TARIFF DISTRIBUTION

FILE PACKAGE NO.: KY-21-0048

DATE:

December 9, 2021

STATE: KENTUCKY

EFFECTIVE DATE: 12/01/2021

TYPE OF DISTRIBUTION: Approved

PURPOSE: Introduce new 12 Month Term and grandfather (obsolete) terms greater than 12 months for SMARTRing Service.

TARIFF SECTION	PAGE NUMBER	PAGE REVISION
Н007	40	0003
Н007	42	0006
H007	45	0005
H007	46	0006
H007	46.0.1	0007
Н007	46.0.2	0004
Н007	46.1	0006
H007	46.1.0.1	0007
Н007	46.2	0005
H007	46.3	0003

KY-21-0048

B7. DIGITAL NETWORK SERVICE

B7.6 Reserved For Future Use B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service

Service Availability

Effective December 1, 2021, neither new nor existing customers will be permitted to purchase new SMARTRing Service ("Service"). In addition, (A) Service Payment Plans greater than 12-months in length will no longer be available; and (B) requests to move, add, change, upgrade, or downgrade existing Service arrangements will not be accepted, with the following exceptions: (1) existing customers will be permitted to modify their existing Service and will be able to add new circuits to their existing Service, but will not be permitted to add new nodes in any locations; (2) any such new circuits will be subject to the customer's existing term payment plan or term agreement for the Service to which they are added. Following the expiration of a customer's existing term agreement, Service will be provided on a month-to-month basis at the applicable Month-to-Month rates until the service is discontinued.

Effective November 30, 2023, unless specified to the contrary in their existing service agreements, existing customers may not renew Payment Plans or term agreements for SMARTRing Service. In addition, no move, add, or change orders of any type will be accepted.

B7.7.1 General

A. SMARTRing service is a dedicated, high capacity, network designed to provide increased reliability and functionality via a self-healing ring topology between multiple customer designated locations and Company Central Offices where facilities can be made available as determined by the Company. This network consists of fiber routed through local, alternate central office, internodal and/or interoffice channel facilities that transmit DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-192 and/or 1000 Mbps channel services simultaneously over primary and alternate paths between customer designated locations and Company Central Offices. This ring topology will continually monitor DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-192 and/or 1000 Mbps service quality, detect any failure within the system, and automatically self-heal around a point of failure to ensure the flow of DS1, DS3, STS-1, OC-3, OC-12, OC-48, OC-12, OC-48, OC-192 and/or 1000 Mbps services between locations within the self-healing network. For locations where a customer requests SMARTRing service and facilities are not available, construction charges will apply as set forth in Section B5 for cases involving extraordinary cost.

Customers may purchase SMARTRing asymmetrical¹ optical interfaces up to the full ring capacity at a customer node or central office node, as shown in the Channel Interface chart following. For example, an OC-12 SMARTRing may have an OC-12 asymmetrical optical interface and an OC-48 SMARTRing may have am OC-48 asymmetrical optical interface. The interface capacity cannot exceed the node capacity of the host SMARTRing.

Note 1: An asymmetrical arrangement allows a customer to input a lower level interface at one node and aggregate onto a higher level optical interface at another Customer Node. For example, the customer had a four node OC-48 SMARTRing with DS3 interfaces at Nodes A, B and C. The customer wants to aggregate multiple DS3s to Node location D, which can be an OC-48 optical interface. The customer can aggregate up to 48 DS3 interfaces to the OC-48 optical interface at Node D via Connecting Facility Assignments (CFA) in the ordering process.

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B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.2 Application of Rates (Cont'd)

