

**Matter of Application of LTD Broadband LLC  
Docket No. TC21-001**

**Responses of LTD Broadband LLC to  
Fifth Discovery Request of South Dakota Telecommunications Association (SDTA)**

**Request 5-1:** Regarding LTD's experience with Fiber to the Premises (FTTP) networks:

- (a) What is the largest Fiber to the Premises (FTTP) network that LTD has deployed in terms of numbers of customers currently being served by fiber?
- (b) What technology does this FTTP network use? (GPON, EPON, etc.)
- (c) Where is this FTTP network located?

**Response:**

- (a) The largest FTTP network currently operated by LTD Broadband serves 448 customers.
- (b) The FTTP network referenced in response to (a) above uses GPON.
- (c) The FTTP network referenced in response to (a) is located in Tennessee.

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**Request 5-2:** How many locations is LTD currently able to serve with its deployed FTTP systems (mainline fiber within 500 feet of location)?

**Response:** LTD Broadband currently is able to serve over 2,500 with its deployed FTTP systems.

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**Request 5-3:** Describe the experience LTD has in obtaining federal and tribal permits as part of a fiber installation project.

**Response:** LTD Broadband does not have relevant experience to describe in response to this Request.

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**Request 5-4:** How many miles of fiber construction planned by LTD in South Dakota will be aerial? Buried?

**Response:** LTD Broadband has not yet determined which portions of its fiber network in South Dakota will be aerial, and which portions will be buried. Therefore, the information requested is not available at this time. Such determinations will be made after LTD Broadband's application for RDOF support is approved by the FCC.

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**Request 5-5:** How many bucket trucks does LTD currently have for maintenance of aerial fiber cable?  
Or how does LTD intend to maintain aerial fiber?

**Response:** LTD Broadband owns 7 bucket trucks.

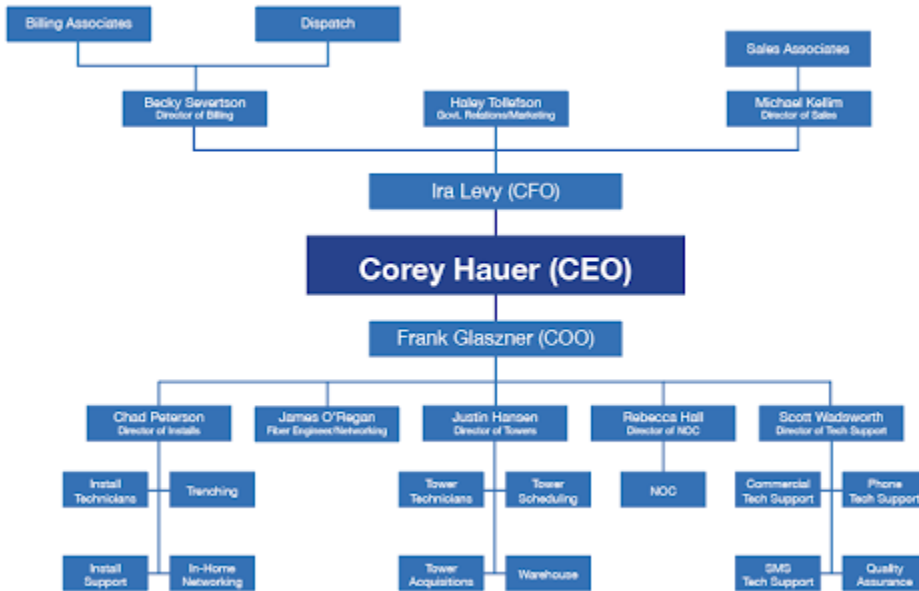
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**Request 5-6:** Provide an Organizational Chart of LTD’s Management Team.

**Response:** An organizational chart of LTD Broadband’s management team is provided below.



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**Request 5-7:** Provide the resume of the licensed professional engineer (Roy Glenn) showing his experience engineering broadband networks similar to what is planned for South Dakota.

