

**Exhibit No. BTC-1T
Dockets UE-150204/UG-150205
Witness: Bradley Cebulko**

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

V.

AVISTA CORPORATION,

Respondent.

**DOCKETS UE-150204 and
UG-150205
(Consolidated)**

TESTIMONY OF

BRADLEY T. CEBULKO

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Electric Service Reliability

July 27, 2015

TABLE OF CONTENTS

I. INTRODUCTION1

II. TESTIMONY2

1 I. INTRODUCTION

2

3 Q. Please state your name and business address.

4 A. My name is Bradley Thomas Cebulko. My business address is 1300 S. Evergreen
5 Park Drive S.W., P.O. Box 47250, Olympia, WA 98504.

6

7 Q. By whom are you employed and in what capacity?

8 A. I am employed by the Washington Utilities and Transportation Commission
9 (Commission) as a Regulatory Analyst in the Conservation and Energy Planning
10 section of the Regulatory Services Division.

11

12 Q. How long have you been employed by the Commission?

13 A. I have been working for the Commission since September 2013.

14

15 Q. Would you please state your educational and professional background?

16 A. I have a Master's degree in Public Administration from the Daniel J. Evans School
17 of Public Policy and Governance at the University of Washington, and a B.A. degree
18 in political science from Colorado State University. I attended the National
19 Association of Regulatory Utility Commissioners' Annual Regulatory Studies
20 Program in August 2014, EUCI's cost of service and rate design training in March
21 2015, New Mexico State University's rate case basics workshop in May 2015, as
22 well as other sector-specific workshops, trainings, and conferences.

23

1 **Q. Have you previously submitted testimony to this commission?**

2 A. I previously filed testimony in Avista's 2014 general rate case¹ on service quality
3 and reliability.

4

5 **II. TESTIMONY**

6

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

8 A. The purpose of my testimony is to discuss the need for additional electric reliability
9 analysis for determining adequate reliability, including an econometric reliability
10 metric benchmarking study.

11

12 **Q. Please summarize your testimony.**

13 A. Staff does not yet have the proper tools to determine if Avista's electric reliability
14 metrics demonstrate adequate electric reliability. The two most prominent electric
15 reliability metrics reported by the Company, System Average Interruption Duration
16 Index (SAIDI) and System Average Interruption Frequency Index (SAIFI), do not
17 yet have meaningful benchmarks, which is necessary to determine adequate
18 reliability. To aid staff's determination of reliability, Staff is developing an
19 econometric model that aims to take into account company-specific service territory
20 attributes to determine appropriate, utility-specific benchmarks.²

21

¹ Dockets UE-140188 and UG-140189.

² Staff is not requesting that the Commission establish benchmarks for Avista in this rate case.

1 **Q. What information does the Company provide to assess electric reliability?**

2 A. Commission staff's primary means for assessing electric reliability is the Company's
3 annual electric service reliability report.³ The annual report describes the
4 Company's reliability monitoring and metrics as a system and by regional office.
5 Consistent with WAC 480-100-393(3)(b), Avista established a 2005 baseline⁴ for its
6 reliability statistics, and a reliability target of an average over a time period plus two
7 standard deviations.⁵ The report includes a variety of industry-recognized metrics,
8 including SAIDI and SAIFI. These metrics are two key indicators of the company's
9 overall operations management. SAIDI is the total duration of interruptions for the
10 average customer during a year. It is calculated by dividing the total number of
11 minutes of customer interruption by the total number of customers. SAIFI is the
12 number of interruptions that an average customer experiences during a year. It is
13 calculated by dividing the total number of customer interruptions by the total number
14 of customers served.

15
16 **Q. What does the 2015 Annual Report say about the Company's service reliability?**

17 A. The 2015 annual report states that the company's SAIDI and SAIFI scores showed
18 an upward trend line from 2005 until 2012. With the inclusion of 2014 data, the
19 SAIFI trend line is slightly downward, and SAIDI trend line continues to trend
20 slightly upward. However, 2014 SAIDI and SAIFI scores are still higher than the

