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November 6, 2023
Via Overnight Delivery
& E-Mail

Secretary
Utah Public Service Commission
Heber M. Wells Building
160 East 300 South, Suite 400
Salt Lake City, UT 84111

RE: Comcast Phone of Utah, LLC - Access Services Tariff Revision

Dear Sir or Madam:

Enclosed for filing please find the original of the above referenced tariff filing submitted on behalf of Comcast Phone of Utah, LLC. The purpose of this filing is to update the Company's Ethernet Transport services and add Business Wavelength services. The Company respectfully requests an effective date for this filing of November 12, 2023.

The following tariff pages are included with this filing:

Table of Contents, Pages 5-6	Updates Table of Contents
Section 4, Page 1	Removes text
Section 4, Pages 3-6	Updates ethernet transport services language
Section 4, Page 9.1	Updates ethernet transport services language
Section 4, Page 12	Updates ethernet transport services language
Section 4, Page 12.1	Updates ethernet transport services language
Section 4, Pages 14.1-14.4	Updates ethernet transport services language
Section 4, Page 15	Updates ethernet transport services language
Section 4, Pages 18-21	Updates ethernet transport services language
Section 4, Pages 22-33	Adds Business Wavelength services

A copy of this filing has also been emailed to the commission via psc@utah.gov.

Any questions you may have regarding this filing should be directed to my attention at 470-672-3022 or via email to croesel@inteserra.com. Thank you for your assistance in this matter.

Sincerely,

Carey Roesel
Consultant

cc: Kelly Clark – Comcast (via email)
Utah PSC (via email)
tms: UTa2302

Enclosures
CR/gs

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4. SPECIAL ACCESS SERVICE

4.1. GENERAL

Except as set forth in 4.2 following, Special Access Services are not generally available but may be provided subject to the terms, conditions, and limitations as set forth in Section 5.3, following, for Special Assemblies and Individual Case Basis Arrangements.

4.2. ETHERNET TRANSPORT SERVICES

Comcast's Ethernet Transport Services will be provided in accordance with the service descriptions, technical specifications, and performance standards set forth in Section 4.2 of this Tariff. If any of the definitions or regulations contained in this Section 4.2 conflict with those elsewhere in this Tariff, those contained in this Section 4.2 shall prevail.

Service is offered subject to facility and equipment availability. Intrastate Ethernet Transport Service may only be purchased by Customers whose traffic on the service will be at least 90% intrastate in nature.

4.2.1. DEFINITIONS

- A. "Agreement" consists of the Enterprise Master Services Agreement executed by the Customer and accepted by Comcast, the Product-Specific Attachment, the terms and conditions contained in this Tariff, any written amendments executed by both parties, and each Sales Order accepted by Comcast under the Agreement.
- B. "Comcast" refers to the operating company affiliate or subsidiary of Comcast that provides the Services.
- C. "Comcast Equipment" refers to any and all facilities, equipment or devices provided by Comcast or its authorized contractors at the Service Location(s) that are used to deliver any of the Services including, but not limited to, all terminals, wires, modems, lines, circuits, ports, routers, gateways, switches, channel service units, data service units, cabinets, and racks. Notwithstanding the above, inside telephone wiring within the Service Location, whether or not installed by Comcast, shall not be considered Comcast Equipment.

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.1. DEFINITIONS (CONT'D)

- V. "Service" means "Service" means (1) Ethernet Transport Services, and (2) Business Wavelength Services. (T)
- W. "Service Commencement Date" means the date(s) on which Comcast first makes Service available for use by Customer. A single Sales Order containing multiple Service Locations or Services may have multiple Service Commencement Dates. (T)
- X. "Service Interruption" means a complete loss of signal that renders the Service unusable.
- Y. "Service Location" means the Customer location(s) where Comcast provides Services, to the extent the Customer owns, leases, or otherwise controls such location(s).
- Z. "Service Term" means the duration of time (commencing on the Service Commencement Date) for which Services are ordered, as specified in a Sales Order.
- AA. "Termination Charges" refers to charges that may be imposed by Comcast if, prior to the end of the applicable Service Term (a) Comcast terminates Services for cause or (b) Customer terminates Services without cause. Termination Charges are as set forth in each PSA, and are in addition to any other rights and remedies under the Agreement.

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.2. PROVISIONING ENTITY

On-Net Service shall be provided by Comcast Business Communications, LLC. On-Net Service provided over the HFC Network and Off-Net Services are available in a limited number of Comcast markets.

4.2.3. REGULATORY APPROVAL; TRAFFIC MIX

Comcast's pricing for Service may be subject to FCC, public service commission or other regulatory approval. Further, Customer represents that its use of Service hereunder will be exclusively for the transmission of communications that is classified as jurisdictionally interstate under FCC rules and regulations. For services for which the endpoints of the service are in the same state, Customer specifically represents that more than ten percent (10%) of the traffic transmitted via the Service will be interstate. (For this purpose, Customer's representation relates to the traffic carried over the Service rather than the locations of the physical endpoints of the facility over which the Service is delivered.) If at any time during the term of the Agreement or any Service Term, less than ten percent (10%) of the traffic transmitted via such Service(s) is interstate, Customer shall immediately notify Comcast of the same in writing. Further, Comcast reserves the right, in its reasonable sole discretion, to reclassify Customer's use of Service as jurisdictionally interstate or intrastate, as appropriate. Customer agrees to indemnify, defend, and hold Comcast harmless from any claims by third parties, including, without limitation, any governmental entities, resulting from or arising out of Customer's failure to properly represent or certify the jurisdictional nature of its use of the Service(s).

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4.2.4. CUSTOM INSTALLATION FEES

All rates and charges quoted herein provide for the furnishing of facilities when suitable facilities are available or where the design or construction of the necessary facilities does not involve unusual costs. When, at the request of Customer, Comcast designs and/or constructs facilities that it would otherwise not construct, or the construction of such facilities involves a greater expense than would otherwise be incurred, Custom Installation nonrecurring charges may apply.

Once Comcast accepts a Sales Order for Service, Comcast will invoice Customer for all Custom Installation fee(s). Customer will pay the Custom Installation fee(s) within thirty (30) days of the invoice date unless a payment schedule is specified in the applicable Service Order.

4.2.5. PROVISIONING INTERVAL

Following its acceptance of a Sales Order, Comcast shall notify Customer of the Estimated Availability Date applicable to that Sales Order. Comcast shall use commercially reasonable efforts to provision the Service on or before the Estimated Availability Date; provided, however, that Comcast's failure to provision by said date shall not constitute a breach of the Agreement.