- F. SMARTRing service interfaces may be ordered as asymmetrical (i.e., a circuit enters one node at a lower level interface and exits at another node at a higher level interface). For example, a customer may have a service that connects to a ring via an OC-3 interface at a node. That service is then transported around the ring and connects via an OC-12 interface to another of the customer's services. The allowable asymmetrical interface arrangements for the various ring sizes are as shown in Technical Reference TR-73582. The interface rates for asymmetrical arrangements are the same as the rates for symmetrical arrangements except as follows:
 - For lower level DS1 interfaces in an asymmetrical arrangement with an STS-1 interface, the DS1 within an STS-1 Asymmetrical Arrangement interface rate element applies in lieu of the STS-1 interface for the higher level termination.
 - For lower level DS1 interfaces in an asymmetrical arrangement with a DS3 interface, the DS3 (Asymmetrical with DS1) interface rate element applies in lieu of the DS3 interface for the higher level termination of the asymmetrical arrangement
- G. In addition, customers with DS3 interfaces at the Customer Node electing to connect with DS1 services at a Central Office Node, must obtain a 28 DS1 Channel System, and the appropriate number of DS1 Channel Interfaces. The applicable rate elements for this arrangement are a DS3 Interface at the Customer Node and a 28 DS1 Channel System with DS1 Interfaces at the Central Office Node. The SMARTRing service 28 DS1 Channel System does not require a DS3 interface at the Central Office Node. A maximum of 28 DS1 Channel Interfaces can be activated for each 28 DS1 System utilized. Nonrecurring charges apply for each 28 DS1 Channel System. Nonrecurring charges also apply for each DS1 Channel Interface in a 28 DS1 Channel System. The recurring rate applies for each 28 DS1 Channel System and each DS1 Channel Interface in a 28 DS1 Channel System.
- H. In order to accommodate more flexible customer situations, SMARTRing service is available under several payment plans: 12 months, 36 Month Term Payment Plan (24-48 months)¹, 60 Month Term Payment Plan (49-72 months)¹, or 84 Month Term Payment Plan (73-96 months)¹. The 12, 36, 60, and 84 Month Term Payment Plans are provided under conditions specified in the Channel Services Payment Plan, (CSPP), B2.4.9, except as modified following. For all payment plans, the following terms and conditions apply:
 - 1. All rate elements, except Channel Interfaces for a given SMARTRing service, whether initially or subsequently ordered, must be provided under the same payment plan with the same service period and are coterminous upon disconnect of the SMARTRing service. Channel Interfaces may be ordered under payment plans equal to or less than the selected payment period for the given SMARTRing service.
 - 2. The month-to-month rates applicable upon payment plan expiration are subject to Company-initiated changes.
 - 3. A termination liability charge will be applicable if services provided under a CSPP arrangement are disconnected prior to the end of the chosen service period. The applicable charge is equal to the number of months remaining in the rate stabilized service period times fifty percent (50%) of the monthly rates for SMARTRing service which include all Nodes, Local Channels, Alternate Central Office Channels, Internodal Channels and/or Interoffice Channels provided under the CSPP arrangement. For services under the month-to-month payment plan, a termination charge is equal to the number of months remaining in the twelve month minimum times the month-to-month rates in effect for SMARTRing service at the time of termination.
 - 4. When a service period under an existing CSPP arrangement is completed and a customer elects to revert to a month-tomonth payment option, no minimum period is applicable. If the customer does not select a new payment period or does not request discontinuance of service, service will be continued under the terms specified in B2.4.
 - 5. Additions of services or rate elements, for activating spare or unused capacities of a SMARTRing service under a CSPP arrangement, must be activated at the same rates and charges specified under the existing CSPP arrangement. Channel interfaces may be ordered as specified in paragraph 1.
 - 6. Additions of services or rate elements, i.e. new local channels, interoffice channels, etc., other than for activating spare or unused capacities, must be under a new CSPP arrangement at rates and charges as specified in paragraph 1. The new CSPP arrangement must be at least 24 months and must be coterminous with the CSPP arrangement for the existing SMARTRing service.
 - 7. (DELETED)
 - **Note 1:** All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

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KY-21-0048

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service)

