LOCAL NETWORK INTERCONNECTION TARIFF

NORTHWESTEL INC.

Original Title Page

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LOCAL NETWORK INTERCONNECTION TARIFF

CONTAINING

TERMS AND CONDITIONS

RATES AND CHARGES

APPLICABLE TO LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING

Northwestel's Tariffs are published under the direction of the Company's Senior Manager, Regulatory Compliance

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LOCAL NETWORK INTERCONNECTION TARIFF

EXPLANATION OF SYMBOLS

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- (A) to denote increases
- (R) to denote reductions
- (C) to denote changes in wording which result in neither increases nor reductions in rates or charges
- (D) to denote material previously shown has now been deleted
- (M) to denote information moved to or from another page
- (N) to denote new rates or items
- (S) to denote reissued material
- (V) not available for new installation or for expansion of existing service
- (Z) available on recovery basis only and at the discretion of the Company

LOCAL NETWORK INTERCONNECTION TARIFF CHECK SHEET

Original and revised pages of this Tariff listed below are in effect:

| PAGE | REVISION | | | |
|-------|----------|-----|--|--|
| Title | Original | | | |
| 1 | Original | | | |
| 2 | 4 | | | |
| 3 | 2 | | | |
| 4 | 2 | | | |
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| 13 | Original | | | |
| 14 | 1 | | | |
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| 17 | Original | | | |
| 18 | 1 | | | |
| 19 | 1 | | | |
| 20 | 1 | | | |
| 21 | Original | (N) | | |

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CRTC 21481 2nd Revised Page 4 Cancels 1st Revised Page 4

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A. GENERAL

Item

- 1. The services and arrangements contained in this tariff item and related Company tariffs and agreements are made available only to Commission-approved Competitive Local Exchange Carriers (CLECs) as specifically noted.
- 2. The provision of the services and arrangements specified in this tariff item and related Company tariffs and agreements will be billed to and payable by the CLEC.
- 3. The services contained in this tariff item for CCS7 Transiting Services (CCS7 signalling messages) are based on existing CCS7 interconnection arrangements.
- 4. Insofar as they are reasonably applicable and not inconsistent with this tariff item, all other Company tariffs, including any amendments to or replacements of them, extend and apply to this tariff item. The General Regulations or Terms of Service of the Company including any amendments to or replacements of them, apply to this tariff item, with such modifications as the circumstances require.
- 5. Subject to the terms, conditions, rates and charges set out in applicable tariff(s) for co-location, other tariffs and agreements as may be applicable and, where the Company's facilities permit, a CLEC may, except where expressly prohibited by the Company's tariffs:
 - a) Interconnect their local services and facilities to the Company's services and facilities, offered under this tariff item, subject to availability of the Company's services and facilities;
 - b) Resell or share any of the Company's services and facilities;
 - c) Provide local Exchange telephone services; and,
 - d) Provide service to its customers which incorporates interconnection to the Public Switched Telephone Network (PSTN), using its own facilities, the Company's facilities or the facilities of another facility provider.
- 6. Interconnection with CLECs will be made on a per Local Interconnection Region (LIR) basis.
- 7. Where a CLEC chooses to lease facilities from the Company instead of building facilities to support interconnection of their POI with the Company's POI, the CLEC will pay the existing tariff rates for the associated facility or Competitor Service.

B. DEFINITIONS

For the purpose of this tariff item:

Analogue Transmission is a telecommunications transmission which uses continuous signals to carry information.

<u>Band</u> is a categorization of the Company's Exchanges in accordance with the criteria set out in Telecom Regulatory Policy CRTC 2013-711 or subsequent determinations, used for rating purposes.

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100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

B. DEFINITIONS (cont'd)

Item

<u>Bill and Keep</u> is a process whereby the originating Local Exchange Carrier (LEC) bills its end-customer for the call and keeps the corresponding revenues; the originating LEC does not compensate the terminating LEC for call termination expense.

<u>CCS7 Cross-Connection</u> is the Company-provided cross connection between the gateway STP connection and CCS7 link transport facilities.

CCS7 A-link is the cross connection between a CLEC's Switch and the Company gateway STP.

<u>CCS7 D-link</u> is the cross connection between a CLEC's Signal Transfer Point (STP) and the Company gateway STP. It may be provided over shared-cost facilities.

<u>Central</u> is a designated building used historically to house switching equipment for main telephone, trunk lines and broadband equipment and also used by eligible CLECs, IXCs and DSLSPs for co-location, local interconnection, toll interconnection and broadband traffic hand-off.

<u>Central Office Code (NXX)</u> is a second set of three digits of a 10-digit telephone number (i.e., NPA-NXX-XXXX) which identifies the local switching office (a 3-digit identification code).

<u>Central Office Switch</u> is the local switching equipment which connects to local end-customer lines and which enables end-customers to make and receive calls to and from other end-customers within the local calling area of their Exchange and to access message toll services of the Company and Interexchange Carriers. The Central Office Switch is associated with one or more Central Office Codes (i.e., NXX Codes).

<u>Common Language Location Identifier (CLLI)</u> is an alphanumeric code used to identify physical locations and equipment, such as buildings, Wire Centres, poles and Central Offices.