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.6. SERVICE COMMENCEMENT DATE

Comcast shall inform Customer when Service is available and performing in accordance with the "Technical Specifications" set forth in Section 4.2.15 ("Availability Notification"). Charges for Service shall begin to accrue as of the Service Commencement Date. The Service Commencement Date shall be earliest of: (a) the date on which Customer confirms receipt of and concurrence with the Availability Notification; (b) five (5) business days following the date of the Availability Notification, if Customer fails to notify Comcast that the Service does not comply materially with the Technical Specifications set forth in Section 4.2.15 hereto; or (c) the date on which Customer first uses the Service.

4.2.7. MINIMUM SERVICE TERM

The charges set forth or referenced in each Sales Order have been extended to Customer in reliance on the Service Term set forth therein. In the event that a Service Term has not been expressly set forth in a Sales Order, the minimum Service Term for Services is twelve (12) months.

4.2.8. TERMINATION CHARGES

A. Termination Charges for On-Net Services

1. Subject to Section 4.2.8.C, in the event that On-Net Service is terminated following Comcast's acceptance of the applicable Sales Order but prior to the Service Commencement Date, Customer shall pay Termination Charges equal to one hundred and twenty percent (120%) of the costs and expenses incurred by Comcast in installing or preparing to install the On-Net Service. (T)

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.8. TERMINATION CHARGES (CONT'D)

A. Termination Charges for On-Net Services (Cont'd)

2. Subject to Section 4.2.8.C, in the event that On-Net Service is terminated on or following the Service Commencement Date but prior to the end of the applicable Service Term, Customer shall pay Termination Charges equal to a percentage of the monthly recurring charges remaining for the unexpired portion of the then-current Service Term, calculated as follows: (T)
 - a. 100% of the monthly recurring charges with respect to months 1-12 of the Service Term; plus
 - b. 80% of the monthly recurring charges with respect to months 13-24 of the Service Term; plus
 - c. 65% of the monthly recurring charges with respect to months 25 through the end of the Service Term; plus
 - d. 100% of any remaining, unpaid Custom Installation Fees.

Termination Charges shall be immediately due and payable upon cancellation or termination and shall be in addition to any and all accrued and unpaid charges for the Service rendered by Comcast through the date of cancellation or termination.

B. Termination Charges for Off-Net Services

1. Subject to Section 4.2.8.C, in the event that Off-Net Service is terminated following Comcast's acceptance of the applicable Sales Order but prior to the Service Commencement Date, Customer shall pay Termination Charges equal to one hundred and twenty percent (120%) of the costs and expenses incurred by Comcast in installing or preparing to install the Off-Net Service, including any third-party incurred by Comcast as a result of the early termination of the Service. (N)
2. Subject to Section 4.2.8.C, in the event that Off-Net Service is terminated on or following the Service Commencement Date but prior to the end of the applicable Service Term, Customer shall pay Termination Charges equal to: (T)
 - a. 100% of the monthly recurring charges remaining through the end of the Service Term plus
 - b. 100% of any remaining, unpaid Custom Installation Fees; plus
 - c. any third-party charges, incurred by Comcast as a result of the early termination of Service. (T)

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.13. MULTIPLE ACCESS OPTIONS

The services are available with the following access options:

- On-Net Fiber Access – Connectivity to Service Locations is enabled via Comcast On-Net Fiber infrastructure.
- On-Net HFC Access – Connectivity to Service Locations is enabled via Comcast On-Net HFC infrastructure.
- Off-Net Access (Off-Net Dedicated Fiber, Off-Net Non-Dedicated Fiber, and Off-Net Non-Fiber) – Connectivity to Service Locations is enabled through a network-to-network interface (“NNI”) via third-party network provider.

4.2.14. EVC AREA TYPES AND OFF-NET SERVICE LOCATIONS

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A. The Services are available both within and between certain major metropolitan areas throughout the United States. Each EVC is assigned an EVC area type (Metro, Regional or Continental, as described below) based upon the proximity of Customer’s respective Service Locations. “Region” means a Comcast-defined geographical region, as determined by Comcast from time to time, within Comcast’s cable footprint. “Metro” means a Comcast-defined sales market, as determined by Comcast from time to time, within a Region.

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- Metro – EVC enables connectivity between Service Locations within the same Metro.
- Regional – EVC enables connectivity between Service Locations that are in different Metros, but within the same Region.
- Continental – EVC enables connectivity between Service Locations that are in different Regions.

B. Customer acknowledges and agrees that without Customer confirmation of the Service, Comcast may be unable to completely deliver the Service. Comcast shall make three (3) attempts to schedule a call during which Customer will confirm readiness to receive the Service. If Comcast’s attempts to schedule a call are unsuccessful, then Comcast may terminate the applicable Service Order at such Service Location, upon prior written notice to Customer (subject to applicable Termination Charges).

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.15. TECHNICAL SPECIFICATIONS AND PERFORMANCE STANDARDS FOR SERVICES (CONT'D)

E. Mac Learning and Forwarding (ENS Only)

The ENS is capable of learning up to 2,500 MAC addresses from all interfaces connecting to the Service. It is highly recommended that routing equipment be utilized to minimize the number of MAC addresses exposed directly to the Service in larger networks. Any addresses in excess of 2,500 will not be learned and traffic directed to these addresses will be treated as "unknown unicast".

F. Maximum Frame Size

Services delivered via fiber support a maximum transmission unit ("MTU") frame size of 2,000 bytes for untagged, tagged and Q- in-Q traffic with IEEE 802.1q or IEEE 802.1ad encapsulation types.

Services delivered via On-Net Fiber may, if set forth in a Sales Order or change order thereto, support an MTU up to 9,100 bytes for untagged, tagged and Q-in-Q frame sizes.

Services delivered via Off-Net Dedicated Fiber may, if set forth in a Sales Order or change order thereto, support an MTU up to 9,100 bytes for untagged, tagged and Q-in-Q frame sizes, but only, and solely, to the extent the applicable Off-Net provider can support such MTU frame size.

Services delivered via HFC support an MTU frame size of 1,522 bytes for untagged, tagged and Q-in-Q traffic with IEEE 802.1q or IEEE 802.1ad encapsulation types.

Services delivered via On-Net HFC may, if set forth in a Sales Order or change order thereto, support an MTU up to 2,000 bytes for untagged, tagged and Q-in-Q frame sizes.

Services delivered via Off-Net Non-Dedicated Fiber and Off-Net Non-Fiber, if set forth in a Sales Order or change order thereto, support an MTU up to 1,600 bytes for untagged, tagged and Q-in-Q frame sizes, but only, and solely, to the extent the applicable Off-Net provider can support such MTU frame size.