**Response:** The current resume of P.E. Roy Glenn is provided below:

**Roy Glenn P.E.-Senior Engineer**

*Roy has been with Fail Engineering since December of 2017 and has taken the place of Senior Engineer for Randall Bowman who retired after 30 years with the company. Roy brings a multitude of different experiences and disciplines from the various projects he has worked on. He has successfully completed as project manager over 75 million dollars' worth of Fiber to the Premise projects in the last three plus years. He graduated from the Aerospace Engineering College at Mississippi State University. His first job upon graduating was with Boeing Aircraft Company, where he worked on testing and design for the Saturn Missile Booster. After this project was successfully completed he went to work for the Lockheed Aircraft in Marietta, Georgia. After completion of these projects he returned to Mississippi and work for several companies as an electrical engineering, including some time working at Dixie Electric on electrical transfer power systems. After this Roy worked for a number of years with MDOT as a civil engineer. His work included state highways and bridges for computing load limits, design including I-10 interstate. After this Roy set up his own engineering business specializing in potable water systems, sewage systems, and storm water control systems. From this time Roy acquire a wealth of experience working with underground systems involving, trenching and directional boring construction methods in right-of way and private easements. He has designed and inspected many of underground systems.*

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**Request 5-8:** Provide Roy Glenn's professional engineering license number for the state of South Dakota.

**Response:** As indicated in the P.E. Certification provided to SDTA as part of LTD Broadband's RDOF materials, Mr. Glenn is a licensed P.E. in the State of Wisconsin. Additionally, Mr. Glenn is a member of the NCEES, and is currently licensed in 16 states.

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**Request 5-9:** Provide all quality-of-service filings against LTD to any state utility commission in last 5 years.

**Response:** No quality of service filing against LTD Broadband has been made with any state utility commission within the last 5 years.

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**Request 5-10:** Provide outage reports for the last 5 years.

**Response:** LTD Broadband currently is not required to produce or maintain outage reports in any state in which it operates. Therefore, the information requested by SDTA is not available. If, and to the extent that such reports are required under the FCC's rules for RDOF fund recipients, or in connection with LTD Broadband's ETC status and/or COA for South Dakota, LTD Broadband will comply with the requirements of applicable law.

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**Request 5-11:** Provide a list of customer complaints for the last 2 years.

**Response:** SDTA’s Request for a list of “customer complaints” is overly broad. It would be unduly burdensome for LTD Broadband to produce a complete list of customer complaints that it received within the last 2 years, as customers may deliver complaints to LTD Broadband by informal means, such as telephone, text, or email. LTD Broadband does not track each and every complaint that it receives – particularly to the extent that a complaint is immediately resolved to the satisfaction of the customer by LTD Broadband’s customer service representative. LTD Broadband has not been the subject of any customer complaint filed with a state commission within the past two (2) years.

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**Request 5-12:** How many total mainline miles of fiber cable does LTD plan to install in South Dakota?

**Response:** LTD Broadband has not yet determined how many miles of fiber cable it will deploy in South Dakota. Therefore, the information requested is not available at this time. Such determinations will be made after LTD Broadband's application for RDOF support is approved by the FCC.

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**Responses of LTD Broadband LLC to  
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**Request 5-13:** How many FTTP subscribers will be supported over each fixed microwave middle-mile link?

**Response:** LTD Broadband currently does not plan to use fixed microwave links in its middle-mile network.

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**Request 5-14:** With regard to any wireless links planned for the middle mile network:

- a. What is the maximum distance LTD is proposing for these links?
- b. What frequency band will be used?
- c. What channel bandwidths will be used?
- d. What are the planned oversubscription ratios for these links?
- e. Does LTD plan to construct new towers? If so, how many?
- f. Will outdoor units or split systems be utilized?

**Response:** LTD Broadband currently does not plan to use fixed microwave links in its middle-mile network.

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**Request 5-15:** Describe the diverse routing and redundancy of the middle mile network (wireless and fiber).

**Response:** LTD Broadband will use resilient Ethernet rings feeding GPON nodes to provide diverse routing an redundancy to its middle-mile network.

