

Range Telephone Cooperative, Inc. - Wyoming 5 Year Service Quality Improvement Plan

Introduction

Range Telephone Cooperative, Inc. is an ETC serving 2 study areas, one in Montana and one in Wyoming. The Wyoming study area is 3,434 square miles in northeastern Wyoming served by 6 wire centers with 1,952 current access lines. Range has the following wire centers:

<u>Wire Center</u>	<u>Sq. Miles</u>	<u>Access Lines</u>
Alzada	151	25
Arvada	1,277	183
Clearmont	693	156
Decker	266	134
SE Sheridan	341	306
Sundance	706	1,148
Total	3,434	1,952

Current USAC Information

During 2013 Range Wyoming received the following amounts in support payments broken down as follows:

High cost loop	596,070
ICLS	874,320
CAF	196,464
Total	1,666,854

This 5 year improvement plan is a section of the Company's 2014 Annual Report. It is in compliance with # 54.313(a)(1) adopted in the FCC USF/ICC Transformation Order (11-161).

Range has developed its improvement plan, concentrating on the delivery and continuation of a robust network which provides, at a minimum, the federally required voice and broadband connectivity as stipulated by regulatory rule.

Range advises that this improvement plan has been carefully crafted, matching measured network deployment, improvement and quality service levels with known financial implications of the Transformation Order upon the Companies cash flows. This would include the Company's ability to borrow needed funds. The uncertainty of such cash flows being received in the outer years as a result of current and potential regulatory action on rate of return carriers has resulted in the Company taking a balanced yet realistic approach.

Range will reevaluate this plan on an annual basis. Action, however, may also be taken abruptly on the presented plan for both current and outer years in the event of evolving regulatory conditions, changes in technology or vendor support, or available financing. All adjustments to the improvement plan in this document will be reflected and explained in subsequent annual reports.

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5 Year Service Quality Improvement Plan by Year

For the next 5 years Range will deploy Broadband Loop Carrier (BLC) equipment to support increased bandwidth to its end users and to collapse its legacy circuit switched voice network into its next generation packet switched voice network. The majority of this Plan entails replacing traditional copper T-carrier facilities with Fiber to The Node (FTTN) infrastructure in support of the new BLC being deployed. In an effort to minimize retained copper loop lengths, additional BLC nodes will be designed for installation either during initial placement of the FTTN facilities or in a subsequent Plan year. Fixed wireless will also be considered where such technology may be more economically feasible to meet the same objective. As this Plan is implemented all subscribers falling within the definition of 'reasonable request' will have access to broadband service at speeds defined by the FCC.

Plan Year 2015

SE SHERIDAN EXCHANGE - WYOMING

HARDESTY FIBER TO THE NODE CONSTRUCTION

The Hardesty Fiber Project includes the placement of approximately 6.18 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Hardesty Electronic Serving Area Interface (ESAI) connects sixteen (16) premises in a nineteen (19) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

SE SHERIDAN EXCHANGE - WYOMING

CAT CREEK FIBER TO THE NODE CONSTRUCTION

The Cat Creek Fiber Project includes new placement of approximately 9.32 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Cat Creek Electronic Serving Area Interface (ESAI) connects twenty one (21) premises in a twenty eight (28) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

SE SHERIDAN EXCHANGE - WYOMING

CENTRAL OFFICE AND ACCESS CARRIER SITE UPGRADES

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Southeast Sheridan Central Office and subtending remote electronics sites. This project will not only support increased broadband capability within the Southeast Sheridan exchange but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed

Metaswitch packet switch in 2015. In addition to the new BLC electronics, wireless point-to-point transport facilities will be placed to upgrade the copper T-Carrier span lines to several remote electronic sites. Existing last mile copper facilities will be retained for the delivery of voice and broadband services to one hundred and seventy six (176) connected premises in a geographic area covering over two hundred and three hundred and forty one (341) square miles. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