For Services delivered via Fiber or HFC all frames that exceed specifications shall be dropped.

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Transport Type	MTU Size
On-Net Fiber and Off-Net Dedicated Fiber	1,600-9,100 bytes
On-Net HFC	1,522-2000 bytes
Off-Net Non-Dedicated Fiber and Off-Net Non-Fiber	1,522 -1,600 bytes

FIGURE 4 MAXIMUM FRAME SIZE

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.17. ETHERNET TRANSPORT SERVICE LEVEL AGREEMENTS (CONT'D)

B. Performance Objectives SLA

The performance objectives associated with traffic flows between any two (2) Service Locations are dependent upon the performance tier, which is determined by Comcast, in its sole discretion, based on the locations of the respective Service Locations, designated as "Service Location A" and "Service Location Z" on the applicable Sales Order ("**Performance Tier**" or "**PT**"). Traffic flow between Service Location A and Service Location Z is a "**Service Location Pairing**."

For any Sales Order accepted by Comcast on or before June 15, 2023, the PT for a particular Service Location Pairing is assigned by Comcast, in its sole discretion, based on the Market of each Service Location in a Service Location Pairing.

For any Sales Order accepted by Comcast after June 15, 2023, the PT for a particular Service Location Pairing is assigned by Comcast, in its sole discretion, based on the mileage between Service Location A and Service Location Z ("**Mileage Band**"). For clarity and avoidance of doubt, the below table is intended only as a guide and Comcast reserves the right to assign or re-assign a particular Service Location Pairing a different PT than the PT corresponding to the applicable Mileage Band in the table below based on certain factors, including, but not limited to, Force Majeure, Market, the geographic landscape, terrain, and particular fiber route(s).

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Performance Tiers	PT0	PT1	PT2	PT3	PT4
Mileage Band	0-50 miles	51-150 miles	151-750 miles	751-2,500 miles	2,501-4,300 miles

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1. Access Types

- **On-Net Access.** For On-Net access, the Mileage Band will be determined by multiplying (A) the total number of direct air miles "as the crow flies" ("**Direct Miles**") between Service Location A and Service Location Z, by (B) 1.25.
- **Off-Net Access.** In addition to On-Net access, Comcast enables Off-Net access to Ethernet Transport Services via one or more third party provider(s). The Performance Tier for Off-Net Service is based upon the location of the Off-Net Service Location, the location of the NNI between Comcast and the third party provider and the performance commitment from the third party provider. For Off-Net Access, the Mileage Band will equal the sum of: (A) (the Direct Miles between Service Location A and NNI * 1.25), plus (B) (Direct Miles between NNI and Service Location Z * 2).

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.17. ETHERNET TRANSPORT SERVICE LEVEL AGREEMENTS (CONT'D)

B. Performance Objectives SLA (Cont'd)

2. Performance Tiers and Performance Objectives

Comcast collects continuous in-band performance measurements for the Services. The calculation of all Latency, Jitter and Packet Loss performance metrics for each calendar month for purposes of this performance objectives service level agreement are based upon the average of sample round trip measurements taken by Comcast during the applicable calendar month, excluding any period during which there is a Service Interruption. The below charts indicate the performance objectives for each of the performance metrics over each calendar month based on the applicable Performance Tier and CoS.

a. Performance Tier 0 (PT0) Agreements

Performance Metric	Class of Service (CoS)		
	Basic	Priority	Premium
Latency (Round Trip Network Delay)	45ms	24ms	4ms
Jitter (Network Delay Variation)	20ms	10ms	1ms
Packet Loss	<1%	<0.01%	<0.001%

(N)

(N)

b. Performance Tier 1 (PT1) Agreements

Performance Metric	Class of Service (CoS)		
	Basic	Priority	Premium
Latency (Round Trip Network Delay)	90ms	46ms	14ms
Jitter (Network Delay Variation)	20ms	10ms	2ms
Packet Loss	<1%	<0.01%	<0.001%

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c. Performance Tier 2 (PT2) Agreements

Performance Metric	Class of Service (CoS)		
	Basic	Priority	Premium
Latency (Round Trip Network Delay)	160ms	90ms	46ms
Jitter (Network Delay Variation)	25ms	15ms	5ms
Packet Loss	<1%	<.02%	<.01%

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d. Performance Tier 3 (PT3) Agreements

Performance Metric	Class of Service (CoS)		
	Basic	Priority	Premium
Latency (Round Trip Network Delay)	200ms	160ms	90ms
Jitter (Network Delay Variation)	30ms	20ms	10ms
Packet Loss	<1%	<.04%	<.02%

(T)

e. Performance Tier 4 (PT4) Agreements

Performance Metric	Class of Service (CoS)		
	Basic	Priority	Premium
Latency (Round Trip Network Delay)	240ms	200ms	160ms
Jitter (Network Delay Variation)	35ms	25ms	15ms
Packet Loss	<1%	<.05%	<.04%

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4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.17. ETHERNET TRANSPORT SERVICE LEVEL AGREEMENTS (CONT'D)

B. Performance Objectives SLA (Cont'd)

3. Credit Allowance

Customer's sole remedy for Comcast's failure to achieve the applicable performance metric standards above over a given calendar month for the Service are the receipt of the following credit amounts with the stated percentages to be applied against the MRC associated with the impacted portion of the Service set forth in the Sales Order ("Performance Objective Credits").

TABLE 1: Credit Allowance for Latency Performance Metric

		Performance Tier									
		PT0		PT1		PT2		PT3		PT4	
		Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit
Class of Service	Premium	0 - 4	No Credit	0 - 14	No Credit	0 - 46	No Credit	0 - 90	No Credit	0 to 160	No Credit
		4.01 - 24	10%	14.01 - 46	10%	46.01 - 90	10%	90.01 - 160	10%	160.01 - 200	10%
		24.01 - 45	25%	46.01 - 90	25%	90.01 - 160	25%	160.01 - 200	25%	200.01 - 240	25%
		>45	50%	>90	50%	>160.01	50%	>200	50%	>240	50%
	Priority	0 - 24	No Credit	0 - 46	No Credit	0 - 90	No Credit	0 to 160	No Credit	0 to 200	No Credit
		24.01 - 45	10%	46.01 - 90	10%	90.01 - 160	10%	160.01 - 200	10%	200.01 - 240	10%
		45.01 - 60	25%	90.01 - 160	25%	160.01 - 200	25%	200.01 - 240	25%	240.01 - 300	25%
		>60	50%	>160.01	50%	>200	50%	>240	50%	>300	50%
	Basic	0 - 45	No Credit	0 - 90	No Credit	0 to 160	No Credit	0 to 200	No Credit	0 to 240	No Credit
		45.01 - 60	10%	90.01 - 160	10%	160.01 - 200	10%	200.01 - 240	10%	240.01 - 300	10%
		60.01 - 90	25%	160.01 - 200	25%	200.01 - 240	25%	240.01 - 300	25%	300.01 - 360	25%
		>90	50%	>200	50%	>240	50%	>300	50%	>360	50%

