trunk or SNAC contained in an order.	\$	12.55
		(B)	Interim 800/NNX Translation	. <u>I</u>	Rate Per Order

The switched transport rate does not apply to Nebraska intrastate calls.

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### 8. <u>Customer's Point of Interconnection Information</u>

#### 8.1 General Information

Access Service is available to customers that interconnect with Iowa Network's facilities at either Iowa Network's central access tandem or the Iowa Network premises listed in this section. The customer is responsible for and bears the burden of reaching a point of interconnection with the Iowa Network premises listed below.

### 8.2 <u>Customer's Point of Interconnection</u>

Central Access Tandem	Iowa Network Premises	<u>V-Cord</u>	H-Cord	<u>Mileage</u>
Des Moines	Omaha	6687	4595	122

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### 9. Participating Telephone Companies

Iowa Network is an affiliate of one hundred twenty-forty (140) Exchange Telephone Companies operating in the State of Iowa.

### 9.1 Exchanges and Localities

The names of the Participating Telephone Companies (PTCs) are as follows:

#### PTCs

Ace Telephone Association Amana Society Service Company Andrew Telephone Company, Inc. Arcadia Telephone Cooperative Atkins Telephone Company, Inc. Ayrshire Farmers Mutual Telephone Co. Baldwin-Nashville Telephone Co., Inc. Barnes City Cooperative Telephone Company Bernard Telephone Company, Inc. Breda Telephone Corp., Inc. Brooklyn Mutual Telephone Co. Butler-Bremer Mutual Telephone Company Cascade Telephone Company Casey Mutual Telephone Co. Center Junction Telephone Co. Central Scott Telephone Company Citizens Mutual Telephone Company Clarence Telephone Company, Inc. Clear Lake Independent Telephone Company

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### 9. <u>Participating Telephone Companies</u> (Cont'd)

### 9.1 Exchanges and Localities (Cont'd)

#### PTCs

C-M-L Telephone Cooperative Association Of Meriden, Iowa

Colo Telephone Company

Coon Creek Telephone Company

Coon Valley Cooperative Telephone Association, Inc.

Cooperative Telephone Company

Cooperative Telephone Exchange

Corn Belt Telephone Company

Cumberland Telephone Company

Danville Mutual Telephone Company

Deep River Mutual Telephone Co.

Defiance Telephone Company

Dixon Telephone Company

Dumont Telephone Company

East Buchanan Telephone Cooperative

Ellsworth Cooperative Telephone Association

Farmer's and Businessmen's Telephone Company

Farmers Cooperative Telephone Co.

Farmers Mutual Cooperative Telephone Co. (Harlan)

Farmers Mutual Cooperative Telephone Co. (Moulton)

Farmers Mutual Telephone Co. (Nora Springs)

Farmers Mutual Telephone Co. (Shellsburg)

Farmers Mutual Telephone Co. (Stanton)

Farmers Telephone Company (Batavia)

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### 9. <u>Participating Telephone Companies</u> (Cont'd)

### 9.1 Exchanges and Localities (Cont'd)

#### PTCs

Farmers Telephone Company (Essex) Farmers Telephone Company (Nora Springs) Fenton Cooperative Telephone Company Frontier Communications Goldfield Telephone Company Grand Mound Cooperative Telephone Association Grand River Mutual Telephone Corporation Griswold Cooperative Telephone Company Hawkeye Telephone Company Heart of Iowa Telephone Cooperative Hills Telephone Company Hospers Telephone Exchange, Inc. Hubbard Cooperative Telephone Association Huxley Cooperative Telephone Co. Iamo Telephone Company Interstate 35 Telephone Company Jefferson Telephone Company Jordan-Soldier Valley Cooperative Telephone Company Kalona Cooperative Telephone Company Keystone Farmers Cooperative Telephone Company La Porte City Telephone Company Laurel Telephone Company, Inc. Lehigh Valley Cooperative Telephone Association Liberty Communications

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- 9. Participating Telephone Companies (Cont'd)
  - 9.1 Exchanges and Localities (Cont'd)

#### PTCs

Lone Rock Cooperative Telephone Company
Lost Nation-Elwood Telephone Co.
Lynnville Community Telephone Co., Inc.
Manilla Telephone Company
Marne & Elk Horn Telephone Co.