DECKER EXCHANGE – WYOMING

ASH CREEK FIBER TO THE NODE CONSTRUCTION

The Wyoming section of the Decker to Ash Creek Fiber Project includes new placement of approximately 11.57 route miles of fiber optic infrastructure in Wyoming. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Ash Creek Electronic Serving Area Interface (ESAI) is located in Montana but connects fourteen (14) Wyoming premises in a thirty (30) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-(TBA) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

DECKER EXCHANGE – WYOMING

CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Decker, MT Central Office and subtending remote electronics sites to serve Wyoming connected premises. This project will not only support increased broadband capability within the Decker exchange area but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Decker Central Office serves ninety three (93) Wyoming premises in a two hundred and sixty six (266) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

ARVADA EXCHANGE - WYOMING

NORTH POWDER RIVER FIBER TO THE NODE CONSTRUCTION

This project includes new placement of approximately 17.4 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is

planned for this project. The North Powder River Electronic Serving Area Interface (ESAI) connects nine (9) premises in a seventeen (17) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

ARVADA EXCHANGE – WYOMING

CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Arvada, WY Central Office and subtending remote electronics sites. This project will not only support increased broadband capability within the Arvada exchange area but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Arvada Central Office serves ninety four (94) connected premises in a one thousand two hundred and seventy seven (1,277) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

ARVADA EXCHANGE – WYOMING

ARVADA CENTRAL OFFICE GENERATOR UPGRADE

The project includes installation of a new emergency standby power generator to assure reliable delivery of broadband and voice services in the event of a commercial power failure. The existing generator at this site is near end of life. This site serves ninety four (94) connected premises in a one thousand two hundred and seventy seven (1,277) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2015 calendar year.

CLEARMONT EXCHANGE – WYOMING

CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Clearmont, WY Central Office and subtending remote electronics sites. This project will not only support increased broadband capability within the Clearmont exchange area but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Clearmont Central Office serves eighty nine (89) connected premises in a six hundred and thirty eight (638) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**CLEARMONT EXCHANGE – WYOMING
CRAZY WOMAN 1 GENERATOR ADDITION**

The project includes installation of a new emergency standby power generator to assure reliable delivery of broadband and voice services in the event of a commercial power failure. This site serves five (5) connected premises in a twenty nine (29) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2015 calendar year.

**SUNDANCE EXCHANGE - WYOMING
HIGHWAY 116 FIBER TO THE NODE CONSTRUCTION**

The Sundance Highway 116 Project includes new placement of approximately 5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Highway 116 Electronic Serving Area Interface (ESAI) connects twelve (12) premises in an eighteen (18) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

Plan Year 2016

**SUNDANCE EXCHANGE - WYOMING
CARLILE JUNCTION FIBER TO THE PREMISE CONSTRUCTION**

The Carlile Junction FTTP project includes the new placement of approximately 19 route miles of fiber optic middle mile and access infrastructure. Current broadband speeds average 10Mbps downstream and 1Mbps upstream. The new FTTP access infrastructure will support broadband speeds averaging 50Mbps downstream and 20Mbps upstream. Direct buried cable placement method is planned for this project. The Carlile Junction Electronic Serving Area Interface (ESAI) connects thirty eight (38) premises in a twenty six (26) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

Plan Year 2017

**ARVADA EXCHANGE - WYOMING:
WILD HORSE SOUTH FIBER TO THE NODE CONSTRUCTION**

The Wild Horse South FTTP Project includes new placement of approximately 7 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC

electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Wild Horse South Electronic Serving Area Interface (ESAI) will connect eleven (11) premises in a twenty four (24) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2017 calendar year.

DECKER EXCHANGE - WYOMING

BEATTY GULCH FIBER TO THE NODE CONSTRUCTION

The Beatty Gulch FTTN Project includes new placement of approximately 3 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 1Mbps downstream and 128Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Beatty Gulch Electronic Serving Area Interface (ESAI) will connect eleven (6) premises in an eighteen (18) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2017 calendar year.

SE SHERIDAN EXCHANGE - WYOMING

MURPHY GULCH FIBER TO THE NODE CONSTRUCTION

The Murphy Gulch FTTN Project includes new placement of approximately 7 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 1Mbps downstream and 256Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Wild Horse South Electronic Serving Area Interface (ESAI) will connect sixteen (16) premises in a twenty (20) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2017 calendar year.