TABLE 2: Credit Allowance for Jitter Performance Metric

		Performance Tier									
		PT0		PT1		PT2		PT3		PT4	
		Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit	Measurement (ms)	Credit
Class of Service	Premium	0 - 1	No Credit	0 - 2	No Credit	0 - 5	No Credit	0 - 10	No Credit	0 - 15	No Credit
		1.01 - 3	10%	2.01 - 3	10%	5.01 - 10	10%	10.01 - 15	10%	15.01 - 20	10%
		3.01 - 5	25%	3.01 - 5	25%	10.01 - 15	25%	15.01 - 20	25%	20.01 - 30	25%
		>5	50%	>5	50%	>15	50%	>20	50%	>30	50%
	Priority	0 - 10	No Credit	0 - 10	No Credit	0 - 15	No Credit	0 - 20	No Credit	0 - 25	No Credit
		10.01 - 15	10%	10.01 - 15	10%	15.01 - 20	10%	20.01 - 30	10%	25.01 - 40	10%
		15.01 - 20	25%	15.01 - 20	25%	20.01 - 30	25%	30.01 - 50	25%	40.01 - 60	25%
		>20	50%	>20	50%	>30	50%	>50	50%	>60	50%
	Basic	0 - 20	No Credit	0 - 20	No Credit	0 - 25	No Credit	0 - 30	No Credit	0 - 35	No Credit
		20.01 - 30	10%	20.01 - 30	10%	25.01 - 40	10%	30.01 - 50	10%	35.01 - 60	10%
		30.01 - 50	25%	30.01 - 50	25%	40.01 - 60	25%	50.01 - 80	25%	60.01 - 90.01	25%
		>50	50%	>50	50%	>60	50%	>80	50%	>90	50%

4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.17. ETHERNET TRANSPORT SERVICE LEVEL AGREEMENTS (CONT'D)

B. Performance Objectives SLA (Cont'd)

3. Credit Allowance (Cont'd)

TABLE 3: Credit Allowance for Packet Loss Performance Metric

		Performance Tier									
		PT0		PT1		PT2		PT3		PT4	
		Measurement	Credit	Measurement	Credit	Measurement	Credit	Measurement	Credit	Measurement	Credit
Class of Service	Premium	0% - 0.001%	No Credit	0% - 0.001%	No Credit	0% - 0.01%	No Credit	0% - 0.02%	No Credit	0% - 0.04%	No Credit
		0.001% - 2.00%	10%	0.001% - 2.00%	10%	0.01% - 2.00%	10%	0.02% - 2.00%	10%	0.04% - 2.00%	10%
		2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%
		>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%
	Priority	0% - 0.01%	No Credit	0% - 0.01%	No Credit	0% - 0.02%	No Credit	0% - 0.04%	No Credit	0% - 0.05%	No Credit
		0.01% - 2.00%	10%	0.01% - 2.00%	10%	0.02% - 2.00%	10%	0.04% - 2.00%	10%	0.05% - 2.00%	10%
		2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%
		>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%
	Basic	0% - 1.00%	No Credit	0% - 1.00%	No Credit	0% - 1.00%	No Credit	0% - 1%	No Credit	0% - 1%	No Credit
		1.01% - 2.00%	10%	1.01% - 2.00%	10%	1.01% - 2.00%	10%	1.01% - 2.00%	10%	1.01% - 2.00%	10%
		2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%	2.01% - 4.00%	25%
		>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%	>4.00%	50%

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Customer shall be entitled to receive a Performance Objective Credit only for one performance metric failure per affected portion of the Service per calendar month. For example, if the applicable metric for Jitter and Latency were missed for the same transport connection (Service Location A to Service Location Z) in a given calendar month, Customer will be entitled only to the Performance Objective Credit associated with either the Jitter or Latency failure for such portion of the Service. In addition, Customer may not receive both the Performance Objective Credit and an Availability Credit for the same portion of the Service in the same calendar month. To qualify for a Performance Objective Credit, Customer must request the applicable Performance Objective Credit from Comcast within thirty (30) days of the end of the applicable calendar month in which the applicable Performance Metric standard was not achieved. Comcast shall not incur any Liability, including Performance Objective Credit, for any failure of the Services caused by force majeure events, Planned Service Interruptions or other scheduled maintenance events, Customer actions or omissions, Customer-provided power or equipment, including Customer-Provided Equipment, a Customer Switch or Router or any other items set forth in the "Exceptions to Credit Allowances" section below.

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.18. NETWORK MONITORING

Comcast monitors On-Net Service on a 24x7x365 basis.

4.2.19. TECHNICAL SUPPORT AND MAINTENANCE

Comcast provides a toll-free trouble reporting telephone number to the Enterprise Technical Support (ETS) Center that operates on a 24x7x365 basis. Comcast provides technical support for service-related inquiries. Technical support will not offer consulting or advice on issues relating to CPE or other equipment not provided by Comcast.

A. Escalation

Reported troubles are escalated within the Comcast Business Services Network Operations Center (BNOC) to meet the response/restoration interval described below (Response and Restoration Standards). Service issues are escalated within the Comcast BNOC as follows: to a Supervisor at the end of the applicable time interval plus one (1) hour; to a Manager at the end of the applicable time interval plus two (2) hours, and to a Director at the end of the applicable time interval plus four (4) hours.

B. Maintenance

Comcast's standard maintenance window for On-Net Services is Sunday to Saturday from 12:00am to 6:00am local time. Scheduled maintenance for On-Net Services is performed during the maintenance window and will be coordinated between Comcast and the Customer. The scheduled maintenance date will be determined by Comcast in its sole discretion; provided, that Comcast provides a minimum of seven (7) days' notice for On-Net Service impacting planned maintenance. Emergency maintenance is performed as needed without advance notice to Customer. Maintenance for Off-Net Services shall be performed in accordance with the applicable third party service provider rules. Therefore, Off-Net Service may be performed without advance notice to Customer.