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### 9. <u>Participating Telephone Companies</u> (Cont'd)

### 9.1 Exchanges and Localities (Cont'd)

#### PTCs

Martelle Cooperative Telephone Association Massena Telephone Company Mechanicsville Telephone Company Mediapolis Telephone Company Mid Iowa Telephone Coop Miles Cooperative Telephone Association Minburn Telephone Company Minerva Valley Telephone Co., Inc. Modern Cooperative Telephone Co. Montezuma Mutual Telephone Co. Morley Telephone Company Mutual Telephone Company Mutual Telephone Company of Morning Sun New Ulm Telephone Company North English Cooperative Telephone Company Northeast Iowa Telephone Co. Northern Iowa Telephone Company Northwest Iowa Telephone Company Northwest Telephone Cooperative Association Norway Rural Telephone Company Ogden Telephone Company Olin Telephone Company, Inc. Onslow Cooperative Telephone Association

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#### 9. Participating Telephone Companies (Cont'd)

#### 9.1 Exchanges and Localities (Cont'd)

#### PTCs

Oran Mutual Telephone Company Palmer Mutual Telephone Company Palo Cooperative Telephone Association Panora Cooperative Telephone Association, Inc. Peoples Telephone Company Postville Telephone Company Prairie Telephone Co., Inc. Prairieburg Telephone Co., Inc. Preston Telephone Company Radcliffe Telephone Co., Inc. Readlyn Telephone Company Ringsted Telephone Company River Valley Telephone Co-op Rockwell Cooperative Telephone Association Ruthven Telephone Exchange Co. Sac County Mutual Telephone Co. Schaller Telephone Company Scranton Telephone Company Sharon Telephone Company Shell Rock Telephone Company South Slope Cooperative Telephone Company, Inc. Southwest Telephone Exchange, Inc. Springville Cooperative Telephone Association, Inc.

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#### 9. Participating Telephone Companies (Cont'd)

#### 9.1 Exchanges and Localities (Cont'd)

#### **PTCs**

Stratford Mutual Telephone Co. Sully Telephone Association Swisher Telephone Company Templeton Telephone Company Terrill Telephone Company The Burt Telephone Company Titonka Telephone Company United Farmers Telephone Co. Van Buren Telephone Co., Inc. Van Horne Cooperative Telephone Co. Ventura Telephone Company, Inc. Walnut Telephone Company Webb-Dickens Telephone Corp. Webster-Calhoun Coop Telephone Assn Wellman Cooperative Telephone Association West Iowa Telephone Company West Liberty Telephone Company Western Iowa Telephone Association Westside Independent Telephone Co. Wilton Telephone Company Winnebago Cooperative Telephone Association Woolstock Mutual Telephone Association Wyoming Mutual Telephone Company

Participating Companies Total - 140

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## 13. Additional Engineering, Additional Labor and Miscellaneous Services

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 7:00 a.m. to 4:00 p.m.) for the application of rates based on working hours. A Miscellaneous Service Order Charge, as described in Section 5.2.2 preceding, applies to any service, or combination of services ordered simultaneously from this section of the Tariff for which a service order is not already pending which does not have the charge applied. 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), Stand by 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) and Maintenance of Service (13.3.1).

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), Stand by Acceptance Testing (13.2.3), Testing and Maintenance with Exchange Telephone Companies when in conjunction with Acceptance Testing (13.2.4), and Additional Cooperative Acceptance Testing [13.3.4(A)(1) and 13.3.4(B)(1)]. This charge is as follows:

Miscellaneous Service Order Charge, per occurrence \$27.00

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## 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

#### 13.1 Additional Engineering

Additional Engineering will be provided by Iowa Network at the request of the customer only when:

- (A) A customer requests additional technical information after Iowa Network has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.4 preceding.
- (B) Reserved for Future Use
- (C) A customer requests a Design Change, additional engineering time is incurred by Iowa Network for the engineering review as set forth in 5.2.2(C). The charge for additional engineering will apply whether or not Iowa Network proceeds with the design change.

