

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

**IN THE MATTER OF THE APPLICATION OF LTD BROADBAND, LLC
FOR DESIGNATION AS AN ELIGIBLE TELECOMMUNICATIONS
CARRIER FOR PURPOSES OF RECEIVING FEDERAL UNIVERSAL
SERVICE SUPPORT**

REDACTED

TC21-001

**PREFILED TESTIMONY OF LARRY THOMPSON
ON BEHALF THE SOUTH DAKOTA TELECOMMUNICATIONS
ASSOCIATION
OCTOBER 22, 2021**

SDTA - Exhibit 1

1 **INTRODUCTION**

2 **Q. Please state your name, employer, business address and telephone number.**

3 A. My name is Larry Thompson. I am the Chief Executive Officer (“CEO”) of Vantage Point
4 Solutions, Inc. (“Vantage Point”). My business address is 2211 North Minnesota Street, Mitchell,
5 South Dakota, 57301.

6 **Q. Generally, what types of services does Vantage Point provide and for whom?**

7 A. Vantage Point is a telecommunications engineering and consulting company that provides
8 services to both wireless and wireline companies. These services include, but are not limited to,
9 long-range communication planning, feasibility studies, emerging technology analysis, migration
10 studies, professional engineering and implementation management for telecommunications
11 electronic equipment including wireless and wireline switching and transport, outside plant
12 engineering, Radio Frequency (“RF”) engineering, field services engineering, cost separation
13 studies, and regulatory consulting. We provide these services to more than 500
14 telecommunications and broadband companies throughout the United States. We have more than
15 400 full-time employees on staff.

16 **Q. What are your duties and responsibilities at Vantage Point?**

17 A. I provide consulting and professional engineering services to Vantage Point’s clients in a
18 wide array of technical and regulatory areas associated with telecommunications. I am also
19 responsible for the normal duties you would expect from the CEO for a company of our size.

20 **Q. Please describe your educational background and experience.**

21 A. I have a Bachelor of Arts in Physics from William Jewell College in Liberty, Missouri,
22 and both Bachelor’s and Master’s degrees in Electrical and Computer Engineering from the

1 University of Kansas in Lawrence, Kansas. Additional details are provided in my Curriculum
2 Vitae (CV), which is attached as Exhibit LT-D1.

3 In 1985, I was hired by TRW, Inc. in Redondo Beach, California to work as a member of
4 its technical staff as a systems engineer. My responsibilities included system design of the
5 communications payloads for classified and unclassified satellite systems and ground stations. In
6 1991, I began working for CyberLink Corporation in Boulder, Colorado as a Senior Engineer. At
7 CyberLink, I provided engineering and technical consulting services regarding voice and data
8 networks for a broad range of government and private sector businesses. In 1996, I accepted a
9 position as a Senior Professional Engineer with Martin and Associates, Inc. in Mitchell, South
10 Dakota. While at Martin and Associates, I designed and engineered fiber optic transport
11 networks, broadband access networks, packet video networks and wireless networks. During my
12 tenure at Martin and Associates (and later renamed Martin Group, Inc.), I was promoted to the
13 General Manager of the Telecommunications, Consulting, and Engineering Group (TCE) and had
14 overall responsibility for the consulting and engineering services provided by Martin Group. In
15 2002, I was a founder of Vantage Point and have served as its CEO since its inception, as
16 described previously. While at Vantage Point, I have provided wireline and wireless engineering
17 services to a variety of national and international clients. I have also provided strategic and
18 business planning to many telecommunications companies as well as authored numerous papers
19 on a variety of technical subjects.

20 In 2017, I was one of 29 people selected by the Chairman of the Federal Communications
21 Commission (FCC), Ajit Pai, to serve on the FCC's Broadband Deployment Advisory Committee
22 (BDAC). I was reappointed to serve on the BDAC for a second term in 2019. I have been a
23 member of NECA's Rate Development Task Group for the last 18 years. I am a current member

1 of NTCA's Industry and Regulatory Policy Committee and have served on numerous other
2 telecommunications industry committees over the years.