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ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.26. RATES AND CHARGES (CONT'D)

B. Ethernet Network Service (ENS)

BANDWIDTH (MBPS)	MAXIMUM MONTHLY RATES			
	EVC (BASIC CoS)	EVC (PRIORITY CoS)	EVC (PREMIUM CoS)	NRC
1	\$90.00	\$100.00	\$105.00	\$500.00
2	\$155.00	\$165.00	\$170.00	\$500.00
3	\$220.00	\$235.00	\$240.00	\$500.00
4	\$285.00	\$300.00	\$320.00	\$500.00
5	\$350.00	\$370.00	\$390.00	\$500.00
6	\$415.00	\$435.00	\$460.00	\$500.00
7	\$480.00	\$505.00	\$535.00	\$500.00
8	\$545.00	\$570.00	\$605.00	\$500.00
9	\$610.00	\$635.00	\$675.00	\$500.00
10	\$675.00	\$715.00	\$740.00	\$1,000.00
20	\$780.00	\$845.00	\$935.00	\$1,000.00
30	\$870.00	\$960.00	\$1,055.00	\$1,000.00
40	\$975.00	\$1,065.00	\$1,170.00	\$1,000.00
50	\$1,065.00	\$1,170.00	\$1,285.00	\$1,000.00
60	\$1,170.00	\$1,275.00	\$1,405.00	\$1,000.00
70	\$1,260.00	\$1,390.00	\$1,520.00	\$1,000.00
80	\$1,365.00	\$1,495.00	\$1,640.00	\$1,000.00
90	\$1,455.00	\$1,600.00	\$1,770.00	\$1,000.00
100	\$1,560.00	\$1,705.00	\$1,885.00	\$2,000.00
200	\$1,675.00	\$1,885.00	\$2,120.00	\$2,000.00
300	\$1,795.00	\$2,055.00	\$2,365.00	\$2,000.00
400	\$1,910.00	\$2,235.00	\$2,600.00	\$2,000.00
500	\$2,030.00	\$2,405.00	\$2,845.00	\$2,000.00
600	\$2,145.00	\$2,585.00	\$3,080.00	\$2,000.00
700	\$2,260.00	\$2,755.00	\$3,330.00	\$2,000.00
800	\$2,380.00	\$2,940.00	\$3,560.00	\$2,000.00
900	\$2,495.00	\$3,105.00	\$3,810.00	\$2,000.00
1000	\$2,615.00	\$3,290.00	\$4,045.00	\$2,000.00

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ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.26. RATES AND CHARGES (CONT'D)

C. Ethernet Private Line (EPL)

BANDWIDTH (MBPS)	MAXIMUM MONTHLY RATES			
	EVC (BASIC CoS)	EVC (PRIORITY CoS)	EVC (PREMIUM CoS)	NRC
1	\$50.00	\$65.00	\$80.00	\$500.00
2	\$105.00	\$130.00	\$145.00	\$500.00
3	\$170.00	\$180.00	\$220.00	\$500.00
4	\$220.00	\$245.00	\$285.00	\$500.00
5	\$275.00	\$310.00	\$365.00	\$500.00
6	\$325.00	\$375.00	\$430.00	\$500.00
7	\$375.00	\$440.00	\$505.00	\$500.00
8	\$440.00	\$505.00	\$570.00	\$500.00
9	\$495.00	\$560.00	\$650.00	\$500.00
10	\$545.00	\$625.00	\$730.00	\$1,000.00
20	\$625.00	\$730.00	\$830.00	\$1,000.00
30	\$715.00	\$820.00	\$935.00	\$1,000.00
40	\$795.00	\$910.00	\$1,055.00	\$1,000.00
50	\$870.00	\$1,000.00	\$1,155.00	\$1,000.00
60	\$960.00	\$1,105.00	\$1,260.00	\$1,000.00
70	\$1,040.00	\$1,195.00	\$1,380.00	\$1,000.00
80	\$1,120.00	\$1,285.00	\$1,480.00	\$1,000.00
90	\$1,195.00	\$1,380.00	\$1,585.00	\$1,000.00
100	\$1,285.00	\$1,480.00	\$1,705.00	\$2,000.00
200	\$1,480.00	\$1,600.00	\$1,845.00	\$2,000.00
300	\$1,600.00	\$1,730.00	\$1,990.00	\$2,000.00
400	\$1,715.00	\$1,845.00	\$2,130.00	\$2,000.00
500	\$1,835.00	\$1,975.00	\$2,275.00	\$2,000.00
600	\$1,950.00	\$2,105.00	\$2,420.00	\$2,000.00
700	\$2,065.00	\$2,225.00	\$2,560.00	\$2,000.00
800	\$2,185.00	\$2,355.00	\$2,705.00	\$2,000.00
900	\$2,300.00	\$2,485.00	\$2,845.00	\$2,000.00
1000	\$2,420.00	\$2,600.00	\$3,005.00	\$2,000.00

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ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.2. ETHERNET TRANSPORT SERVICES (CONT'D)

4.2.26. RATES AND CHARGES (CONT'D)

D. Ethernet Virtual Private Line (EVPL)

BANDWIDTH (MBPS)	MAXIMUM MONTHLY RATES			
	BASIC BANDWIDTH	EVC (PRIORITY CoS)	EVC (PREMIUM CoS)	NRC
1	\$130.00	\$145.00	\$155.00	\$500.00
2	\$260.00	\$285.00	\$310.00	\$500.00
3	\$390.00	\$430.00	\$470.00	\$500.00
4	\$535.00	\$570.00	\$625.00	\$500.00
5	\$665.00	\$715.00	\$780.00	\$500.00
6	\$795.00	\$860.00	\$935.00	\$500.00
7	\$925.00	\$1,000.00	\$1,090.00	\$500.00
8	\$1,055.00	\$1,155.00	\$1,260.00	\$500.00
9	\$1,185.00	\$1,300.00	\$1,415.00	\$500.00
10	\$1,315.00	\$1,445.00	\$1,560.00	\$1,000.00
20	\$1,430.00	\$1,510.00	\$1,585.00	\$1,000.00
30	\$1,545.00	\$1,625.00	\$1,715.00	\$1,000.00
40	\$1,665.00	\$1,755.00	\$1,845.00	\$1,000.00
50	\$1,780.00	\$1,870.00	\$1,965.00	\$1,000.00
60	\$1,900.00	\$2,000.00	\$2,095.00	\$1,000.00
70	\$2,015.00	\$2,120.00	\$2,225.00	\$1,000.00
80	\$2,130.00	\$2,250.00	\$2,355.00	\$1,000.00
90	\$2,250.00	\$2,365.00	\$2,485.00	\$1,000.00
100	\$2,365.00	\$2,485.00	\$2,615.00	\$2,000.00
200	\$2,470.00	\$2,600.00	\$2,755.00	\$2,000.00
300	\$2,575.00	\$2,715.00	\$2,885.00	\$2,000.00
400	\$2,680.00	\$2,835.00	\$3,030.00	\$2,000.00
500	\$2,780.00	\$2,950.00	\$3,160.00	\$2,000.00
600	\$2,885.00	\$3,070.00	\$3,300.00	\$2,000.00
700	\$2,990.00	\$3,185.00	\$3,430.00	\$2,000.00
800	\$3,095.00	\$3,300.00	\$3,575.00	\$2,000.00
900	\$3,200.00	\$3,420.00	\$3,705.00	\$2,000.00
1000	\$3,300.00	\$3,535.00	\$3,850.00	\$2,000.00

E. Equipment Fee

EQUIPMENT FEE PER MONTH
\$34.95

(N)

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES

Comcast's Business Wavelength Services will be provided in accordance with the service descriptions, technical specifications, and performance standards set forth in this Section 4.3 of this Tariff. If any of the definitions or regulations contained in this Section 4.3 conflict with those elsewhere in this Tariff, those contained in this Section 4.3 shall prevail.