<u>Default Point of Interconnection (Default POI)</u> is the point within an LIR for a new interconnection arrangement, unless otherwise mutually agreed.

<u>Company Loop Termination (COLT)</u> is the end point of the Company-provided transmission path which terminates at the Company's distribution frame or other designated distribution device located in the Company's Central Office building or equivalent.

<u>Competitive Local Exchange Carrier (CLEC)</u> is a Commission-certified provider of local Exchange service other than the Company.

<u>Connecting Link</u> is a transmission path which connects a Company-provided unbundled network component located or terminated within a Company Central Office building or equivalent (i.e., Local Loop), to a CLEC's collocated transmission equipment located within a Company Central Office building or equivalent.

<u>Customer Network Interface (CUST-NI)</u> is the point of termination or demarcation of a local loop specified in the tariff item for primary exchange service.

<u>Digital Transmission</u> is a telecommunications transmission which uses non-continuous signals to transmit information.

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LOCAL NETWORK INTERCONNECTION TARIFF

100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

B. DEFINITIONS (cont'd)

Item

Distribution Serving Area (DSA) is a basic geographic area within a Wire Centre area for the administration and furnishing of telephone service. There may be one or more DSAs within a given Wire Centre area. DSA C boundaries do not overlap one another.

<u>DS-0 Set</u> a group of DS-0s which are of the same type (i.e., Feature Group D, Feature Group B, or 800/888) within the same DS-1, connected at the same location and ordered at the same time.

<u>End-customer</u> is the ultimate user of all telecommunications services sold on a retail basis by CLECs, APLDs, or the Company.

<u>Exchange</u> is a basic geographical area for the administration and furnishing of telephone service, and normally includes a city, town or village and adjacent areas. The territory served by an Exchange, within which local service rates apply, is known as the Exchange area. See also *Local Calling Area*.

<u>Interexchange Carrier (IXC)</u> is a Canadian Carrier, as defined in Section 2 of the Telecommunications Act, which provides interexchange services and is not the Company.

Local Calling Area is an area defined by the Company, wherein calls can be made by the Company's customers without the application of interexchange toll charges. A local calling area includes one or more Exchange area. See also *Exchange*.

<u>Local Interconnection Region (LIR)</u> is a geographic area specified by the Company within which traffic is exchanged with CLECs on a Bill and Keep basis as specified in Telecom Decision CRTC 2004-46. Unless specified otherwise, the LIR is limited to the Local Calling Area.

<u>Local Loop</u> is a Company-provided transmission path between, and including, the CUST-NI located at the endcustomer's premises and the COLT.

<u>Numbering Plan Area (NPA)</u> is also known as the Area Code. An NPA is the 3-digit code that occupies the A, B, and C positions in the 10-digit North American Numbering Plan (NANP) format that applies throughout the NANP serving area. NPAs are of the format NXX, where N represents the digits 2-9 and X represents any digit 0-9. In the NANP, NPAs are classified as either geographic or non-geographic.

<u>Premises</u> is the continuous property and the building or buildings located thereon, or the part or parts of a building, occupied at the same time by an end-customer CLEC or DSLSP.

<u>Reseller</u> is a person engaged in resale, with or without adding value of a telecommunications service leased from an IXC or from the Company.

<u>*Trunk*</u> is a DS-0 time slot or channel within the Company-provided digital connection between the trunk-side of the Company's local switch and the Cross-connect panel used to provide interconnection arrangements.

Trunk Group is a group of equivalent trunks.

C. TERMS AND CONDITIONS

1. General

Item

- a) The company will provide the elements of local network interconnection and component unbundling subject to the availability of suitable facilities.
- b) CLECs or DSL Service Providers(s) ("DSLSPs") may subscribe to Local Loops and associated connecting links within a single Central Office building.
- C
- c) The Company does not make any representation that the services in this tariff item, or related Company tariffs, shall at all times be available in the quantities requested and at the locations specified. The Company shall, however, make every reasonable effort to make such services available on request.
- d) If a CLEC cancels an application for service after the Company has incurred costs associated with the provision of the service, the CLEC shall pay the Company all incurred costs.
- e) The type, location and timing of facilities to provide the elements of this tariff item must be specified, at the time of the order, by the CLEC. If the type, location or timing of facilities is changed by the CLEC, any additional expense incurred will be charged to the CLEC.
- f) Responsibility for services provided by the Company to a CLEC may be assumed by another CLEC. The assuming CLEC of record shall be responsible for payment of all unpaid rates and charges incurred by the CLEC from whom it assumes the services and facilities.
- g) The elements of local network interconnection and component unbundling are provided in accordance with the specifications, interfaces and parameters described in this tariff item and applicable technical references. The Company's primary obligation under this tariff item is to provide local network interconnection and unbundled network components in accordance with such specifications, network interfaces and parameters. The Company does not warrant that its local network interconnection and unbundled network components are compatible with any specific facilities or equipment or can be used for any particular purpose or service. CLECs ordering unbundled network components are responsible to obtain and provide facilities and equipment that are compatible with such unbundled network components.
- h) Traffic imbalance may occur for traffic that is interchanged between a CLEC and the Company over designated Bill and Keep trunks. For LIR based interconnection the Company will notify the CLEC immediately upon detecting an imbalance. The monthly rates will be applied on the basis of actual traffic imbalances from the date of notification for as long as the imbalance exists. Billing would commence one month from the date of notification.
- i) Services provided under the terms and conditions of this tariff item will be maintained in accordance with the technical references.
- j) The provision of local network interconnection and component unbundling outlined in this tariff item does not constitute a joint undertaking with the CLEC or DSLSP in the furnishing of any service.