3 **Q. Specifically, what is your experience in South Dakota?**

4 A. As the CEO of Vantage Point, I have been providing engineering services to
5 telecommunications and broadband companies in South Dakota since 2002 and have been
6 engineering wireless and wireline networks in South Dakota and elsewhere even longer. Vantage
7 Point has engineered and managed the construction of more fiber optic cable networks and miles
8 of fiber in the state of South Dakota than any other company. At Vantage Point, I oversee a staff
9 of more than 400 and provide engineering services for many of the rural local exchange carriers
10 that serve rural areas similar to the areas that were part of the Rural Digital Opportunity Fund
11 (RDOF) Phase I Auction. Because of this, I am very familiar with the cost to deploy fiber
12 networks in all these rural, South Dakota areas. In addition, we provide financial analysis for our
13 clients and understand all the costs associated with operating a fiber network in the rural areas of
14 South Dakota.

15 **Q. Do you hold any professional engineering licenses?**

16 A. Yes. I am a licensed professional engineer in twenty-one states, including in South Dakota
17 (License 6233). I am also a member of the National Council of Examiners for Engineering and
18 Surveying.

19 **Q. In which types of regulatory and technical proceedings have you previously provided
20 testimony?**

21 A. I have provided regulatory and technical testimony in several proceedings in South Dakota
22 on a variety of telecommunication subjects such as wireless IntraMTA factors and traffic,
23 interconnection agreements, phantom traffic, state high-cost fund issues, tandem re-homing, and

1 forward-looking economic cost studies. I have also testified in federal litigation cases and spoken
2 at Federal Communications Commission (“FCC”), state utilities commissions, and United States
3 Senate workshops. A complete list of testimony experience is provided in my Curriculum Vitae
4 (CV), which is attached as Exhibit LT-D1.

5 **Q. On whose behalf are you testifying?**

6 A. I am testifying on behalf of South Dakota Telecommunications Association (SDTA).

7 **Q. What is the purpose of your direct testimony?**

8 A. I have been asked by the SDTA to provide an Expert Report (“Report”) in the South
9 Dakota Public Utilities Commission (SDPUC) Docket TC21-001. The Report is attached to and
10 incorporated into this testimony as Exhibit LT-D2. The subject of this docket is LTD Broadband
11 LLC’s (“LTD Broadband” or simply “LTD”) request to receive designation as an eligible
12 telecommunications carrier (ETC) in the state of South Dakota. LTD Broadband is required to
13 secure ETC status in each state where it was the provisional winner in the Federal Communication
14 Commission’s (FCC’s) Rural Digital Opportunity Fund (RDOF) Phase I Auction.

15 To be designated as an ETC in the state of South Dakota, the applicant must file a petition
16 with the South Dakota Public Utilities (SDPUC) as defined in South Dakota Codified Law
17 (SDCL) and Administrative Rules (ARSD). The ETC applicant must provide all items in ARSD
18 20:10:32:43, which includes:

- 19 • Provide service on a timely basis
- 20 • Ability to remain functional in emergency situations
- 21 • Satisfy consumer protection and service quality standards
- 22 • Show service is in the public interest

1 The goal of this proceeding is to ensure that telecommunication providers in the State of
2 South Dakota among other things, have the technical, managerial, and financial ability to provide
3 reliable telecommunications service and continue to do so without failing. Failure of an ETC to
4 continue to provide telecommunications service would not be in the public interest and could
5 come at a time when access to emergency services is needed. Based on our assessment of LTD
6 Broadband’s technical and financial ability to offer – and continue to offer – telecommunications
7 services within the State of South Dakota we will help determine if it would be in the public’s
8 best interest to designate LTD Broadband as an ETC in the state of South Dakota.