4.3.1. DEFINITIONS

Definitions for this Service are as set forth for Ethernet Service in Section 4.2.1.

4.3.2. PROVISIONING ENTITY

Service shall be provided by Comcast Business Communications, LLC or its applicable affiliates and subsidiaries.

Comcast may provide Customer with Service and fiber maps during the term of the Agreement to further describe Service availability. Such maps are hereby deemed Comcast Confidential Information.

4.3.3. REGULATORY APPROVAL; TRAFFIC MIX

Comcast's pricing for Service may be subject to FCC, public service commission or other regulatory approval. Further, Customer represents that its use of Service hereunder will be exclusively for the transmission of communications traffic that is classified as jurisdictionally intrastate under FCC rules and regulations. Customer specifically represents that ten percent (10%) or less of the traffic transmitted via the Service will be interstate. (For this purpose, Customer's representation relates to the traffic carried over the Service rather than the locations of the physical endpoints of the facility over which the Service is delivered.) If at any time during the term of the Agreement or any Service Term, more than ten percent (10%) of the traffic transmitted via the Service is interstate, Customer shall immediately notify Comcast of the same in writing. Further, Comcast reserves the right, in its reasonable sole discretion, to reclassify Customer's use of Service as jurisdictionally interstate or intrastate, as appropriate. Customer agrees to indemnify and hold Comcast harmless from any claims by third parties resulting from or arising out of Customer's failure to properly represent or certify the jurisdictional nature of its use of the Service(s).

(N)

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ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

(N)

4.3.4. SPECIAL CONSTRUCTION

All rates and charges quoted herein provide for the furnishing of facilities when suitable facilities are available or where the design or construction of the necessary facilities does not involve unusual costs. When, at the request of Customer, Comcast designs and/or constructs facilities that it would otherwise not construct, or the construction of such facilities involves a greater expense than would otherwise be incurred, Special Construction nonrecurring charges may apply.

Once Comcast accepts a Sales Order for Service, Comcast will invoice Customer for all special construction fee(s). Customer will pay such fee(s) within thirty (30) calendar days of the invoice date unless a payment schedule is specified in the applicable Service Order.

4.3.5. PROVISIONING INTERVAL

Following its acceptance of a Sales Order, Comcast shall notify Customer of the Estimated Availability Date applicable to that Sales Order. Comcast shall use commercially reasonable efforts to provision the Service on or before the Estimated Availability Date; provided, however, that Comcast's failure to provision by said date shall not constitute a breach of the Agreement.

4.3.6. SERVICE COMMENCEMENT DATE

Comcast shall inform Customer when Service is available and performing in accordance with the "Technical Specifications" set forth in Section 4.3.11 ("Availability Notification"). Charges for Service shall begin to accrue as of the Service Commencement Date. The Service Commencement Date shall be the earliest of: (A) the date on which Customer confirms receipt of and concurrence with the Availability Notification; (B) five (5) business days following the date of the Availability Notification, if Customer fails to notify Comcast that the Service does not comply materially with the Technical Specifications; or (C) the date on which Customer first uses the Service.

4.3.7. MINIMUM SERVICE TERM

The charges set forth or referenced in each Sales Order have been extended to Customer in reliance on the Service Term set forth therein. To the extent that a Service Term has not been expressly set forth in a Sales Order, the Service Term for such Sales Order shall be twelve (12) months.

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.8. TERMINATION CHARGES

- A. In the event that Service is terminated prior to the Service Commencement Date, Customer shall pay Termination Charges equal to the costs and expenses incurred by Comcast in installing or preparing to install the Service plus twenty percent (20%).
- B. In the event that Service is terminated on or following the Service Commencement Date but prior to the end of the applicable Service Term, Customer shall pay Termination Charges equal to a percentage of the monthly recurring charges remaining for the unexpired portion of the then-current Service Term, calculated as follows:
 - 1. 100% of the monthly recurring charges with respect to months 1-12 of the Service Term; plus
 - 2. 80% of the monthly recurring charges with respect to months 13-24 of the Service Term; plus
 - 3. 65% of the monthly recurring charges with respect to months 25 through the end of the Service Term; plus
 - 4. 100% of any remaining, unpaid Special Construction Fees.
- C. Termination Charges shall be immediately due and payable upon cancellation or termination and shall be in addition to any and all accrued and unpaid charges for the Service rendered by Comcast through the date of cancellation or termination.
- D. Exclusions

Termination Charges shall not apply to Service terminated by Customer as a result of Comcast's material and uncured breach in accordance with the General Terms and Conditions.

(N)

(N)

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.8. TERMINATION CHARGES (CONT'D)

E. Portability

Customer may terminate an existing Service (an “**Existing Service**”) and turn up a replacement Service (*i.e.*, activate Service with termination points on Comcast’s network that are different than those of the Existing Service) (a “**Replacement Service**”) without incurring Termination Charges with respect to the Existing Service, provided that (a) the Replacement Service must have a Service Term equal to or greater than the remaining Service Term of the Existing Service but in no event less than twelve (12) months; (b) the Replacement Service must have monthly recurring charges equal to or greater than the monthly recurring charges for the Existing Service; (c) Customer submits a Sales Order to Comcast for the Replacement Service within ninety (90) days after termination of the Existing Service and that Sales Order is accepted by Comcast; (d) Customer reimburses Comcast for any and all installation charges that were waived with respect to the Existing Service; and (e) Customer pays the actual costs incurred by Comcast in installing and provisioning the Replacement Service.