		ng Multi-notal Anemae Roue Top	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
1.		al Channel Mileage Rates capacities)	Charge		112010005				0500	(-)
2.	(a) (b) Alte	Per Local Channel Per quarter air mile rnate Central Office Channel Milea	\$500.00 - ge Rates	- \$95.00	- \$83.00	- \$83.00	- \$73.00	- \$68.00	1HVXX 1HVAX	(N)
		Capacities)	6							
	(a)	Alternate C.O. Channel, per channel	500.00	-	-	-	-	-	1HAXX	
3.	(b) Inter	Per quarter air mile roffice Channel Mileage Rates	-	685.00	280.00	280.00	175.00	140.00	1HAAX	(N)
	(a)	Fixed, OC-3 capacity	195.00	50.00	36.00	36.00	32.00	27.00	1HXFX	(N)
	(b) (c)	Fixed, OC-12, capacity (DELETED)	195.00	145.00	130.00	130.00	115.00	105.00	1HXFX	(N)
	(d)	Fixed, OC-48 and OC-48+ capacity	195.00	340.00	270.00	270.00	260.00	250.00	1HXFX	(N)
	(e)	Fixed, OC-192 and OC-192+ capacity	240.00	770.00	635.00	635.00	610.00	590.00	1HXFX	(N)
	(f)	Per quarter air mile (OC-3 capacity)	-	45.00	32.00	32.00	23.00	18.00	1HXAX	(N)
	(g)	Per quarter air mile (OC-12 capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)
	(h)	(DELETED)	-							
	(i)	Per quarter air mile (OC-48 and OC-48+ capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)
	(j)	Per quarter air mile (OC-192 and OC-192+ capacity)	-	50.00	36.00	36.00	30.00	23.00	1HXAX	(N)
4.	Inter	rnodal Channel Mileage Rates (All	Capacities)							
	(a)	Per Internodal Channel, Same Wire Center area	\$500.00	-	-	-	-	-	1HNXX	
	(b)	Per quarter air mile, Same Wire Center	-	\$1,400.00	\$535.00	\$535.00	\$415.00	\$345.00	1HNWX	(N)
	(c)	Per Internodal Channel, Same Office Park/Campus Environmen in Contiguous Serving Wire Center areas	500.00 t	-	-	-		-	1HNZX	
	(d)	Per quarter air mile, same Office Park/Campus Environment in contiguous Serving Wire Center areas	-	1,600.00	650.00	650.00	465.00	390.00	1HNCX	(N)

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for (N) new or renewing subscribers.

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EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

			Nonrecurring	Month To	12	24 to 48 ¹	49 to 72 ¹	73 to 96 ¹		(C)
			Charge	Month	Months		Months	Months	USOC	(C)
5.	Cust	omer Node (per Node)	8							(M)
	(a)	OC-3 capacity	\$435.00	\$2,200.00	\$990.00	\$990.00	\$900.00	\$810.00	SHNC3	(M)(N)
	(b)	(DELETED)								(M)
	(c)	OC-12 capacity	465.00	3,400.00	1,980.00	1,980.00	1,800.00	1,575.00	SHNC1	(M)(N)
	(d)	OC-48 capacity	465.00	5,220.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN8	(M)(N)
	(e)	OC-48+ capacity	465.00	5,850.00	4,410.00	4,410.00	4,050.00	3,510.00	SHNN9	(M)(N)
	(f)	OC-192 capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN6	(M)(N)
	(g)	OC-192+ capacity	540.00	25,000.00	9,375.00	9,375.00	8,250.00	7,300.00	SHNN2	(M)(N)
6.		omer Channel Interface (per Node))							
	(a)	Per DS1	165.00	35.00	30.00	30.00	25.00	20.00	SHNBB	(N)
	(b)	Per DS3	130.00	170.00	135.00	135.00	130.00	125.00	SHNZT	(N)
	(c)	Per STS-1	190.00	220.00	170.00	170.00	150.00	140.00	SHN13	(N)
	(d)	Per OC-3, 2 fiber	190.00	255.00	190.00	190.00	170.00	160.00	SHN1D	(N)
	(e)	Per OC-3, 4 fiber	190.00	515.00	380.00	380.00	340.00	320.00	SHN15	(N)
	(f)	Per OC-12, 2 fiber	340.00	745.00	515.00	515.00	475.00	440.00	SHN1F	(N)
	(g)	Per OC-12, 4 fiber	340.00	1,490.00	1,030.00	1,030.00	950.00	880.00	SHN19	(N)
	(h)	Per OC-48, 2 fiber	420.00	1,600.00	1,325.00	1,325.00	1,215.00	1,050.00	SHN1A	(N)
	(i)	Per OC-48, 4 fiber	420.00	3,200.00	2,650.00	2,650.00	2,430.00	2,100.00	SHN1B	(N)
	(j)	Per OC-192, 2 fiber	1,600.00	7,500.00	4,800.00	4,800.00	3,300.00	2,850.00	SHNE1	(N)
	(k)	Per OC-192, 4 fiber	1,600.00	15,000.00	9,600.00	9,600.00	6,600.00	5,700.00	SHNE2	(N)
	(l)	Per DS1 within an STS-1	330.00	25.00	22.00	22.00	20.00	18.00	SHNBS	(N)
		Asymmetrical Arrangement								
	(m)	Per DS3	360.00	550.00	450.00	450.00	400.00	350.00	SHN1T	(N)
		(Asymmetrical with DS1)								
	(n)	Per 10 Mbps	450.00	500.00	175.00	175.00	155.00	140.00	SHN1M	(N)
	(0)	Per 100 Mbps (3 STS-1) -	450.00	540.00	210.00	210.00	190.00	170.00	SHN1N	(N)
		Electrical								
	(p)	Per 100 Mbps (3 STS-1) –	450.00	540.00	210.00	210.00	190.00	170.00	SHN3N	(N)
		Optical 1310 nm Single-mode								