9 **Q. What information did you review in preparing your Report and this testimony?**

10 A. As part of my preparation for this Report, I have reviewed numerous documents
11 associated with this case, including:

- 12 1. LTD Broadband’s ETC filing with the South Dakota Public Utilities Commission
- 13 2. LTD Broadband’s Long Form filing with the FCC for the RDOF Phase I Auction attached
14 as Exhibit LT-D3.
- 15 3. Responses of LTD Broadband LLC to First Data Request of Commission Staff (and the
16 supplemental response to Data Request 1-11)
- 17 4. Responses of LTD Broadband LLC to Second Data Request of Commission Staff
- 18 5. Responses of LTD Broadband LLC to Third Data Request of Commission Staff
- 19 6. Responses of LTD Broadband LLC to First Data Request of the SDTA
- 20 7. Responses of LTD Broadband LLC to Second Data Request of the SDTA
- 21 8. Responses of LTD Broadband LLC to Third Data Request of the SDTA
- 22 9. Responses of LTD Broadband LLC to Fourth Data Request of the SDTA
- 23 10. Responses of LTD Broadband LLC to Fifth Data Request of the SDTA

1 All Data Requests I reviewed are attached as Exhibit LT-D4

2 **Q. Are you aware of the status of LTD's ETC application in ND? If so, what is it?**

3 A. I am aware that the North Dakota PSC Staff filed a recommendation that LTD's request
4 to be designated as an ETC for the purpose of receiving RDOF I Auction funding be denied.

5 **Q. What was the basis of their recommendation?**

6 A. That it is not in the public interest to designate LTD as an ETC. They found that LTD is
7 not technically or financially feasible to buildout the necessary infrastructure and that as a result
8 ND will be ineligible for other funding opportunities to build out unserved areas.

9 **Q. Are you aware of the status of the FCC review of LTD's RDOF filings?**

10 A. Most recently, on October 20, 2021, the FCC released an Order indicating it considers
11 LTD Broadband in default, in the RDOF I process, in Iowa, Nebraska and North Dakota. The
12 FCC bases its decision on LTD's delinquent ETC filing in the listed states. Previously, the FCC
13 found LTD in default in California, Oklahoma, and Kansas. In addition, LTD voluntarily
14 relinquished groups of census blocks in California, Colorado, Iowa, Illinois, Indiana, Kansas,
15 Minnesota, Missouri, Nebraska, Ohio, Oklahoma, Texas, Wisconsin, and even South Dakota.

16 **Q. Did you review any LTD Broadband's South Dakota specific network diagrams?**

17 A. No. LTD Broadband's Long Form filing with the FCC showed generic diagrams to
18 describe its broadband deployment in the various states where it was the provisional winner.
19 Although LTD Broadband was asked for more specific information by the Commission Staff
20 and SDTA in discovery, none was provided. There were no South Dakota specific network
21 diagrams available for review.

22 **Q. Did this lack of South Dakota specific network information restrict your ability to**
23 **analyze LTD Broadband's plans?**

1 A. No. Enough information was provided by LTD regarding the technology that was
2 planned and the type of network to be deployed that I was able to generate a construction cost
3 estimate given Vantage Point's extensive experience in engineering and project managing
4 hundreds of FTTH networks across the country and every region of the state of South Dakota.
5 This experience makes us uniquely qualified to assess the feasibility of LTD Broadband's
6 network.

7 **Q. Given the lack of South Dakota specific engineering diagrams, what did you**
8 **review?**

9 Since LTD did not produce detailed network diagrams, I engineered a Fiber-to-the-
10 Home (FTTH) network as described in LTD's discovery responses to determine if it would be
11 possible to build and deploy this network in LTD's RDOF areas for the capital expense shown
12 in LTD's business plan.¹ If its investment is grossly different than what I estimate based on
13 FTTH construction projects in these same areas, it is likely that LTD Broadband did not
14 accurately determine capital expenses to construct its network in South Dakota.