F. Upgrades and Features

Customer may upgrade the speed of an Existing Service or convert an Unprotected Circuit to a Protected Circuit (as defined and further described in Schedule A-1 herein) (in each case, an “**Upgraded Service**”) without incurring Termination Charges, provided that (A) the Upgraded Service must assume the remaining Service Term of the Existing Service, but in no event less than twelve (12) months; (B) the Upgraded Service must have the same points of termination on Comcast’s Network as the Existing Service; (C) Customer submits a Sales Order to Comcast for the Upgraded Service and that Sales Order is accepted by Comcast; (D) Customer pays Comcast’s applicable nonrecurring charges for the Upgraded Service; and (E) Customer agrees to pay the applicable monthly recurring charges for the Upgraded Service commencing with the Service Commencement Date for such Upgraded Service.

(N)

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4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.9. ADDITIONAL INFORMATION

As necessary for the interconnection of the Service with services provided by others, Comcast may request (as applicable), and Customer will provide to Comcast, circuit facility assignment information, firm order commitment information, and design layout records necessary to enable Comcast to make the necessary cross-connection between the Service and Customer's other service provider(s). Comcast may charge Customer nonrecurring and monthly recurring charges to make such connections.

4.3.10. BUSINESS WAVELENGTH SERVICES DESCRIPTION

The Service is a private, dedicated, point-to-point transport service that provides secure, high-performance network connectivity between two (2) Service Locations to send and receive data by utilizing Dense Wavelength Division Multiplexing (DWDM) technology over Comcast lit fiber-optic lines. The Service can be delivered as either an Unprotected Circuit or a Protected Circuit, each as defined below.

- A. Unprotected. An "**Unprotected Circuit**" is point-to-point linear circuit utilizing one (1) static physical fiber path ("**Fiber Path**") terminating on single Comcast-owned Network Terminating Equipment ("**NTE**") at each circuit endpoint. NTE constitutes Comcast Equipment. Protection Switching (as defined below) is not provided at the NTE or within the transport network, even if Customer has more than one Unprotected Circuit. 10G and 100G circuits are available as Unprotected Circuits.
- B. Protected. A "**Protected Circuit**" is a point-to-point linear circuit utilizing two (2) diverse Comcast Fiber Paths that both terminate on the same NTE at each circuit endpoint but diverge along the circuit at the nearest point of divergence from each circuit endpoint and are routed to diverse Comcast headends. Each circuit utilizes a dedicated port on the NTE for the Customer handoff. One of the two (2) diverse Fiber Paths is designated by Comcast as the primary Fiber Path and the other Fiber Path is designated by Comcast as the secondary Fiber Path. In the event the primary Fiber Path is unavailable, Comcast re-routes traffic from the primary Fiber Path to the secondary Fiber Path ("**Protection Switching**"). Only one (1) Fiber Path is active at a given time. Only 10G circuits are available as Protected Circuits.

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4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.11. TECHNICAL SPECIFICATIONS FOR SERVICES

The Services are bi-directional, point-to-point optical Services capable of transporting high bandwidths (e.g., 10G and 100G) using Ethernet or Optical Transport Network (OTN) protocols. Each Service constitutes an entire wavelength or "Lambda" channel of a DWDM.

Customer Interface

Table 1 shows the customer interfaces supported, by protocol, for the Service.

Protocol	Interface(s)
Ethernet – 10G LAN PHY	10GBase-LR
Ethernet – 10G WAN PHY	10GBase-LW
Ethernet – 100G	100GBASE-LR4
OTN – 10G	OTU2, OTU2e
OTN – 100G	OTU4

Table 1: Wavelength Services Protocols and Customer Interfaces

4.3.12. SERVICE MONITORING, TECHNICAL SUPPORT AND MAINTENANCE

- A. Network Monitoring - Comcast monitors Services on a 24x7x365 basis.
- B. Technical Support - Comcast provides a toll-free trouble reporting telephone number to the Network Operations Center that operates on a 24x7x365 basis. Comcast provides technical support for service-related inquiries. Technical support will not offer consulting or advice on issues relating to equipment not provided by Comcast.
- C. Escalation. Reported troubles are escalated within the Comcast Business Services Network Operations Center to meet the response/restoration objectives described below (Response and Restoration Standards). Service issues are escalated within the Comcast Business Services Network Operations Center as follows: to a Supervisor at the end of the applicable objective time interval plus one (1) hour; to a Manager at the end of the applicable objective time interval plus two (2) hours; and to a Director at the end of the applicable objective time interval plus four (4) hours.
- D. Maintenance - Comcast's standard maintenance window for Services is Sunday to Saturday from 12:00 am to 6:00 am local time. Scheduled maintenance for Services is performed during the maintenance window and will be coordinated between Comcast and the Customer. Comcast provides a minimum three (3) business days' notice for maintenance expected to impact service for <=50ms. Comcast provides a minimum of seven (7) business days' notice for maintenance expected to impact service for >50ms. Emergency maintenance is performed as needed without advance notice to Customer.
- E. Comcast Equipment. Comcast provides certain Comcast Equipment, which will reside at the Service Location, for provisioning its Services. Comcast will retain ownership and management responsibility for this Company Equipment. This Comcast Equipment must only be used for receipt of Services.

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ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.13. CUSTOMER RESPONSIBILITIES

Customer shall have the following responsibilities related to the installation, support, and maintenance of the Service:

- Connecting to the Demarcation Point.
- Responsibility for all equipment and service beyond the Demarcation Point and/or interconnection between Comcast Equipment and the wiring at the Demarcation Point.
- Procuring and maintaining equipment which is technically compatible with the Service and the Network.
- Providing an operating environment with temperatures not below fifty-five (55) or above eighty-five (85) degrees Fahrenheit. Humidity shall not exceed ninety (90) percent at eighty-five (85) degrees Fahrenheit.
- Providing secure space sufficient for access to one (1) standard, freestanding, equipment cabinet at each of the Customer facilities, no further than fifty feet from the Customer router or switch interface.
- Providing outside cable entry conduit(s), entry cable ground point, and internal building conduit to allow Comcast the ability to rod/rope a fiber optic cable to the Demarcation Point.
- Locating and marking all private underground utilities (water, electric, etc.) along path of new underground placement not covered by utility companies.
- Providing a pull rope in any existing duct that Comcast is to use and ensure existing duct is serviceable for Comcast use.
- Obtaining "right-of-way" entry easement for Comcast facilities and equipment from property owners at each Customer location.

(N)

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.13. CUSTOMER RESPONSIBILITIES (CONT'D)

- Coring of the Service Location's outside wall and internal walls. Upon request, Comcast can perform this activity on an "as needed" basis for an additional one-time fee.
- Providing UPS AC power (back-up battery power) equipment, circuit sizing to be determined, if applicable.
- Emergency local generator backup service, if applicable.
- Providing access to the buildings and Demarcation Point at each Service Location to allow Comcast and its approved contractors to install the Service and for regular (8am - 5pm) and emergency (24 hour) service and maintenance of Comcast's equipment and facilities.
- Providing, installing and maintaining a device that is capable of interconnecting network traffic between the Service and the Customer's Local Area Network ("LAN").
- Providing a point of contact ("POC") for installation, service activation and any maintenance activities.