C. TERMS AND CONDITIONS (cont'd)

1. General (cont'd)

Item

- k) In the furnishing of services in this tariff item, the Company is not responsible to the CLEC or their endcustomers for end-to-end service.
- The CLEC will furnish or arrange to furnish to the Company, at no charge, adequate equipment space and electrical power required by the Company to provide the connections under this tariff item at the CLEC's premises, or at the CLEC's end-customer's premises, as appropriate.
- m) Subject to limitations imposed by Access Services Tariff for Interconnection with Interexchange Carriers, CRTC 21480 Item 20. "Trunk-side Access", any facilities and services of the Company required by a CLEC for the purpose of resale or sharing may be acquired through any of the Company's Tariffs including this tariff item.
- n) The CLEC will furnish or arrange to furnish to the Company, at no charge, any additional facilities or protective apparatus that may be required to protect against any hazards associated with the particular nature or location of the connections.
- When it is necessary for the Company to install special equipment or to incur unusual expense in order to meet a CLEC's requirements, an additional charge may be assessed based upon the equipment installed or the expense incurred.

2. Network and Facilities Changes

- a) The Company does not make any representation that its equipment, facilities and services are, or will remain, adapted for use in connection with CLEC equipment, facilities and services.
- b) The Company reserves the right to change, in whole or in part, the design, function, operation, technology or layout of its equipment, apparatus, lines, switches, circuits, and devices as the Company, in its sole discretion, considers necessary. The Company shall not be responsible to the CLEC or the customers of the CLEC for their equipment, apparatus, lines, switches, circuits, devices, in whole or in part, which cease to be compatible with Company facilities or which become inoperative because of such changes to the Company's equipment, apparatus, lines, switches, circuits, devices or other components.
- c) The Company and CLECs will each provide network-to-network notification to the other party in accordance with the network-to-network notification requirements established by Telecom Letter Decision CRTC 94-11 and prior to implementing changes to the design, function, operation, technology or layout of its equipment, apparatus, lines, switches, circuits or devices.
- d) The Company shall have the right to modify its Exchange or LIR boundaries from time to time. The Company shall provide to the CLEC, no later than 31 December of each year, a forecast of Exchange or LIR boundary changes which the Company anticipated will be implemented during the following calendar year. In any event, the Company shall provide to the CLEC not less than six (6) months prior notice of any Exchange or LIR boundary affecting the territory served by the CLEC.

C. TERMS AND CONDITIONS (cont'd)

2. Network and Facilities Changes (cont'd)

e) The CLEC shall not implement any change to its operations, services, or network which would, in the reasonable assessment of the Company, materially affect the Company's operations, services or network, without the prior consent of the Company, which shall not unreasonably be withheld.

3. Network Outages

Item

- a) The Company will provide the CLEC with the earliest possible notice of all network outages affecting the operation of the CLEC's networks.
- b) The Company does not guarantee uninterrupted working of its service and/or equipment and shall not be liable to the CLEC, or to any other entity, for any failure or delay in performance of any service provided pursuant to this, or any other Company tariff or agreement, to the extent that such failure or delay is attributable to causes or results from events beyond the Company's reasonable control. Nothing in this tariff item shall extend the liability of the Company, as specified in the Company's Terms of Service or General Regulations, in the event of network outages or other service problems.

4. Protection

- a) The characteristics and methods of operation of any circuits, facilities or equipment of the CLEC, when connected to the Company, shall not:
 - i) interfere with or impair service over any facilities of the Company or its connecting carriers involved in its services;
 - ii) cause damage to its plant;
 - iii) impair the privacy of any communication carried over its facilities;
 - iv) create hazards to the Company's employees or to the public;
 - v) equipment must be certified in accordance with requirements detailed in General Tariff CRTC 3001, Section XIII Connection of Customer-provided Equipment, Item 1301; or
 - vi) all equipment acceptable for interconnection with Company facilities within a Wire Centre shall be limited to those equipment types identified in the National Co-location Equipment List as amended and updated from time to time. Such equipment shall conform to the terms and conditions pursuant to the co-location tariffs and associated agreements as applicable.
- b) If such characteristics or methods of operation are not in accordance with the preceding, the Company will, where practicable, notify the CLEC that temporary discontinuance of the use of any circuits, facilities or equipment may be required. When prior notice is not practicable, nothing contained within this tariff item shall be deemed to preclude the Company from temporarily discontinuing forthwith the availability to the CLEC of any circuit, facility or equipment if such action is reasonable under the circumstances. In cases of such discontinuance, the CLEC will be promptly notified and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance.
- c) During any period of temporary discontinuance of service caused by a trouble or condition arising in the CLEC's operations, facilities or network, no refund for interruption of service, as set forth in the Company's Terms of Service or General Regulations, shall be made.