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**Responses of LTD Broadband LLC to  
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**Request 5-16:** Describe the redundancy planned for the Core network and Internet Connection Point.

**Response:** LTD Broadband will use resilient Ethernet rings feeding GPON nodes to provide redundancy within its Core network, and at its Internet Connection Point.

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**Responses of LTD Broadband LLC to  
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**Request 5-17:** How will the broadband traffic be backhauled from the various RDOF areas to the Internet Connection Point in Sioux Falls.

**Response:** LTD Broadband has not yet determined how broadband traffic will be backhauled from its RDOF service areas to its Internet Connection Point in Sioux Falls. Therefore, the information requested is not available at this time. LTD Broadband will make specific determinations about its backhaul plans after its application for RDOF support is approved by the FCC.

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**Responses of LTD Broadband LLC to  
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**Request 5-18:** How many customers does LTD anticipate in South Dakota 3 years after FCC award?

**Response:** LTD Broadband approximates that it will serve 500 customers in South Dakota within 3 years of its RDOF award.

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**Responses of LTD Broadband LLC to  
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**Request 5-19:** How much investment will LTD have made in South Dakota 3 years after FCC award?

**Response:** At a minimum, LTD Broadband's investment in South Dakota within the 3 years that follow its RDOF award will be sufficient to meet its obligations under the FCC's RDOF rules.

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**Request 5-20:** Describe how the broadband investments in South Dakota be financed.

**Response:** While LTD Broadband has considered both loans and private equity options, it has not made any final determinations with respect to how it will finance its broadband investments in South Dakota.

**Date:** September 27, 2021

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA**

In the Matter of	)	
	)	
Application of LTD Broadband LLC for	)	
Designation as an Eligible	)	Docket No. TC21-001
Telecommunications Carrier (ETC) for	)	
Purposes of Receiving Federal Universal	)	
Service Support.	)	

**CERTIFICATE OF SERVICE**

I, Brett Heather Freedson, hereby certify that true and correct copies of LTD Broadband LLC’s responses to SDTA’s Fifth Discovery Request were served electronically to the Parties listed below, on this 27th day of September, 2021:

Ms. Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, SD 57501  
[patty.vangerpen@state.sd.us](mailto:patty.vangerpen@state.sd.us)

Ms. Brittany Mehlhaff  
Staff Analyst  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, SD 57501  
[brittany.mehlhaff@state.sd.us](mailto:brittany.mehlhaff@state.sd.us)

Amanda Reiss  
Staff Attorney  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, SD 57501  
[amanda.reiss@state.sd.us](mailto:amanda.reiss@state.sd.us)

Ms. Kara Semmler  
General Counsel  
South Dakota Telecommunications Association  
320 East Capitol Avenue

P.O. Box 57  
Pierre, SD 57501  
[karasemmler@sdaonline.com](mailto:karasemmler@sdaonline.com)

Mr. Corey Hauer  
CEO  
LTD Broadband LLC  
PO Box 3064  
Blooming Prairie, MN 55917  
[coreyhauer@ltdbroadband.com](mailto:coreyhauer@ltdbroadband.com)

Mr. Stephen E. Coran  
Ms. Brett Heather Freedson  
*Counsel to LTD Broadband LLC*  
Lerman Senter PLLC  
2001 L Street NW, Suite 400  
Washington, D.C. 20036  
[scoran@lermansenter.com](mailto:scoran@lermansenter.com)  
[bfreedson@lermansenter.com](mailto:bfreedson@lermansenter.com)

Mr. Jason R. Sutton  
Mr. Paul W. Tschetter  
*Counsel to LTD Broadband LLC*  
Boyce Law Firm, LLP  
P.O. Box 5015  
Sioux Falls, SD 57117-5015  
[jrsutton@boycelaw.com](mailto:jrsutton@boycelaw.com)  
[pwtsetter@boycelaw.com](mailto:pwtsetter@boycelaw.com)

*/s/ Brett Heather Freedson*

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Brett Heather Freedson