(N)

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.14. INTRASTATE WAVELENGTH SERVICE LEVEL AGREEMENTS (SLA)

Comcast's Intrastate Comcast Business Wavelength Services are backed by the following Service Level Agreement (SLA):

A. Availability SLA

Comcast's liability and Customer's sole remedy for Service Interruptions, and errors, omissions, interruptions, delays, outages, or defects in transmission or switching of any Services (individually or collectively, "Liability"), shall be limited to the amounts set forth in the tables below ("Availability Credit"). For the purposes of calculating credit for a Service Interruption, the length of Service Interruption begins when the Customer reports such Service Interruption and a trouble ticket is opened and concludes upon the closing of the same trouble ticket or, if sooner, the termination of the Service Interruption, less any time Comcast is awaiting additional information or premises testing from the Customer. The length of Service Interruptions for separately occurring Service Interruptions will not be aggregated for purposes of determining Availability Credit allowances. For purposes of calculating the Service credit percentage in the following tables, only the MRC of the impacted wavelength circuit shall apply. To qualify, Customer must request the Availability Credit from Comcast within thirty (30) days of the beginning of the Service Interruption. Comcast shall not incur any Liability, including availability credit, for any failure of the Services caused by force majeure events, Planned Service Interruptions, Customer actions, omission or equipment, or any other items set forth in the "Exceptions to Credit Allowances" Section 4.3.15.B following.

(N)

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.14. INTRASTATE WAVELENGTH SERVICE LEVEL AGREEMENTS (SLA) (CONT'D)

B. SLA for Unprotected and Protected Options

TABLE 1: SLA for Unprotected Circuits

Availability	Length of Service Interruption	Service Credit (Based on MRC of only the impacted wavelength circuit)
>= 99.44%	Less than 4 hours	No Credit
>= 98.89% < 99.44%	At least 4 hours but less than 8 hours	10% of the MRC
>= 98.33% < 98.89%	At least 8 hours but less than 12 hours	25% of the MRC
< 98.33%	At least 12 hours or greater	50% of the MRC

TABLE 2: SLA for Protected Circuits*

Availability	Length of Service Interruption	Service Credit (Based on MRC of only the impacted wavelength circuit)
> 99.99%	Less than 4 minutes 19 seconds	No Credit
>= 99.86% < 99.99%	At least 4 minutes 20 seconds but less than 1 hour	10% of the MRC
>= 98.61% < 99.85%	At least 1 hour but less than 10 hours	25% of the MRC
< 98.61%	At least 10 hours or greater	50% of the MRC

*Availability Credits on protected circuits are available only to the extent both Fiber Paths for such Protected Circuit simultaneously sustain a Service Interruption. For clarity and avoidance of doubt, if either Fiber Path for a Protected Circuit is Available, the entire Protected Circuit shall be considered Available for purposes of calculating Availability.

SEPARATELY OCCURRING SERVICE INTERRUPTIONS ARE NOT AGGREGATED FOR THE PURPOSES OF DETERMINING CREDIT ALLOWANCES.

(N)

(N)

ISSUED: NOVEMBER 7, 2023

EFFECTIVE: NOVEMBER 12, 2023

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.15. EXCEPTIONS AND TERMS APPLICABLE TO ALL SLAS

A. Remedy Processes

All claims and rights arising under this Service Level Agreement must be exercised by Customer in writing within the time period set forth in Section 4.3.14.A., preceding. The Customer must submit the following information to the Customer's Comcast account representative with any and all claims for credit allowances: (a) Organization name; (b) Customer account number; and (c) basis of credit allowance claim (including date and time, if applicable). Comcast will acknowledge and review all claims promptly and will inform the Customer by electronic mail or other correspondence whether a credit allowance will be issued or the claim rejected, with the reasons specified for the rejection.

B. Exceptions to Credit Allowances

Comcast's failure to meet either of the SLAs set forth in 4.3.14 shall not qualify for the remedies set forth herein if such failure is related to, associated with, or caused by: Planned Service Interruptions or other scheduled maintenance events; Customer actions or inactions; Customer-provided power or equipment; any third party not contracted through Comcast, including, without limitation, Customer's users, third-party network providers, any power, equipment or services provided by third parties; or an event of force majeure as defined in the Agreement

C. Other Limitations

The total credit allowance per calendar month under Section 4.3.14 is capped at 50% of that month's MRC for the impacted portions of the Service. In addition, the remedies set forth in this Service Level Agreement shall be Customer's sole and exclusive remedies for any Service Interruption, outage, unavailability, delay, or other degradation, or any Comcast failure to meet the service objectives.

(N)

(N)

4. SPECIAL ACCESS SERVICE

4.3. BUSINESS WAVELENGTH SERVICES (CONT'D)

4.3.16. RATES AND CHARGES

Comcast may enter into term agreements with prices that may vary subject to the availability of promotional offers and/or the Customer's choice of term, bandwidth, and associated Special Construction or related charges. Special Construction charges shall be applied on an individual case basis as described in Section 4.3.4 subject to the terms, conditions, and limitations set forth in Section 5.3, following, for Special Assemblies and Individual Case Basis Arrangements. The minimum term for Business Wavelength Service is thirty-six (36) months.

Business Wavelength Service is offered in 10G and 100G Bandwidths in Protected and Unprotected configurations. Ports are available in 10G and 100G and are priced per port, two ports per circuit.

Comcast Business Wavelength Services Pricing

Charge Type	Bandwidth	Protection	Term (months)	MRC	NRC
Service	10G	Unprotected	36	\$7,000.00	\$0.00
Service	10G	Unprotected	60	\$6,300.00	\$0.00
Service	10G	Protected	36	\$14,000.00	\$0.00
Service	10G	Protected	60	\$12,600.00	\$0.00
Service	100G	Unprotected	36	\$15,000.00	\$0.00
Service	100G	Unprotected	60	\$13,500.00	\$0.00
Service	100G	Protected	36	\$30,000.00	\$0.00
Service	100G	Protected	60	\$27,000.00	\$0.00
Port	10G	N/A	36	\$500.00	\$0.00
Port	10G	N/A	60	\$400.00	\$0.00
Port	100G	N/A	36	\$1,000.00	\$0.00
Port	100G	N/A	60	\$800.00	\$0.00

(N)

(N)