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100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

C. TERMS AND CONDITIONS (cont'd)

5. Transit Service

Item

- a) Transit Services provide the Exchange of local traffic via the Company's networks between two carriers subscribing to the service, conditional on the existence of a business arrangement between two carriers originating and terminating traffic with each other and evidence of this business arrangement being provided to the Company.
- b) Local Transit Service is provided between two CLECs.

The carrier originating local transit traffic is responsible for providing the underlying facilities required to deliver the traffic to the Company on dedicated one-way trunk groups.

The Company will terminate local transit traffic via bill and keep trunks established between the Company and CLECs.

- c) Toll Transit service provides CLECs and IXCs with capability to deliver toll traffic to or from the Company's class 5 switch to or from the Company's designated class 4 switch at the same terms and conditions are contained with the Company's Access Services Tariff for Interconnection with Interexchange Carriers CRTC 21480 Item 40. The IXCs may deliver transit traffic to the Company on existing toll trunk groups or on separate transit trunk groups.
- d) CCS7 Transit may be obtained from third-party providers of this service.

6. Remote Switching Information

The Company will provide the following information for each Wire Centre requested in an order from a CLEC:

- a) a DSA designator for each DSA identified;
- b) the CLLI code for the Wire Centre for each DSA designator identified above;
- c) the 11 digit CLLI code for each remote, provisioned for the purpose of voice services within the Wire Centre area and associated with the requested Wire Centre, except those within Wire Centres or Central Office buildings for which co-location is mandated;
- d) the Exchange name and civic address for each remote identified above;
- e) whether each remote identified above uses fibre or copper;
- f) the maximum capacity of each remote identified above, i.e., <=24 loops, 25 to 672 loops or >672 loops;
- g) the list of DSA designators for each remote identified above, and
- h) data available for each Wire Centre with respect to boundaries of remote areas and remote Central Office C or RSU locations, when requested by a CLEC.

C. TERMS AND CONDITIONS (cont'd)

Item

6. Remote Switching Information (cont'd)

For each order received, the Company will provide electronic files that include all of the necessary information for each Wire Centre identified in the order. The first file will include items (a) and (b) and the second file will include items (c) through (g) inclusive, as identified above.

Orders for Remote Switching Information are restricted to one order per calendar quarter.

A charge per order shall apply, see Item D.

Also, a charge per Wire Centre shall apply as follows:

For each Wire Centre identified in the order, subject to a minimum charge equivalent to 10 Wire Centres, see Item D

The provision of the above information is subject to the signing of a non-disclosure agreement with the Company.

7. Connection to In-building Wire

Where the Company has responsibility and control of copper in-building wire in a multi-dwelling unit (MDU), and where a CLEC or Carrier Internet Service Provider (Carrier ISP) that provides its own facilities to the main terminal room (MTR) of an MDU wants to use the in-building wire that is owned by the Company to complete the service to the CLEC's or Carrier ISP's customer, the Company will permit the CLEC or Carrier ISP to connect to and use the Company's copper in-building wire at no charge. At the time of connection by the CLEC or the Carrier ISP to the Company's copper in-building wire, the CLEC or Carrier ISP takes responsibility and control for its customer's end-to-end service.

D. RATES AND CHARGES

Rates and charges for the elements described below are specified in the individual tables following these descriptions, unless otherwise specified.

1. Routing of Competitive Local Exchange Carrier ("CLEC") 800/888 Calls

Upon request, the Company will negotiate to route and terminate CLEC originated 800/888 calls on behalf of the CLEC.

2. Unbundled Network Components

- a) Local Loops
 - A local loop is a Company-provided transmission path between and including the Customer Network Interface (CUST-NI) located at the end-customer's premises and the Central Office Loop Termination ("COLT"). CLECs and DSLSPs will be able to obtain local loops from the Company subject to the availability of suitable facilities.

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LOCAL NETWORK INTERCONNECTION TARIFF

100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

D. RATES AND CHARGES (cont'd)

Item

2. Unbundled Network Components (cont'd)

- a) Local Loops (cont'd)
 - ii) An unbundled loop provided in a Multi-dwelling Unit (MDU) may be terminated at either the service provider demarcation point or at the customer demarcation point within the MDU. It is the responsibility of the CLEC or DSLSP ordering the unbundled loop to specify the required demarcation point at the time the order is placed with the Company.
 - iii) Additional charges also apply in situations where the provision of loops requires extra work or equipment.
 - iv) A Loop Selection Charge applies whenever a CLEC or DSLSP requests the identification of the availability of a loop, in a given location, meeting a specific loop category profile. This service charge includes a report which identifies whether a loop meeting a specific loop category profile is available in a given location and provides the loop make-up. In the event that a loop which meets the requested loop category profile is not available in a given location, the CLEC or DSLSP may request the removal of bridge taps and/or loading coils from a loop at that location. In such cases, a Loop Modification Charge applies based on the amount of labour time and cost of materials required to remove the bridge taps and/or loading coils.
 - v) Standard repair and provisioning intervals apply.
 - vi) The following types of Local Loops are available:

Type A

A Type A Local Loop is an analogue transmission path which extends from the CUST-NI to the COLT and supports the transmission of a voice-grade signal of approximately 3 kHz usable bandwidth terminating in a 2-wire electrical interface at both the end-customer's premises and at the COLT.

