

Crown Castle Fiber LLC

Tariff Format

- A. Page Numbering - Page numbers appear in the upper right corner of the page. Pages are numbered sequentially. However, new pages are occasionally added to the tariff. When a new page is added between pages already in effect, a decimal is added. For example, a new page added between Pages 14 and 15 would be 14.1.

- B. Page Revision Numbers - Revision numbers also appear in the upper right corner of each page. These numbers are used to determine the most current page version on file with the Commission. For example, the 4th Revised Page 14 cancels the 3rd Revised Page 14.

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Check Sheet

Pages 1 through 44 inclusive of this tariff are effective as of the date shown at the top of the respective page(s).

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1 General

1.1 Explanation of Symbols

- (C) – To signify a changed regulation
- (D) – To signify a discontinued rate or regulation
- (I) – To signify an increase in a rate
- (M) – To signify text or rates relocated without change
- (N)

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2 Rules and Regulations

2.1 Undertaking of the Company

The Company undertakes to furnish Ethernet and Wavelength to business customers and wholesale carriers within the state of Minnesota. Subject to the approval by the Commission if required, the Company may offer other telecommunications Products in the future. To the extent that it is required, such future offerings will be set forth in transmittals and revised tariff pages detailing changes to this tariff or other tariffs the Company may have on file with the Commission.

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2.2 Obligations of the Customer

2.2.1.3 The Customer shall be responsible for:

2.2.1.1 The payment of all applicable charges specified in Order Form(s) executed by the Customer and for charges due

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2.2.1.3 With respect to any Product, Network, equipment or facility provided by

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2.3.1.3 Defacement of Premises

2.3.4.1

2.3.8.2

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2.4 Customer Liability for Unauthorized Use of the Network

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2.10 Overcharge/Undercharge

2.10.1.3 When a Customer has been overcharged, the amount shall be refunded or credited to the Customer within thirty (30) days after discovering or being notified of the overcharge. Interest on the overbilled amount shall also apply.

2.10.1.3 When a Customer has been undercharged, the amount shall be billed to the Customer. The Company may offer the Customer a delayed payment agreement over one or more billing periods to resolve the undercharged amount

2.11 Customer Complaints and Billing Disputes

2.11.1.3 Customers must notify the Company of billing or other disputes in writing no later than sixty (60) days after the date of the invoice and shall submit a documented claim with detailed information in writing for the disputed amount and pay the undisputed amounts in accordance with paragraphs 2.8.1 and 2.8.2. Failure of Customer to so notify Company of any dispute shall constitute a waiver by Customer of any dispute. Any amounts disputed in good faith shall not be due and payable until such dispute is resolved as provided herein. All billed amounts not disputed in good faith and in writing or orally by Customer within such sixty (60) days may not be disputed by Customer. All undisputed amounts are due and payable

2.12.1.3 Company is directly or indirectly owned in whole or in part by an entity that qualifies or intends to qualify as a “real estate investment trust” or “REIT” under Sections 856 through 860 of the Internal Revenue Code of 1986,

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2.15 Termination or Denial of Product:

2.15.1.3 The Company may decline to provide Product, or may terminate an existing Product, in the following cases, after providing five (5) days written notice, excluding Fridays, Saturdays, Sundays and legal holidays, unless otherwise noted:

2.15.1.1 Late Payment or Nonpayment. If Customer fails to pay any charge when due.

2.15.1.2 Without Notice For Hazardous Condition. For a condition on the

2.15.1.9 Refusal of Access. For failure of the Customer to permit the

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3 Rates and Charges

3.1 Rates Generally: Individual Case Basis (ICB)

Rates and charges, including minimum usage, installation, special construction and recurring charges, for the Company's Products are established at negotiated rates on an individual case basis (ICB), which may vary depending upon certain factors, including without limitation, the nature of the facilities and Products, the costs of construction and operation, the volume of traffic, the length of Product commitment by the Customer, and location. The terms of such arrangements shall be set forth in individual customer contracts and Order Forms. Unless otherwise specified, the terms, conditions, obligations, and regulations set forth in this tariff shall be incorporated into and become a part of, said contract, and shall be binding on the Company and Customer. The Company may or may not have an equivalent Product in its tariff on file with the Commission and the quoted ICB rates may be different than the tariffed rates.

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4 Description of Products

4.1 Ethernet Product

4.1.1 Product Description

4.1.1.1 General

“Ethernet Product” or “Product” means a method of communication between or among two or more locations using the Ethernet protocol defined by IEEE 802.3. Ethernet Product may be ordered and provisioned either as On-Net Product or Off-Net Product. Ethernet Product includes, without limitation, the following types of Products:

- (a) **E-Line**: a port-based product providing dedicated UNIs for point to point connections. E-Line supports a single EVC between two (2) UNIs. Bandwidth ranges typically between 3Mbps and 10GE
- (b) **Ethernet Virtual Private Line (“EVPL”)**: a VLAN based product providing multiplexed UNIs allowing multiple EVCs per UNI. Bandwidth ranges typically between 3Mbps and 10GE
- (c) **Ethernet LAN (“E-LAN”)**: a VLAN based meshed product providing many-to-many products with dedicated or product-multiplexed UNIs. E-LAN supports transparent LAN product and multipoint Layer 2 VPNs. Bandwidth ranges typically between 3Mbps and 10GE
- (d) **Metro-E Advanced Private Line (“Md (L 09(g)5()38.9(-1.3(e)-4(a)-3.2(t0er.64 17**

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- 4.1.1.2.G Any additional charges levied to the Company for space and power which are required in order to place equipment on the Company's side of the network interface will be the responsibility of the Customer.
- 4.1.1.2.H The Customer is responsible to specify in its Order Form what product configuration is to be contained in each product connection.
- 4.1.1.2.I A change in location or change of the type of circuit will be treated as a discontinuance of the existing Product and an installation of a new Product. All associated non- recurring charges will apply for the new Product. A new minimum period will be established for the new Product. The Customer will also be responsible for all outstanding minimum Product period obligations associated with the disconnected Product.