Towa Network will notify the customer that additional engineering charges, as set forth in 13.1.1 following, will apply before any additional engineering is undertaken.

#### 13.1.1 Rates For Additional Engineering

The charges for additional engineering are as follows:

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## 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

#### 13.1 Additional Engineering (Cont'd)

#### 13.1.1 Rates For Additional Engineering (Cont'd

	Additional Engineering Periods	Each Half Hour or Fraction Thereof
(A)	Basic Time, normally scheduled working hours, per engineer	\$15.74
(B)	Overtime, outside of regularly scheduled working hours, per engineer	23.61
(C)	Premium time outside of scheduled work day, per engineer	31.48

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## 13. 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 Iowa Network as set forth in 13.2.1 through 13.2.5 following. Iowa Network will notify the customer that additional labor charges as set forth in 13.2.6 following will apply before any additional labor is undertaken.

#### 13.2.1 Overtime Installation

Overtime installation is that Iowa Network installation effort outside of regularly scheduled working hours.

#### 13.2.2 Overtime Repair

Overtime repair is that Iowa Network maintenance effort performed outside of regularly scheduled working hours.

#### 13.2.3 Stand By

Stand by includes all time in excess of one-half (1/2) hour during which Iowa Network personnel stand by to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

## 13.2.4 <u>Testing and Maintenance with Exchange Telephone</u> Companies

Additional testing, maintenance or repair of facilities which connect to facilities of Exchange Telephone Companies which is in addition to normal effort required to test, maintain or repair facilities provided solely by Iowa Network.

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## 13. <u>Additional Engineering</u>, <u>Additional Labor and Miscellaneous Services Cont'd</u>)

#### 13.2 Additional Labor (Cont'd)

#### 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.

#### 13.2.6 Rates for Additional Labor

The charges for additional labor are as follows:

(A) Installation or Repair

Additional Labor Periods	Each Half Hour or Fraction Thereof
Overtime, outside of regularly scheduled working hours, on a scheduled work day, per technician	\$23.51*
Premium Time, outside of scheduled work day, per technician	31.34*

\* A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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# 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

#### 13.2 Additional Labor (Cont'd)

### 13.2.6 Rates for Additional Labor (Cont'd)

(B)	Stand by	Each Half Hour
	Additional Labor Periods	or Fraction Thereof
	Basic time, regularly scheduled working hours, per technician	\$16.14
	Overtime, outside of regularly scheduled working hours, on a scheduled work day, per technician	24.21*
	Premium Time, outside of scheduled work day, per technician	32.28*

A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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# 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

### 13.2 Additional Labor (Cont'd)

### 13.2.6 Rates for Additional Labor (Cont'd)

The charges for additional labor are as follows:

	Additional Labor Periods	Each Half Hour or Fraction Thereof		
		Installation and Repair Technician	Central Access Tandem Maintenance Technician	
(C)	Testing and Maintenance with Exchange Telephone Companies, or Other Labor			
	<ul> <li>Basic Time, regularly scheduled working hours, per technician</li> </ul>	<b>\$</b> 15.67	<b>\$15.85</b>	
	<ul> <li>Overtime, outside         of regularly         scheduled working         hours on a         scheduled work day,         per technician</li> </ul>	21.51*	23.78*	
	<ul> <li>Premium Time, outside of scheduled work day, per technician</li> </ul>	31.34*	31.70*	

\* A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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## 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

#### 13.3 Miscellaneous Services

#### 13.3.1 Maintenance of Service

- (A) When a customer reports a trouble to Iowa Network for clearance and no trouble is found in Iowa Network's facilities, the customer shall be responsible for payment of a Maintenance of Service charge for the period of time from when Iowa Network personnel are dispatched to the customer point of interconnection to when the work is completed. Failure of Iowa Network personnel to find trouble in Iowa Network 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 Iowa Network dispatches personnel to the customer point of interconnection and the trouble is in equipment or communications systems provided by other than Iowa Network.

In either (A) or (B) preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service charge applies.