Type B

A Type B Local Loop is a digital transmission path which extends from the CUST-NI to the COLT and supports the transmission of an ISDN BRI (Basic Rate Interface) type signal terminating in a 2-wire electrical interface at both the end-customer's premises and at the COLT.

b) Diagnostic Maintenance Charge

A Diagnostic Maintenance Charge or Maintenance of Service charge applies for each test made in response to each CLEC's or DSLSP's request for repair or testing of a trouble when no trouble is found in the Local Loop.

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100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

D. RATES AND CHARGES (cont'd)

Item

2. Unbundled Network Components (cont'd)

- c) Connecting Links
 - i) Connecting Links A and Connecting Links B provide the Central Office equipment required to connect the COLT of Type A or Type B Local Loops to the CLEC's or DSLSP's co-located transmission equipment located in the Company's Central Office building or equivalent.
 - ii) Connecting Links A and B are provided in quantities of 100 of each type and the service charge applied is a flat rate per 100 links of each type. In addition, a monthly rate for the use of Central Office riser space (per meter, per cable) applies.
- d) Relay Service
 - i) The following terms apply for CLECs that purchase Relay Service and IPRS from the Company.
 - Relay Service, provides a deaf, hard of hearing or speech impaired customer, with the ability to communicate with other customers through the use of a Teletypewriter (TTY). A separate rate per Network Access Service (NAS) or per Working Telephone Number (WTN) will be assessed to the CLEC for access to Relay Service.
 - iii) In addition Internet Protocol Relay Service (IPRS), enables a person using an Internet-enabled device (e.g., personal computer) to communicate with another person (or vice-versa) over the telephone network. A specially trained operator transmits messages via Internet Protocol (IP)-based text conversation with a person with a hearing or speech disability and via voice conversation with a person without such a disability.
 - iv) All references to Relay Service include both TTY based Relay Service and IPRS.
 - v) Basic 9-1-1 Service is provided for 9-1-1 calls placed through Relay Service. Customers placing a 9-1-1 call through Relay Service will be routed to an emergency operator (an "Operator") and will have to provide their specific address/location. Once this information has been successfully provided to the Operator, the Operator will route the customer's call to the appropriate Safety Answering Point corresponding to the provided address/location.
 - vi) Access to Relay Service is available to CLECs using their own switches. Wholesale relay service is available for use 24 hours a day, 7 days a week. The CLEC shall pay the Company for any unusual expense required to furnish IPRS or Relay Service.

| Relay Service and | Monthly Rate by CLEC End | One Time Set-up |
|-------------------|-----------------------------|-----------------|
| IPRS Rates | Customer per NAS or per WTN | charge per CLEC |
| | \$0.15 | \$156.90 |

- e) Emergency-reporting and Alerting systems (9-1-1)
 - i) Emergency Service (9-1-1) provides a CLEC with access to the Company's Emergency 9-1-1 Service. (9-1-1) is available to CLECs by establishing a Trunk-side Interconnection to the Company's Switch providing 9-1-1 service. A rate per Network Access Service (NAS) or Working Telephone Number (WTN) will be assessed to the CLEC for such access.
 - ii) The type of access may vary with the type of service available in the Company's operating territory.

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100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

D. RATES AND CHARGES (cont'd)

3. Local Network Interconnection and Unbundled Network Components

Local Network Interconnection

| | Monthly Rate | Service Charge |
|-----------------------------------|--------------|----------------|
| CCS7 Signalling Interconnection – | | |
| CLEC Switch to the Company | | |
| Gateway STP, each A-Link | \$1,400.00 | |
| (Notes 2 and 3) | | |
| One-time Administration Charge | | \$69,500.00 |
| (Note 1) | | |

- Note 1 Administrative charge applies to the initial engineering, planning and testing activities associated with a CLEC's initial request to develop network interfaces and to implement CCS7 network interconnection arrangements. The activities include engineering, operations and translations work required to provision initial CCS7 interconnection for CLEC switch to Company gateway STP connection.
- Note 2 Northwestel's CCS7 Signalling Point of Interconnections for its ILEC serving territory are available at Whitehorse and Yellowknife.
- Note 3 CCS7 interconnection at a Northwestel SPOI requires that the requesting CLEC rely on a CCS7 identification code that is different from the one it uses, if any, in respect of its CCS7 interconnection with Bell Canada or one of Bell Canada's other affiliates.