15 **Q. Does your analysis of LTD Broadband focus on wireline fiber or wireless**
16 **technologies?**

17 A. I focused on wireline fiber technologies. I did so as a result of LTD affirming their
18 intention is to serve all customers in South Dakota using fiber to the end user customer. In an
19 email dated August 11, 2021 from Brett Heather Freedson to SDTA, Amanda Reiss and Brittany
20 Mehlhaff, Mr. Freedson stated:

¹ LTD Broadband's FCC RDOF Long Form filing, Feb. 10, 2021, page 5.

1 “. . . I confirmed with Corey Hauer, LTD Broadband’s CEO, that LTD
2 Broadband does not plan to construct towers, or to use wireless facilities to
3 serve its customers within the South Dakota census blocks for which LTD
4 Broadband was presumptively awarded funds. Rather, LTD Broadband plans
5 to serve all customers within its RDOF-awarded service areas with fiber
6 deployed directly to the customer’s premises (i.e., fiber-to-the-home or
7 “FTTH”), and for that purpose, would have no need to construct towers.”

8 In SDTA’s fifth data request, LTD Broadband stated, “LTD Broadband currently does not plan
9 to use fixed microwave links in its middle-mile network.” Because LTD’s clear statements that
10 there will be no wireless networks in either the last mile nor the middle mile, I did not consider
11 any concerns associated with a wireless deployment and focused my efforts on LTD broadband’s
12 use of FTTH technology.

13 **Q. What are the construction estimates you used in your analysis?**

14 A. My construction estimates, based upon my previously explained experience and
15 methodology, is shown in the chart below. The estimates are based upon the eight regions where
16 LTD was the apparent RDOF winning bidder. I used LTD Broadband’s assumed █████ penetration
17 rate at the end of year 6.

Region	Construction Estimate	Locations	Cost Per Location
Rapid City Area (includes Black Hills)	\$46.0M	4,020	\$11,570
Timber Lake Area	\$11.7M	521	\$22,591
Watertown Area	\$5.6M	641	\$8,830
Pierre Area	\$2.2M	86	\$26,163
Miller Area	\$5.3M	339	\$15,693
Sioux Falls Area	\$5.7M	537	\$10,726
Rosebud Area	\$4.4M	169	\$25,799
Yankton Area	\$9.2M	1,168	\$8,039
Total for LTD in SD (████ Pen)	\$91.0M	7,481	\$12,167

1

2 **Q. How does your estimate compare to LTD Broadband’s construction cost estimate?**

3 A. I believe LTD Broadband has grossly underestimated the cost to serve RDOF locations in
 4 South Dakota. As my attached Report explains in more detail, there are additional costs that were
 5 not incorporated into the analysis that would drive the estimates even further apart. LTD
 6 Broadband’s construction estimate, compared to Vantage Point’s Estimate is shown in the
 7 following chart.

8

	LTD Broadband Estimate	Vantage Point Estimate
Total Construction Cost	████	\$91.0M
Cost per Served Location (with █████ penetration)	████	\$12,167

9

10 **Q. What impact will increased construction costs have on LTD Broadband’s ability to**
 11 **successfully serve South Dakota?**

12 A. This large additional capital expense to build their network will likely result in LTD’s
 13 FTTH operation in South Dakota never becoming profitable, which increases the likelihood of
 14 LTD Broadband failing to meet the FCC’s buildout requirements and the South Dakota PUC
 15 requirements.

1 **Q. How will LTD's failure to meet FCC and South Dakota requirements impact South**
2 **Dakota consumers?**

3 A. A failure of LTD Broadband will negatively impact South Dakota consumers. It is likely
4 that a failure will occur after the planned state and federal funding opportunities have past and the
5 citizens covered by the LTD Broadband may be left in a broadband wasteland for many years to
6 come. Providing ETC status to a company that is likely to fail is not be in the public interest.