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

Seventh Revised Page 46.0.1

KY-21-0048

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

		Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
6.	Customer Channel Interface (per Node) (Con								
(q)	Per Fractional 1000 Mbps								
	50 Mbps 850 nm Multi-mode – 1 STS-1	\$450.00	\$520.00	\$190.00	\$190.00	\$170.00	\$150.00	SHN10	(N)
- 4	50 Mbps 1310 nm Single-mode – 1 STS-1	450.00	520.00	190.00	190.00	170.00	150.00	SHN3O	(N)
	150 Mbps 850 nm Multi-mode – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN1P	(N)
-]	150 Mbps 1310 nm Single-mode – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3P	(N)
	150 Mbps 850 nm Multi-mode – 3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3J	(N)
- 1	150 Mbps 1310 nm Single-mode – 3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHN3L	(N)
- 3	300 Mbps 850 nm Multi-mode – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN1R	(N)
- 3	300 Mbps 1310 nm Single-mode – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3R	(N)
- 3	300 Mbps 850 nm Multi-mode – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3M	(N)
- 3	300 Mbps 1310 nm Single-mode – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHN3Q	(N)
_ 4	450 Mbps 850 nm Multi-mode – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN1U	(N)
_ 4	450 Mbps 1310 nm Single-mode – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN3U	(N)
_ 4	450 Mbps 850 nm Multi-mode – 9 STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN3T	(N)
_ 4	450 Mbps 1310 nm Single-mode – 9 STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHN39	(N)
- (600 Mbps 850 nm Multi-mode – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHN1V	(N)
- (600 Mbps 1310 nm Single-mode – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHN3V	(N)
- (600 Mbps 850 nm Multi-mode – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNBY	(N)
- 6	500 Mbps 1310 nm Single-mode – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNBZ	(N)
-]	1000 Mbps 850 nm Multi-mode – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN1K	(N)
-]	1000 Mbps 1310 nm Single-mode – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN3K	(N)
-]	1000 Mbps 850 nm Multi-mode – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN3G	(N)
- 1	1000 Mbps 1310 nm Single-mode – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHN3H	(N)
(r)	Per Flex DS1	360.00	45.00	34.00	34.00	27.00	25.00	SHN1Q	(N)
(s)	Per 100 Mbps (1 STS-1) Metro Ethernet	800.00	500.00	175.00	175.00	155.00	140.00	SHN1J	(N)
	Backbone								
(t)	Per 100 Mbps (3 STS-1) Metro Ethernet	800.00	540.00	210.00	210.00	190.00	170.00	SHN33	(N)
	Backbone						10 0 0 -		
(u)	Per 1000 Mbps Metro Ethernet Backbone	850.00	740.00	520.00	520.00	475.00	425.00	SHN34	(N)
									(M)