Unbundled Network Component

| Monthly | Service Charge | | | | |
|---------|----------------------|-------------------------|---|---|--|
| Rate | Per C | Order | Per L | oop | |
| | Residence Business 1 | | Residence | Business | |
| | | See Note 2 | | | |
| | | | | | |
| \$21.40 | \$24.10 | \$44.35 | \$16.50 | \$24.85 | |
| \$59.44 | \$24.10 | \$44.35 | \$16.50 | \$24.85 | |
| | Rate \$21.40 | Rate Per C Residence | RatePer OrderResidenceBusinessSee Note 2\$21.40\$24.10\$44.35 | RatePer OrderPer LResidenceBusinessResidenceSee Note 2\$21.40\$24.10\$21.40\$24.10\$44.35 | |

Note 2 - For multi-dwelling unit orders the business rate applies

Other Activities

| | Service Charge |
|-----------------------------|----------------|
| Loop Selection, per loop | \$49.60 |
| Loop Modification, per loop | See Note 3 |

Note 3 - This charge is determined based on the amount of labour time and cost of materials require to modify the existing loop to remove the bridge taps and/or loading coils under the rates and conditions identified in General Tariff, CRTC 3001, Item 305.

Remote Switching Coverage Information

| | Service Charge | | | | |
|-------------------------------------|----------------|--|--|--|--|
| Per Order | \$86.21 | | | | |
| Per Wire Centre (see Note 4) | \$147.29 | | | | |
| Note 1 Minimum charge of \$1 708 50 | | | | | |

Note 4 - Minimum charge of \$1,708.50

Item

100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

D. RATES AND CHARGES (cont'd)

3. Local Network Interconnection and Unbundled Network Components (cont'd)

Connecting Links

| | Monthly Rate | Service Charge |
|------------------------------------|--------------|----------------|
| Connecting Link A or B | | |
| per 100 links of each type | \$1.08 | \$1,379.42 |
| Riser Space, per metre, | CRTC 3010 | CRTC 3010 |
| per cable (for Connecting Links A) | Item 746.4 | Item 746.4 |

9-1-1 Service

| | Monthly Rate | Service Charge | |
|--------------------------------|-------------------|----------------|---|
| Access by CLEC end-customers | CRTC 3010 | | |
| per NAS or per WTN | Items 722 and 723 | | С |
| Trunks between CLEC Switch and | CRTC 3003 | CRTC 3003 | |
| Company 9-1-1 Serving Switch | Item 1111 | Item 1111 | |

Note 5 - In the event that the CLEC co-located equipment resides on the same floor as the Company's MDF, no Riser Space charges apply. However, unusual expenses may apply for the recovery of any expenses the Company incurs associated with the use of horizontal Riser Space. See Special Services Tariff CRTC 3010, item 746.4, Rates and Charges.

4. Compensation for Traffic Terminations

a) Termination of CLEC Intraexchange or Intra LIR Traffic

Traffic imbalance may occur for traffic that is interchanged between the Company and a CLEC over designated Bill and Keep trunks. Subject to the paragraphs below that apply to existing Exchange-based interconnection, where a traffic imbalance exists, the party which originates less traffic than it terminates is entitled to compensation. It is the responsibility of the party entitled to compensation (i.e., in whose favour the imbalance exists) to detect and apply charges for the imbalance.

For existing Exchange-based interconnection, the Company will notify the CLEC of any imbalance in the Company's favour that is detected for three (3) consecutive months on specific trunk groups (the "initial imbalance").

If the Company detects a traffic imbalance in its favour, subsequent to the initial imbalance that applies for existing Exchange-based interconnection and for LIR-based interconnection, it shall notify the CLEC as soon as possible. For both the Exchange-based and the LIR-based interconnection regimes, the non-recurring monthly rates specified below will be applied on the basis of actual traffic imbalances from the date of notification.

The charge for any month is calculated for each trunk required at the busiest period of that month on the basis of actual traffic imbalance in the month. The non-recurring monthly rates specified below apply for as long as the imbalance exists. When an imbalance recurs in a month subsequent to its declining to zero, the Company shall notify the CLEC of the recurrence of the imbalance. The Company will then issue an invoice for the imbalance consistent with the manner in which ongoing imbalance situations are billed.

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Item 100

0 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (cont'd)

D. RATES AND CHARGES (cont'd)

4. Compensation for Traffic Terminations (cont'd)

Termination of CLEC Intraexchange or Intra LIR Traffic (cont'd)

Where a traffic imbalance favourable to the Company exists for a partial month after the activation of Bill and Keep trunks in a new LIR, the Company may waive charges for that partial month. If the Company chooses to do so, billing will resume as normal in the first complete month.

| | >10% | >20% | >30% | >40% | >50% | >60% | >70% | >80% | >90% |
|------------------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Up to 24 Trunks, | | | | | | | | | |
| per trunk | \$2.15 | \$3.57 | \$5.02 | \$6.44 | \$7.87 | \$9.31 | \$10.73 | \$12.17 | \$13.60 |
| Up to 48 Trunks, | | | | | | | | | |
| per trunk | \$3.36 | \$5.61 | \$7.86 | \$10.10 | \$12.35 | \$14.59 | \$16.85 | \$19.10 | \$21.34 |
| Up to 72 Trunks, | | | | | | | | | |
| per trunk | \$3.73 | \$6.22 | \$8.72 | \$11.21 | \$13.70 | \$16.20 | \$18.69 | \$21.18 | \$23.67 |
| Up to 96 Trunks, | | | | | | | | | |
| per trunk | \$3.93 | \$6.55 | \$9.17 | \$11.79 | \$14.42 | \$17.03 | \$19.65 | \$22.27 | \$24.89 |
| < 96 Trunks, | | | | | | | | | |
| per trunk | \$4.03 | \$6.72 | \$9.41 | \$12.10 | \$14.78 | \$17.47 | \$20.16 | \$22.86 | \$25.55 |