7 **Q. Did LTD Broadband provide a business plan?**

8 A. Yes. LTD Broadband's included a financial business plan as part of their FCC RDOF
9 Long Form application. LTD Broadband's own financial plan showed a loss of approximately
10 [REDACTED] in the first 6 years of operation. I provided an analysis of LTD Broadband's business plan
11 in my attached Report along with a revised and more complete business plan. This analysis shows
12 that when using more realistic capital and operational expense, I estimate LTD Broadband's loss
13 to be more than [REDACTED] estimate (greater than \$65M) in the first 6 years.

14 **Q. Was LTD Broadband's business plan accurate and complete?**

15 A. No. The business plan was based on high-level estimates and gave little detail. In addition
16 to a significant error in their estimated capital expense to construct a FTTH network in South
17 Dakota, they also omitted any expense for the cost of money. This is relevant because LTD
18 Broadband asserts that all revenue shortfalls will be covered [REDACTED]

19 [REDACTED]
20 [REDACTED]

21 [REDACTED] There
22 are also some concerning discrepancies. For example, the business plan included in their RDOF
23 Long Form application showed approximately [REDACTED] South Dakota customers at the end of year

1 3. However, when SDTA asked how many customers they expected in the first three years
2 (SDTA Data Request 5-18) they claim there will only be 500. If this is the case, the estimated
3 end user revenue in LTD Broadband's business plan is also grossly understated.

4 **Q. Can LTD Broadband use profits from their RDOF networks in the other 14 states to**
5 **offset the losses in South Dakota?**

6 A. My analysis, as detailed in the attached Report, shows the same issues in all other states.
7 In fact, LTD Broadband's underestimate of the capital required to build a FTTH network is more
8 significant in other states. LTD Broadband's estimated cost per location in 13 of the 15 states
9 where it was the apparent RDOF Phase I Auction winner is even lower than what it estimated the
10 cost to be in South Dakota. However, many of those areas are more sparsely populated and the
11 construction will be more difficult due to rockier soil and more environmental issues. More than
12 half of these states were estimated by LTD Broadband to be less than ██████ per location. For
13 example, in Nebraska² LTD Broadband estimated the per location cost to be approximately
14 ██████ This would likely be the cost of only the customer drop with electronics – which means
15 no expense was accounted for in business plan for mainline cable, middle mile, and transport.
16 The shortcomings in these other states makes it more likely for LTD Broadband to fail in South
17 Dakota also.

18 **Q. Does your attached Report more fully develop and explain your analysis and**
19 **conclusions?**

20 A. Yes. I fully incorporate and rely upon my attached Report as the basis of this testimony
21 and the conclusions I come to as a result.

² Nebraska has 5.4% of LTD Broadband's RDOF locations (28,729)

1 **Q. Outside of your financial and engineering analysis, do you have other concerns**
2 **regarding LTD Broadband’s plan to serve in South Dakota? If so, what are those**
3 **concerns?**

4 A. I have concerns regarding LTD Broadband’s ability to meet Service Standards as
5 contained in South Dakota Administrative Rules.

6 **Q. What is the basis for your concern?**

7 A. LTD has no history or proven track record nor does it have plans adequately to
8 demonstrate it can satisfy consumer protection and service quality standards. LTD Broadband
9 currently has less than 300 customers in South Dakota and 147 employees companywide. In
10 SDTA’s fifth data request,³ LTD broadband admitted to only having 448 total FTTH customers
11 today and those are in Tennessee. LTD Broadband is committed to serve over half a million
12 RDOF locations in the next 6 years and their business plan is based on them providing service
13 to over 260K in that same period. This would be challenging for even the most experienced
14 FTTH broadband provider. Discovery responses indicate that LTD Broadband has not
15 developed any plans about how it will satisfy consumer protection and service quality standards
16 for thousands of new customers over the course of the next 6 years. Customers in the LTD
17 Broadband areas are entitled to receive the same level of customer service as all other South
18 Dakota residents.

19 **Q. Does that conclude your testimony?**

20 A. Yes, but I reserve to right to modify this testimony if new information becomes available.

³ SDTA Data Request 5 (Request 5-1)