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

Fourth Revised Page 46.0.2

KY-21-0048

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

Self		ig multi nodul miernale Route To	Nonrecurring	Month To	12	24 to 48 ¹	49 to 72 ¹	73 to 96 ¹		(C)
			Charge	Month	Months		Months	Months	USOC	(C)
6.	Cust	omer Channel Interface (per Node)) (Cont'd)							(M)
	(v)	Per Fractional 1000 Mbps								(M)
	()	Metro Ethernet Backbone								(M)
		- 150 Mbps (3 STS-1)	\$850.00	\$560.00	\$230.00	\$230.00	\$210.00	\$190.00	SHN35	(M)(N)
		- 300 Mbps (6 STS-1)	850.00	600.00	300.00	300.00	280.00	260.00	SHN36	(M)(N)
		- 450 Mbps (9 STS-1)	850.00	640.00	340.00	340.00	310.00	290.00	SHN37	(M)(N)
		- 600 Mbps (12 STS-1)	850.00	700.00	380.00	380.00	340.00	320.00	SHN38	(M)(N)
	(w)	Per Fibre Connection (FICON)	500.00	810.00	570.00	570.00	520.00	470.00	SHNBC	(M)(N)
		(21 STS-1)								(M)
	(x)	Per Fibre Connection (FICON)	500.00	810.00	570.00	570.00	520.00	470.00	SHNBD	(M)(N)
		(24c STS-1)								(M)
	(y)	Per Fibre Connection (FICON)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNBE	(M)(N)
		Express								(M)
		(48 STS-1)								(M)
	(z)	Per Fibre Connection (FICON)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNBF	
		Express								(M)
		(48c STS-1)						100.00		(M)
	(aa)	Per Fibre Channel 100	500.00	830.00	580.00	580.00	530.00	480.00	SHNBG	
		(21 STS-1)	-00.00	000 00		-00.00		400.00	~~~~~	(M)
	(ab)	Per Fibre Channel 100	500.00	830.00	580.00	580.00	530.00	480.00	SHNBH	
	<i>(</i>)	(24c STS-1)	520.00	1 2 (0 0 0	1 1 2 0 0 0	1 1 20 00	1 0 2 0 0 0	000.00	CINDI	(M)
	(ac)	Per Fibre Channel 200	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNBJ	
	(1)	(48 STS-1)	520.00	1 260 00	1 120 00	1 1 20 00	1 0 20 00	800.00	CUNDV	(M)
	(ad)	Per Fibre Channel 200	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNBK	
7.	Cont	(48c STS-1) ral Office Node (per Node)								(M)
		•	* * * * * * *	*1 100 00	\$6666	\$000.00	\$000 00	\$010.00		
(a)		-3 capacity	\$405.00	\$1.400.00	\$990.00	\$990.00	\$900.00	\$810.00	SHNH3	(N)
(b)	· ·	ELETE)	455.00	a <00.00	1 000 00	1 000 00	1 000 00	1 00	CIDUIA	a b
(c)		-12 capacity	455.00	2,600.00	1,980.00	1,980.00	1,800.00	1,575.00	SHNH1	(N)
(d)		-48 capacity	455.00 455.00	4,860.00	4,110.00	4,110.00	4,050.00	3,510.00	SHNH8 SHNH9	(N)
(e)		-48+ capacity		5,490.00	4,110.00	4,110.00	4,050.00	3,510.00		(N)
(f)		-192 capacity	540.00 540.00	25,000.00	9,375.00 0.375.00	9,375.00	8,250.00	7,300.00	SHNH7	(N)
(g)		-192+ capacity 2 Shared Node Interconnection	540.00 550.00	25,000.00 980.00	9,375.00 690.00	9,375.00 690.00	8,250.00 630.00	7,300.00 570.00	SHNH6 SHNHA	(N)
(h)		-3 Shared Node Interconnection	550.00 550.00		690.00 1,390.00	690.00 1,390.00		570.00 1,100.00	SHNHA SHNHB	(N)
(i)		-12 Shared Node Interconnection	550.00 550.00	1,820.00 3,400.00	2,880.00	1,390.00 2,880.00	1,260.00 2,840.00	2,460.00	SHNHB	(N) (N)
(j)		 -48 Shared Node Interconnection -48+ Shared Node Interconnection 		3,400.00 3,840.00	2,880.00	2,880.00	2,840.00	2,460.00	SHNHD	(N) (N)
(k)	UC	-40+ Shared node interconnection	550.00	3,040.00	2,000.00	2,000.00	2,040.00	2,400.00	SILUID	(14)

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

EFFECTIVE: December 1, 2021

KY-21-0048

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

- A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)
 - 8. Central Office Channel Interface (per Central Office Node)