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- 13. <u>Additional Engineering</u>, <u>Additional Labor and Miscellaneous Services</u> (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.1 Maintenance of Service (Cont'd)
      - (C) The charges for Maintenance of Service are as follows:

Maintenance of Service Periods Each Half Hour or Fraction Thereof

Basic Time, Overtime\* and Premium Time\* See the rates for Additional Labor set forth in 13.2.6(C) preceding.

- 13.3.2 Reserved for Future Use
- 13.3.3 Reserved for Future Use
- 13.3.4 <u>Testing Services</u>

Iowa Network will, in addition to any customer requested acceptance testing, perform such tests as it believes necessary to ensure that the access services ordered by a customer are functioning properly prior to furnishing such access services to the customer. In addition, Iowa Network, as part of the ongoing work to maintain the continued satisfactory performance of the access services ordered by the customer, may perform periodic tests.

\* A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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## 13. <u>Additional Engineering</u>, <u>Additional Labor and Miscellaneous Services</u> (Cont'd)

#### 13.3 Miscellaneous Services (Cont'd)

#### 13.3.4 Testing Services (Cont'd)

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 13.3.4(C) following. Other testing services, as described in 6.1.5 and 6.1.6 preceding, are provided by Iowa Network in association with Access Services and are furnished at no additional charge. Testing Services are normally provided by Iowa Network personnel at Iowa Network locations. In addition, Iowa Network will, at the request of the customer, perform Acceptance Testing with the customer in accordance with the provisions set forth in Section 6. preceding.

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), (B) and (C) 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, and (b) tests which are performed after acceptance of such access services by a customer, i.e., in-service tests. These in-service tests may be further divided into two broad categories of tests: scheduled and nonscheduled.

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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.4 Testing Services (Cont'd)
      - (A) Switched Access Service (Cont'd)

Scheduled tests are those tests performed by Iowa Network on a regular basis, as set forth in Section 6.1.6 preceding which are required to maintain Switched Access Service. Scheduled tests may be done on an automatic basis (no Iowa Network or customer technicians involved) or on a cooperative basis (Iowa Network technician(s) involved at Iowa Network office(s) and customer technicians involved at customer terminal location(s)).

(1) <u>Additional Cooperative Acceptance</u> <u>Testing</u>

Additional Cooperative Acceptance Testing (ACAT) of Switched Access Service involves Iowa Network provision of a technician at its office(s) and the customer provides a technician at its terminal location(s), with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.4 <u>Testing Services</u> (Cont'd)
      - (A) <u>Switched Access Service</u> (Cont'd)
        - (1) Additional Cooperative Acceptance
          Testing (Cont'd)
          - C-Notched Noise
          - Impulse Noise
          - Phase Jitter
          - Signal to C-Notched Noise Ratio
          - Intermodulation (Nonlinear)
            Distortion
          - Frequency Shift (Offset)
          - Envelope Delay Distortion
          - Dial Pulse Percent Break
        - (2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Groups B, C and D), where the customer provides remote office test lines and lines with associated test their functional responders or equivalent, will consist of monthly loss and C-message noise tests and an annual balance test. However, the customer may specify a more frequent schedule of tests. In addition to the loss/noise/balance tests, the customer may also order, at additional charges, gain-slope and C-notched noise testing.

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- 13. <u>Additional Engineering</u>, <u>Additional Labor and Miscellaneous</u> <u>Services</u> (Cont'd)
  - 13.3 Miscellaneous Services (Cont'd)
    - 13.3.4 <u>Testing Services</u> (Cont'd)
      - (A) <u>Switched Access Service</u> (Cont'd)
        - (2) Additional Automatic Testing (Cont'd)

Iowa Network 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.

- (3) Reserved for Future Use
- (4) Obligations of the Customer
  - (a) The customer shall provide the Remote Office Test Line priming data to Iowa Network as appropriate, to support AAT as set forth in 13.3.4(A)(2) preceding.
  - (b) Reserved for Future Use
- (B) Reserved for Future Use

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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.4 <u>Testing Services</u> (Cont'd)
      - (C) Rates and Charges (Cont'd)
        - (1) Switched Access
          - (a) <u>Additional Cooperative Acceptance</u> <u>Testing</u>

Testing Period	Each Half Hour or Fraction Thereof
Basic Time, Overtime* and Premium Time*	See the rates for Additional Labor as set forth in 13.2.6(C) preceding.