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Product	Bandwidth (Mbps)	MRC Range (12-60 Month Term)
Ethernet On-Net E-Line Per UNI	30	\$603 - \$422
Ethernet On-Net E-Line Per UNI	40	\$636 - \$446
Ethernet On-Net E-Line Per UNI	45	\$649 - \$454
Ethernet On-Net E-Line Per UNI	50	\$661 - \$463
Ethernet On-Net E-Line Per UNI	60	\$689 - \$482
Ethernet On-Net E-Line Per UNI	70	\$711 - \$498
Ethernet On-Net E-Line Per UNI	80	\$733 - \$514
Ethernet On-Net E-Line Per UNI	90	\$756 - \$529
Ethernet On-Net E-Line Per UNI	100	\$772 - \$541
Ethernet On-Net E-Line Per UNI	150	\$866 - \$606
Ethernet On-Net E-Line Per UNI	200	\$959 - \$671
Ethernet On-Net E-Line Per UNI	300	\$986 - \$690
Ethernet On-Net E-Line Per UNI	400	\$1124 - \$787
Ethernet On-Net E-Line Per UNI	500	\$1234 - \$864
Ethernet On-Net E-Line Per UNI	600	\$1268 - \$888
Ethernet On-Net E-Line Per UNI	700	\$1338 - \$937
Ethernet On-Net E-Line Per UNI	800	\$1365 - \$955
Ethernet On-Net E-Line Per UNI	900	\$1392 - \$975

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Product	Bandwidth (Mbps)	MRC Range (12-60 Month Term)
Ethernet On-Net E-Line Per UNI	1000	\$1420 - \$994
Ethernet On-Net E-Line Per UNI	>1001	ICB
Ethernet On-Net EVPL Per EVC	3	\$804 - \$563
Ethernet On-Net EVPL Per EVC	5	\$804 - \$563
Ethernet On-Net EVPL Per EVC	10	\$805 - \$563
Ethernet On-Net EVPL Per EVC	20	\$854 - \$598
Ethernet On-Net EVPL Per EVC	25	\$879 - \$616
Ethernet On-Net EVPL Per EVC	30	\$904 - \$633
Ethernet On-Net EVPL Per EVC	40	\$954 - \$668
Ethernet On-Net EVPL Per EVC	45	\$973 - \$681
Ethernet On-Net EVPL Per EVC	50	\$992 - \$694
Ethernet On-Net EVPL Per EVC	60	\$1033 - \$723
Ethernet On-Net EVPL Per EVC	70	\$1067 - \$747
Ethernet On-Net EVPL Per EVC	80	\$1100 - \$770
Ethernet On-Net EVPL Per EVC	90	\$1133 - \$793
Ethernet On-Net EVPL Per EVC	100	\$1246 - \$873
Ethernet On-Net EVPL Per EVC	150	\$1371 - \$960
Ethernet On-Net EVPL Per EVC	200	\$1426 - \$998

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The Company may provide different Bandwidths (Mbps) in accordance with Product availability at specific location(s). The Company and the Customer may negotiate Product Terms greater than 60 months at rates not specified in this table.

The Company reserves the right to require additional non-recurring and/or monthly-recurring charges related to the architecture necessary for installation, provision, operation, and/or maintenance of On-Net Product(s) and/or Off-Net Product(s) which may vary depending upon the individual circumstance of the Customer and the specifics of the location, whether it is not yet served or underserved and requiring construction or it is already served and requiring additional construction, where the On-Net Product(s) and/or Off-Net Product(s) may be provided to the Customer.

4.11.4 Additional Charges

Additional charges will apply to serve location(s) that include Off-Net Product, require construction or lack adequate capacity to fulfill the request. Those specific charges will be quoted on a Customer specific basis.

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4.2 Wavelength Product

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4.3 Distributed Antenna System

4.3.1 Product Description

4.3.1.1 General

The Distributed Antenna System (“DAS”) product begins at the Company’s demarcation point. Customers are responsible for providing or obtaining circuits to connect from their networks to the Company’s demarcation point. The Base Station contains Customers’ circuit terminating equipment, base transceiver station and related peripheral equipment. The RF/Optical conversion equipment converts Customers’ RF signals into optical signals, and places those signals into a dedicated point-to-point circuit that traverses Company DAS network facilities between the Base Station and one or more Remote Node locations. DAS products are not available to residential customers.

4.3.1.2 Network Demarcation Point

The Company will provide facilities, equipment, and products to its network demarcation point. The Company is responsible for the provisioning and maintenance of its facilities, equipment, and products to the network demarcation point, including those located at that point.

The Customer is responsible for the completion of services beyond the Company’s network demarcation point. Customer requested products beyond the network demarcation point may be provided by the Company at the Customer’s expense.

4.3.1.3 Rates and Charges

4.3.1.3.1 Non-Recurring Charges (“NRC”)

Charging Basis