		N T •	Month	12	24 to	49 to	73 to		
		Nonrecurring	To	12 M	48 ¹	72 ¹	96 ¹	USOC	(C)
<i>(</i>)	D D(1	Charge	Month	Months	Months	Months	Months	USOC	(C)
(a)	Per DS1	\$120.00	\$35.00	\$30.00	\$30.00	\$25.00	\$20.00	SHNCB	(N)
(b)	Per DS3	185.00	115.00	85.00	85.00	80.00	75.00	SHNYT	(N)
(c)	Per STS-1	190.00	150.00	105.00	105.00	100.00	90.00	SHNO2	(N)
(d)	Per OC-3, 2 fiber	340.00	255.00	190.00	190.00	170.00	160.00	SHNCD	(N)
(e)	Per OC-3, 4 fiber	340.00	515.00	380.00	380.00	340.00	320.00	SHNO4	(N)
(f)	Per OC-12, 2 fiber	535.00	745.00	515.00	515.00	475.00	440.00	SHNCF	(N)
(g)	Per OC-12, 4 fiber	535.00	1,490.00	1,030.00	1,030.00	950.00	880.00	SHNC9	(N)
(h)	Per OC-48, 2 fiber	650.00	1,600.00	1,325.00	1,325.00	1,215.00	1,050.00	SHNCJ	(N)
(i)	Per OC-48, 4 fiber	650.00	3,200.00	2,650.00	2,650.00	2,430.00	2,100.00	SHNCK	(N)
(j)	Per OC-192, 2 fiber	1,600.00	7,500.00	4,800.00	4,800.00	3,300.00	2,850.00	SHNE3	(N)
(k)	Per OC-192, 4 fiber	1,600.00	15,000.00	9,600.00	9,600.00	6,600.00	5,700.00	SHNE4	(N)
(1)	Per 28 DS1 Channel System (DS3)	185.00	650.00	550.00	550.00	500.00	450.00	SHNW8	(N)
(m)	Per 28 DS1 Channel System (STS-1)	195.00	750.00	550.00	550.00	500.00	450.00	SHNCS	(N)
(n)	Per DS1 on 28 DS1 Channel System	155.00	12.00	8.00	8.00	7.00	6.00	SHNCA	(N)
	(DS3)								
(o)	Per DS1 on 28 DS1 Channel System	155.00	40.00	35.00	35.00	30.00	25.00	SHNCG	(N)
	(STS-1)								
(p)	Per DS1 within an STS-1	360.00	25.00	22.00	22.00	20.00	18.00	SHNCH	(N)
47	Asymmetrical Arrangement								
(q)	Per DS3	400.00	550.00	450.00	450.00	400.00	350.00	SHNCT	(N)
. 1	(Asymmetrical with DS1)								
(r)	Per 10 Mbps	450.00	500.00	175.00	175.00	155.00	140.00	SHNCM	(N)
(s)	Per 100 Mbps (3 STS-1) - Electrical	450.00	540.00	210.00	210.00	190.00	170.00	SHNCN	(N)
		550.00	540.00	210.00	210.00	190.00	170.00	SHNDU	
(t)	Per 100 Mbps (3 STS-1) - Optical	530.00	340.00	210.00	210.00	190.00	170.00	SHINDU	(N)

Note 1:

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Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

Seventh Revised Page 46.1.0.1

(N)

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)