\* A call-out of an Iowa Network employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four (4) hours.

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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.4 Testing Services (Cont'd)
      - (C) Rates and Charges (Cont'd)
        - (1) Switched Access (Cont'd)
          - (b) Additional Automatic Testing (AAT)

The Additional Tests as set forth following may be ordered by the customer, at additional charges, 60 days prior to the start of the customer prescribed schedule.

To First Point of Switching

Additional Tests

	Per Test, Per Transmission Path
Gain-Slope Tests	\$2.89
C-Notched Noise Test	s 2.89
1004 Hz Loss*	2.89
C-Message Noise*	2.89
Balance (return loss	3) * 2.89

\* 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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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 Miscellaneous Services (Cont'd)
    - 13.3.5 Provision of Access Service Billing Information
      - (A) The customer will receive its monthly bills in a standard paper format. The customer may receive usage detail on 5 1/4 or 3 1/2 inch floppy diskette in lieu of paper upon request and for no additional charge.
      - (B) At the option of the customer, and for an additional charge:
        - (1) Customer monthly usage detail in support of the monthly bill may be provided on magnetic tape.
        - (2) Billing detail and/or information may be transmitted to the customer terminal location by data transmission.
        - (3) Additional copies of the customer monthly bill or billing detail may be provided in standard paper or on 5 1/4 or 3 1/2 inch floppy diskette format.
      - (C) Upon acceptance by Iowa Network of an order for data transmission, Iowa Network will determine the period of time to implement the transmission of such material on an individual order basis.
      - (D) The rates and charges for the provision of Access Service Billing Information are as follows:

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- 13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)
  - 13.3 <u>Miscellaneous Services</u> (Cont'd)
    - 13.3.5 Provision of Access Service Billing Information (Cont'd)
      - (D) (Cont'd)

		<u>FID</u>	Rates
(1)	Provision of Standard Bill Detail and/or Information in magnetic tape format, per record	DMT	ICB rates and charges apply
(2)	Data Transmission to a customer Terminal Location of Bill Detail and/or Information, per record transmitted	TRMD B	ICB rates and charges apply
(3)	Additional Copies of customer monthly bill or bill detail in standard paper format, or 5 1/4 inch or 3 1/2 inch floppy diskette per page per diskette	BOD NEL BOD FH	ICB rates and charges apply

#### 13.3.6 Reserved for Future Use

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# 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u>

#### 15.1 Switched Transport Interface Groups

Interface Group 6 is provided with Type A or B Transmission Specifications, depending on the Feature Group. This Interface Group is provided with Data Transmission Parameters.

Only certain interfaces are available at the customer's points of interconnection set forth in Section 8. preceding. The interfaces associated with the Interface Group may vary among Feature Groups. The various interfaces which are available with the Interface Group, and the Feature Groups with which it may be used, are set forth in 15.1.11 following.

- 15.1.1 Reserved for Future Use
- 15.1.2 Reserved for Future Use
- 15.1.3 Reserved for Future Use
- 15.1.4 Reserved for Future Use
- 15.1.5 Reserved for Future Use

#### 15.1.6 Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the points of interconnection set forth in Section 8. preceding. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to twenty-four (24) voice frequency transmission paths.

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- 15. <u>Interface Groups, Transmission Specifications and Channel</u>
  Interfaces (Cont'd)
  - 15.1 Switched Transport Interface Groups (Cont'd)
    - 15.1.6 <u>Interface Group 6</u> (Cont'd)

When analog switching utilizing analog terminations is provided, Iowa Network will provide multiplex and channel bank equipment to derive twenty-four (24) transmission paths of a frequency bandwidth of approximately three hundred (300) to three thousand (3000) Hz. When digital switching or analog switching with digital carrier terminations is provided, Iowa Network will provide, at the first point of switching, a DS1 signal in D3/D4 format.