LIR Based Interconnection for Traffic Imbalance of: per Monthly Rate

5. Compensation for Transiting Service

a) Transit Services

Charges imposed on the Company by carriers receiving traffic, which are not recovered in the rates and charges associated with the Company's transit services, will be passed on to the originating carrier in the form of unusual expenses.

Local Transit service provides CLECs with the option to deliver their local Exchange traffic to other CLECs via the Company's networks.

The monthly charges apply on a per trunk basis for each trunk used to deliver local Exchange transit traffic to the Company and applies based on the size of the trunk group. Each transit trunk is provided on a DS-0 basis.

The service charge includes a one-time order processing charge and a trunk activation/change charge per trunk.

D. RATES AND CHARGES (cont'd)

Item

5. Compensation for Transiting Service (cont'd)

b) Local Transit Service provided to CLECs for the delivery of originating and terminating local transit traffic to another CLEC.

Local Transit Service

| | Monthly Rate | Service Charge |
|--------------------------------------|---------------------|----------------|
| Order Processing, each order | | \$187.68 |
| Trunk Activation or change per trunk | | \$22.63 |

Transit Charge

| | Monthly Rate | Service Charge |
|-------------------------------|--------------|----------------|
| Up to 24 Trunks per trunk | \$28.01 | |
| Up to 48 Trunks per trunk | \$30.68 | |
| Up to 72 Trunks per trunk | \$31.46 | |
| Up to 96 Trunks per trunk | \$31.92 | |
| More than 96 Trunks per trunk | \$32.02 | |

6. CCS7 Transit Service

Basic CCS7 transit service provides for the transiting of Integrated Services Digital Network User Part (ISUP) messages where the carriers have implemented direct message trunking and Transaction Capabilities Application Part (TCAP) messages to support Call Management Service (CMS) functionality between CLECs operating in the same Exchange, between CLECs and Wireless Service Providers (WSPs) operating in the same Exchange, and between CLECs and IXCs.

Both parties transiting CCS7 messages via the CCS7 Transit services must subscribe.

| CCS7 Transit Services | Monthly Rate | Service Charge |
|---|--------------|----------------|
| (a) CCS7 Transit Service (Note 1) | . \$420.90 | - |
| (b) Service Charge – Initial, per order (Note 2) | | \$2,732.40 |
| (c) Service Charge – Subsequent, per order (Note 2) | | 1,792.16 |

Notes: 1. For each transiting arrangement, a CLEC must subscribe to the Basic CCS7.

2. The service charges – initial or subsequent – apply per order, independently from the type(s) of CCS7 Transit service(s) ordered, the number of locations within the Company's territory or the number of carriers involved in the transit arrangements.

D. RATES AND CHARGES (cont'd)

Item

6. CCS7 Transit Service (cont'd)

CCS7 Transit service provides for the Exchange of CCS7 signalling messages between two different carriers i.e. CLECs, WSPs, IXCs subscribing to the service, conditional on the existence of a business arrangement between the two carriers exchanging CCS7 messages with each other and evidence of this business arrangement being provided to Northwestel

- (a) Basic CCS7 Transit service is provided between CLECs, WSPs, and IXCs conditional on the implementation of direct message trunking between themselves
- (b) Both parties transiting CCS7 messages via the CCS7 Transit services must subscribe.

E. POINT OF INTERCONNECTIONS (POIs)

1. The Company has line side access and MF trunk side access available at the following locations. Please note that this list will be updated frequently so for the most current list please contact the Company's Carrier Services Group.

Aklavik, Arctic Bay, Baker Lake, Cambridge Bay, Clyde River, Faro, Ft. Liard, Ft. Simpson, Ft. Smith, Gjoa Haven, Hay River, Igloolik, Kugluktuk, Norman Wells, Pangnirtung, Pond Inlet, Rankin Inlet, Resolute, Sanikiluaq, Taloyoak, Tuktoyaktuk, Whitehorse, Yellowknife, Iqaluit, Fort Nelson, and Inuvik.