8. Central Office Channel Interface (per Node) (Cont'd)

(u)	Per Fractional 1000 Mbps	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
(4)	- 50 Mbps – 1 STS-1	\$450.00	\$520.00	\$190.00	\$190.00	\$170.00	\$150.00	SHNCO	(N)
	- 150 Mbps – 3c STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNCP	(N)
	- 150 Mbps –3 STS-1	450.00	560.00	230.00	230.00	210.00	190.00	SHNDV	(N)
	- 300 Mbps – 6c STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNCR	(N)
	- 300 Mbps – 6 STS-1	450.00	600.00	300.00	300.00	280.00	260.00	SHNDX	(N)
	- 450 Mbps – 9c STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNCU	(N)
	- 450 Mbps – 9 STS-1	450.00	640.00	340.00	340.00	310.00	290.00	SHNDY	(N)
	- 600 Mbps – 12c STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNCV	(N)
	- 600 Mbps – 12 STS-1	450.00	700.00	380.00	380.00	340.00	320.00	SHNDZ	(N)
	- 1000 Mbps – 21 STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNCW	(N)
	- 1000 Mbps – 24c STS-1	400.00	740.00	520.00	520.00	475.00	425.00	SHNDW	(N)
(v)	Per Flex DS1	250.00	40.00	30.00	30.00	25.00	20.00	SHNCQ	(N)
(w)	Per 100 Mbps (1 STS-1) Metro Ethernet Backbone	800.00	500.00	175.00	175.00	155.00	140.00	SHNOJ	(N)
(x)	Per 100 Mbps (3 STS-1) Metro Ethernet Backbone	800.00	540.00	210.00	210.00	190.00	170.00	SHNCX	(N)
(y)	Per 1000 Mbps Metro Ethernet Backbone	850.00	740.00	520.00	520.00	475.00	425.00	SHNC5	(N)
(z)	Per Fractional 1000 Mbps Metro Ethernet Backbone								
	- 150 Mbps (3 STS-1)	850.00	560.00	230.00	230.00	210.00	190.00	SHND5	(N)
	- 300 Mbps (6 STS-1)	850.00	600.00	300.00	300.00	280.00	260.00	SHND6	(N)
	- 450 Mbps (9 STS-1)	850.00	640.00	340.00	340.00	310.00	290.00	SHND7	(N)
	- 600 Mbps (12 STS-1)	850.00	700.00	380.00	380.00	340.00	320.00	SHND8	(N)
(aa)	Per Fibre Connection (FICON) (21 STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNDB	(N)
(ab)	Per Fibre Connection (FICON) (24c STS-1)	500.00	810.00	570.00	570.00	520.00	470.00	SHNDC	(N)
(ac)	Per Fibre Connection (FICON) Express (48 STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNDD	(N)
(ad)	Per Fibre Connection (FICON) Express (48c STS-1)	520.00	1,280.00	1,060.00	1,060.00	970.00	840.00	SHNDE	(N)
(ae)	Per Fibre Channel 100 (21 STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNDF	(N)
(af)	Per Fibre Channel 100 (24c STS-1)	500.00	830.00	580.00	580.00	530.00	480.00	SHNDG	(N)
(ag)	Per Fibre Channel 200 (48 STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNDH	(N)
(ah)	Per Fibre Channel 200 (48c STS-1)	520.00	1,360.00	1,130.00	1,130.00	1,030.00	890.00	SHNDJ	(N)

Note 1: All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

Effective December 1, 2021, Payment Plans greater than 12 Months are no longer available for new or renewing subscribers.

Fifth Revised Page 46.2

(N)

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

- A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)
 - 9. Channel Interface Capacity Reallocation

10.	(a) Cor	Per Node, Per occurrence acatenation Rearrangement Charge						nrecurring Charge \$395.00	USOC SHRBC	
11.	(a) SM	Per OC-3, OC-12 or OC-48 optical concatenated or non-concatenated installation of the circuit ARTRing Service Rearrangement	Ų		Monthly Rate -		С	nrecurring harge Subsequent \$500.00	USOC NRCCN	
	(a) (b)	Surveillance, Per Node, per SMAR Reconfiguration, Per STS-1 group.	0	Month To	- - 12	24 to 48 ²	- 49 to 72 ²	255.00 365.00 73 to 96 ²	SHNRR SHNR1	(C)
10	D		Charge	Month	Months		Months		USOC	(C)
12.		ic Shared Ethernet LAN Access Link								
	(a)	Customer Premises Access Link Con		#=20.00	¢2=0.00	\$250.00	#220.00	\$300.00	CUDITC	a b
		 Per 10 Mbps Basic Shared Ethernet LAN Access Link - Electrical¹ 	\$2,050.00	\$730.00	\$250.00	\$250.00	\$220.00	\$200.00	SHN1G	(N)
		(2) Per 100 Mbps Basic Shared Ethernet LAN Access Link - Electrical ¹	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN1H	(N)
		 (3) Per 100 Mbps Basic Shared Ethernet LAN Access Link – Optical 1310 nm Single-mode ¹ 	2,050.00	780.00	300.00	300.00	280.00	250.00	SHN11	(N)
		(4) Per Fractional 1000 Mbps Basic	Shared Ethernet	LAN Acces	s Link – Opti	cal ¹				
		- 50 Mbps 850 nm Multi-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN1S	(N)
		- 50 Mbps 1310 nm Single-mode	2,050.00	750.00	280.00	280.00	250.00	240.00	SHN3S	(N)
		- 150 Mbps 850 nm Multi-mode	2,050.00	810.00	330.00	330.00	300.00	280.00	SHN1W	(N)
		- 150 Mbps 1310 nm Single-mode	2,050.00 2,050.00	810.00 870.00	330.00 440.00	330.00 440.00	300.00 410.00	280.00 380.00	SHN3W SHN1X	(N) (N)
		- 300 Mbps 850 nm Multi-mode- 300 Mbps 1310 nm Single-mode	2,050.00	870.00	440.00 440.00	440.00 440.00	410.00	380.00	SHN1X SHN3X	(N)
		- 450 Mbps 850 nm Multi-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN3X SHN1Y	(N)
		- 450 Mbps 1310 nm Single-mode	2,050.00	930.00	490.00	490.00	450.00	420.00	SHN3Y	(N)
		- 600 Mbps 850 nm Multi-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN1Z	(N)
		- 600 Mbps 1310 nm Single-mode	2,050.00	1,020.00	550.00	550.00	490.00	460.00	SHN3Z	(N)
		- 1000 Mbps 850 nm Multi-mode	2,050.00	1,120.00	650.00	650.00	590.00	560.00	SHNJA	(N)
		- 1000 Mbps 1310 nm Single-mode	2,050.00	1,120.00	650.00	650.00	590.00	560.00	SHNKA	(N)