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

- 15.1.7 Reserved for Future Use
- 15.1.8 Reserved for Future Use
- 15.1.9 Reserved for Future Use
- 15.1.10 Reserved for Future Use

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# 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)

#### 15.1 Switched Transport Interface Groups (Cont'd)

#### 15.1.11 Available Interface Codes

Following is a matrix showing, for the Interface Group, which interface codes are available as a function of Iowa Network switch supervisory signaling and Feature Group. For explanations of these codes, see the Glossary of Channel Interface Codes in 15.3 following.

Interface Group	Telephone Company Switch Supervisory Signaling	Interface <u>Code</u>	Feature Group B D
6	RV, EA, EB, EC RV, EA, EB, EC	4DS9-15 4DS9-15L	$egin{array}{cccc} X & X & X & X & X & X & X & X & X & X $

#### 15.1.12 Supervisory Signaling

This Interface Group may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Iowa Network's central access tandem. Generally, such signaling is available only where Iowa Network's central access tandem provides an analog, i.e. non-digital, interface and a portion of the facility provided by the customer between Iowa Network's central access tandem and the customer's premises is analog.

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# 15. <u>Interface Groups, Transmission Specifications and Channel</u> Interfaces (Cont'd)

### 15.2 Transmission Specification Switched Access Service

#### 15.2.1 Standard Transmission Specifications

Following are descriptions of the two Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups are set forth in 6.2.2(B) and 6.2.4(B) preceding.

#### (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.

#### (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) <u>C-Message Noise</u>

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

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- 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.1 <u>Standard Transmission Specifications</u> (Cont'd)
      - (A) Type A Transmission Specifications (Cont'd)
        - (3) <u>C-Message Noise</u> (Cont'd)

Route Miles	<u>C-Message Noise</u>
	20 AD 00
Less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

(4) <u>C-Notched Noise</u>

The maximum C-Notched Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBrnCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is equal to or greater than the following:

Echo	Return	Loss	Singing Return Loss	
	16 dB		11 dB	

(6) Reserved for Future Use

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- 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.1 Standard Transmission Specifications
      - (B) 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  $\pm 2.5$  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) <u>C-Message Noise</u>

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

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

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

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- 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.1 Standard Transmission Specifications
      - (B) Type B Transmission Specifications
        - (4) <u>C-Notch Noise</u>

The maximum C-Notched Noise, utilizing a -16 dBmO holding tone is less than or equal to 47 dBrnCO.

(5) Echo Control

Echo Control, identified as Impedance Balance for FGB and Equal Level Echo Path Loss for FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL) also differ by Feature Group. They are greater than or equal to the following:

Echo		Singing	
Return Loss		Return Los	
771 m - m			
For FGB			
access	8 dB	4 dB	

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- 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.1 <u>Standard Transmission Specifications</u> (Cont'd)
      - (B) Type B Transmission Specifications (Cont'd)
        - (6) Reserved for Future Use
          - (C) Reserved for Future Use
    - 15.2.2 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 on terms of the Feature Groups with which they are provided are set forth in 6.2.2(B) and 6.2.4(B) preceding. 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.

(2) Envelope Delay Distortion

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

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- 15. <u>Interface Groups, Transmission Specifications and Channel</u>
  Interfaces (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.2 <u>Data Transmission Parameters</u> (Cont'd)
      - (A) <u>Data Transmission Parameters Type DA</u> (Cont'd)
        - (2) <u>Envelope Delay Distortion</u> (Cont'd)

less than 50 route miles 500 microseconds

604 to 2804 Hz

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 dBrnCO threshold in fifteen (15) minutes is no more than fifteen (15) counts.

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- 15. <u>Interface Groups, Transmission Specifications and Channel Interfaces</u> (Cont'd)
  - 15.2 <u>Transmission Specification Switched Access Service</u> (Cont'd)
    - 15.2.2 <u>Data Transmission Parameters</u> (Cont'd)
      - (A) <u>Data Transmission Parameters Type DA</u> (Cont'd)
        - (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

(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 thirty (30) dB.

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