SUNDANCE EXCHANGE - WYOMING

WARREN PEAK GENERATOR INSTALLATION

The project includes installation of a new emergency standby power generator to assure reliable delivery of mission critical voice and data services in the event of a commercial power failure. This site serves a Federal Aviation Administration (FAA) air traffic control peripheral and several wireless radio communications systems for both private and local government use. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2017 calendar year.

SUNDANCE EXCHANGE - WYOMING

SUNDANCE MOUNTAIN GENERATOR INSTALLATION

The project includes installation of a new emergency standby power generator to assure reliable delivery of voice and data services in the event of a commercial power failure. This site serves several wireless voice and data communications and Internet service providers as well as wireless radio communications systems for both private and local government use. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2017 calendar year.

SUNDANCE EXCHANGE - WYOMING

SUNDANCE EAST GENERATOR INSTALLATION

The project includes installation of a new emergency standby power generator to assure reliable delivery of voice and data services in the event of a commercial power failure. The Sundance East Electronic Serving Area Interface (ESAI) connects nineteen (19) premises in a fourteen (14) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2017 calendar year.

Plan Year 2018

SUNDANCE, WYOMING EXCHANGE

MOSKEE SOUTH FIBER TO THE NODE CONSTRUCTION

The Moskee South FTTN Project includes new placement of approximately 4.5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Moskee South Electronic Serving Area Interface (ESAI) will connect eight (8) premises in an eight (8) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

SUNDANCE, WYOMING EXCHANGE

FROLANDERS FIBER TO THE NODE CONSTRUCTION

The Frolanders FTTN Project includes new placement of approximately .5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Frolanders Electronic Serving Area Interface (ESAI) will connect nineteen (19) premises in a fifteen (15) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

SUNDANCE, WYOMING EXCHANGE

MILLER CREEK FIBER TO THE NODE CONSTRUCTION

The Miller Creek FTTN Project includes new placement of approximately 1.6 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Miller Creek Electronic Serving Area Interface (ESAI) will connect eleven (11) premises in a twelve (12) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

SUNDANCE, WYOMING EXCHANGE

SUNDANCE MOUNTAIN FIBER TO THE NODE CONSTRUCTION

The Sundance Mountain FTTN Project includes new placement of approximately 1.75 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Sundance Mountain Electronic Serving Area Interface (ESAI) will connect four (4) premises and several cell towers in a fifteen (15) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

SUNDANCE, WYOMING EXCHANGE

UPTON SOUTH FIBER TO THE NODE CONSTRUCTION

The Upton South FTTN Project includes new placement of approximately 5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Sundance Mountain Electronic Serving Area Interface (ESAI) will connect seventeen (17) premises in a five (5) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

SUNDANCE EXCHANGE – WYOMING

SUNDANCE - FOUR CORNERS FIBER TO THE PREMISE CONSTRUCTION

The Sundance – Four Corners FTTP project includes the new placement of approximately forty six (46) route miles of fiber optic middle mile and access infrastructure along with new electronics. The new FTTP access infrastructure will support broadband speeds averaging 50Mbps downstream and 20Mbps upstream. Direct buried cable placement method is planned for this project. This project will upgrade services to ninety two (92) connected premises in a thirty one (31) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the

construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

Plan Year 2019

DECKER EXCHANGE - WYOMING

DECKER TO YOUNGS CREEK FIBER TO THE NODE CONSTRUCTION

The Wyoming segment of the Youngs Creek FTTN Project includes new placement of approximately 3.5 route miles of fiber optic infrastructure in Wyoming to feed Broadband Loop Carrier (BLC) electronics located in Montana. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Broadband Loop Carrier (BLC) facilities in this area. The FTTN node will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Youngs Creek Electronic Serving Area Interface (ESAI) does not connect any Wyoming premises, but does four (4) premises in a twenty two (22) square mile area in Montana. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2019 calendar year.