Note 1: Basic Shared Ethernet LAN Access Link interfaces are available based on equipment capability.

Note 2: All term plans for SMARTRing Service which are established, renewed or extended after December 13, 2013, for term lengths which are scheduled to expire at any time after February 1, 2019, will instead expire on February 1, 2019. All such services provided on or after February 1, 2019 will be provided on a Month-to-Month (MTM) basis at the applicable, then-current MTM rates. Notwithstanding anything to the contrary in the previous two sentences, this footnote does not apply to any term plans established after July 15, 2017.

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KY-21-0048

EFFECTIVE: December 1, 2021

B7. DIGITAL NETWORK SERVICE

B7.7 Self-Healing Multi-Nodal Alternate Route Topology Ring (SMARTRing) Service (Cont'd)

B7.7.4 Rates and Charges (Cont'd)

- A. Self-healing Multi-nodal Alternate Route Topology Ring (SMARTRing Service) (Cont'd)
 - 12. Basic Shared Ethernet LAN Access Link (Cont'd)
 - (b) Metro Ethernet Access Link Connection

	Nonrecurring Charge	Month To Month	12 Months	24 to 48 ¹ Months	49 to 72 ¹ Months	73 to 96 ¹ Months	USOC	(C) (C)
 Per Fractional 1000 Mbps Access Link – Metro Ethernet Customer Premises 	Churge		111011111	1.101111			0000	
- 150 Mbps 850 nm Multi-mode	\$2,050.00	\$980.00	\$800.00	\$800.00	\$500.00	\$400.00	SHNMA	(N)
- 150 Mbps 1310 nm Single-mode	2,050.00	980.00	800.00	800.00	500.00	400.00	SHNSA	(N)
- 300 Mbps 850 nm Multi-mode	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNMB	(N)
- 300 Mbps 1310 nm Single-mode	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNSB	(N)
- 450 Mbps 850 nm Multi-mode	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNMC	(N)
- 450 Mbps 1310 nm Single-mode	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNSC	(N)
- 600 Mbps 850 nm Multi-mode	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNMD	(N)
- 600 Mbps 1310 nm Single-mode	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNSD	(N)
- 1000 Mbps 850 nm Multi-mode	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNME	(N)
- 1000 Mbps 1310 nm Single-mode (2) Per Fractional 1000 Mbps	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNSE	(N)
Access Link – Metro Ethernet								
Central Office - 150 Mbps	2,050.00	980.00	800.00	800.00	500.00	400.00	SHNOA	(N)
- 300 Mbps	2,050.00	1,220.00	930.00	930.00	580.00	540.00	SHNOB	(N)
- 450 Mbps	2,050.00	1,310.00	990.00	990.00	630.00	590.00	SHNOC	(N)
- 600 Mbps	2,050.00	1,430.00	1,075.00	1,075.00	690.00	650.00	SHNOD	(N)
- 1000 Mbps	2,050.00	1,570.00	1,200.00	1,200.00	830.00	790.00	SHNOE	(N)
13. Virtual Packet Ring Rearrangement Cha	rge		Monthly	No	nrecurrin	r Chargo		

		Monthly	Nonrecur	ring Charge	
		Rate	Initial	Subsequent	USOC
(a)	Per service order associated with a rearrangement to	-	-	\$500.00	SHNRP
	increase or decrease a virtual packet ring subsequent to				

the initial setup of the virtual packet ring

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