2. The Company has CCs7 ISUP interconnection available at the following locations.

| Province | Community/Exchange Province | | Community/Exchange | Province | Community/Exchange |
|-----------------------|--|-----------------------|--------------------|-----------------------|--------------------|
| Yukon | Yukon Whitehorse Northwest Territories | | | Northwest Territories | Inuvik |
| Yukon | Dawson City | Northwest Territories | Hay River | Nunavut | Igloolik |
| Northwest Territories | Fort Smith | Northwest Territories | Dettah | Nunavut | Iqaluit |
| Northwest Territories | Coville Lake | Northwest Territories | Behchoko | BC | Fort Nelson |

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Item

100 LOCAL INTERCONNECTION AND COMPONENT UNBUNDLING (continued)

F. LOCAL INTERCONNECTION REGIONS

- "Local Interconnection Region" (LIR) is a geographic area specified by the Company within which traffic is exchanged with CLECs on a Bill and Keep basis as specified in Telecom Decision CRTC 2004-46 and Telecom Regulatory Policy CRTC 2013-711.
- 2. The LIR description in Item 100.F.3 includes the LIR designation (the default POI) and the local Exchange names within each LIR. The Company's list of communities (Exchanges) within each LIR will be revised (added to) significantly on a semi annual basis as a result of the 2013 to 2017 Modernization Plan outlined in the proceeding leading to Telecom regulatory Policy CRTC 2013-711.

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3. LIR descriptions are as follows:

| Territory | Community/ Exchange | Default POI Exchange | |
|-----------|--|-----------------------|--|
| BC | ATLIN | FORT NELSON | |
| BC | FORT NELSON | FORT NELSON | |
| BC | LOWER POST | FORT NELSON | |
| BC | MUNCHO LAKE (includes Mould Creek) | FORT NELSON | |
| BC | PROPHET RIVER | FORT NELSON | |
| BC | GOOD HOPE LAKE | ISKUT | |
| BC | ISKUT | ISKUT | |
| BC | TELEGRAPH CREEK | ISKUT | |
| BC | WONOWON (includes Buleberry and Upper Halfway) | WONOWON/ BLUEBERRY | |
| NT | ENTERPRISE | HAY RIVER | |
| NT | FORT SMITH | HAY RIVER | |
| NT | HAY RIVER | HAY RIVER | |
| NT | AKLAVIK | INUVIK | |
| NT | INUVIK | INUVIK | |
| NT | TSIIGEHTCHIC | INUVIK | |
| NT | TUKTOYAKTUK | INUVIK | |
| NT | JEAN MARIE RIVER | JEAN MARIE RIVER | |
| NT | WRIGLEY | JEAN MARIE RIVER | |
| NT | DELINE | TULITA | |
| NT | TULITA | TULITA | |

| Territory | Community/ Exchange | Default POI Exchange | | |
|---|---|----------------------|--|--|
| NT | BEHCHOKO (includes RAE and Edzo) | YELLOWKNIFE | | |
| NT | WHA TI | YELLOWKNIFE | | |
| NT | YELLOWKNIFE (includes Dettah) | YELLOWKNIFE | | |
| YT | BEAVER CREEK | DESTRUCTION BAY | | |
| YT | DESTRUCTION BAY (includes Burwash Landing) | DESTRUCTION BAY | | |
| YT | CARCROSS | WHITEHORSE | | |
| YT | CARMACKS | WHITEHORSE | | |
| YT | DAWSON CITY | WHITEHORSE | | |
| YT | FARO | WHITEHORSE | | |
| YT | HAINES JUNCTION (includes Champagne) | WHITEHORSE | | |
| YT | MARSH LAKE (includes Judas Creek) | WHITEHORSE | | |
| YT | MAYO (includes Stewart Crossing) | WHITEHORSE | | |
| YT PELLY CROSSING YT ROSS RIVER YT TAGISH YT TESLIN YT WATSON LAKE (includes Upper Liard) | | WHITEHORSE | | |
| | | WHITEHORSE | | |

110 CLEC DIGITAL NETWORK ACCESS (CLEC DNA)

A. General Terms of Service

Item

CLEC DNA provides a DS-1 access channel to a registered CLEC for the purpose of local interconnection with the Company and must be used in conjunction with Bill and Keep Type Interconnection as specified in CRTC 21481 C Item 100.D.4

A DS-1 Access channel provides digital transmission of information at speeds of less than 1.544 Mbps (DS-1) from a CLECs POI within a Rate Centre or Local Interconnection Region for connection to the Company PSTN switch interface.

In the event that the CLEC purchases a DNA in conjunction with transit service (CRTC 21481 Item 100.C.5) or future group D service, then the rates in Private Wire Service Tariff 3003 Item 1111 will apply.

Except as otherwise specified within this tariff, the Definitions, Conditions and Terms of Service found in Private Wire Service Tariff 3003 Item 1111 Digital Network Access Service apply to CLEC DNA.

B. Rates and Charges

Note that no link service charge (specified in CRTC 3003 Item 1111) is required for CLEC DNA service.

1. Contract Rates

| Service Item | Monthly Rate Minimum Contract Period | | | | | Service |
|--------------------------|--------------------------------------|----------|----------|----------|----------|----------|
| | 1 Year | 2 Year | 3 Year | 4 Year | 5 Year | Charge |
| Access Channel (each) | \$260.00 | \$250.00 | \$240.00 | \$230.00 | \$225.50 | \$700.00 |

2. Non-Contract Rates

| Service Item | Monthly Rate | Service Charge |
|-----------------------|--------------|----------------|
| Access Channel (each) | \$310.00 | \$1,400.00 |

* Any travel costs will apply only in situations where the competitor requests service on an urgent basis.