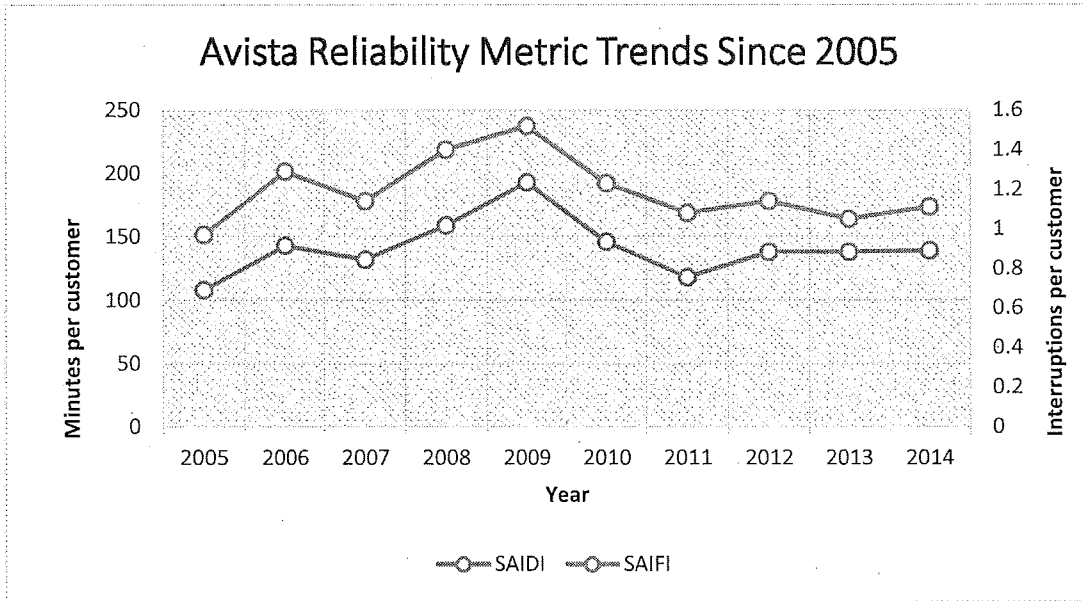
³ As required by WAC 480-100-398.

⁴ A baseline is a starting point to be used for comparisons, and a benchmark is an established standard.

⁵ *Avista 2014 Electric Service Reliability Report*, Docket UE-150695 at 2.

1 2005 baseline.⁶ Higher SAIDI and SAIFI scores correspond to diminished
2 reliability.

3 *Figure 1 Source: Avista 2014 Electric Service Reliability Report, Docket UE-150695*



4

5

6 **Q. Does the Company have any other reliability measurements?**

7 A. The Company also conducts a survey, the Voice of the Customer, and collects
8 information from the J.D. Power Electric Utility Survey that can be interpreted to
9 reflect customer perceptions of reliability. The Voice of the Customer is the
10 Company's contracted quarterly survey that measures customer satisfaction with
11 Avista's customer contact points, such as the call center and operations staff. The
12 J.D. Power's Customer Satisfaction Index measures customer satisfaction with
13 power quality and reliability, as well as field and customer services, and identifies
14 utility practices that contribute to a customer's satisfaction.⁷

⁶ *Id.* at 1.

⁷ *Reply Comments of Avista Corporation Related to the Proposed Service Quality Measures Program*, Dockets UE-140188 and UG-140189, June 17, 2015, at 5-6.

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Q. Can staff use these tools to determine if the Company's service is reliable or unreliable?

A. No. The Voice of the Customer survey is an important tool for the Company, but it is a Company contracted questionnaire to customers who have had direct contact with the Company, whether through the call center or field technicians. It is not a randomized survey that asks questions specifically about the duration and frequency of outages. Some customers may experience better reliability than others (less frequent outages for shorter durations) and might not be as well represented in the survey. Like the Voice of the Customer survey, the J.D. Power survey only captures customer perception of reliability.

The 2015 Annual Report states that the 2014 SAIDI and SAIFI scores may be higher than 2005 due to under reporting that may have occurred during the transition to the Company's Outage Management Tool (OMT) in 2005.⁸ On the other hand, the Company also reports that the gradual increase in scores from 2007 until 2012 were not attributable to the transition to the new OMT.⁹ Unfortunately, the Company did not provide additional explanation or analysis as to what is causing the scores to rise. Staff is not comfortable using only this information to determine whether Avista's service is sufficiently reliable.

⁸ 2015 Annual Report at 1.

⁹ Avista 2014 Electric Service Reliability Report, Docket UE-150695 at 1.

1 **Q. Why are the identified tools insufficient for determining reliability?**

2 A. To use SAIDI and SAIFI to evaluate reliability the measurements need to have
3 meaningful company-specific benchmarks. WAC 480-100-393(3)(b) required the
4 electric utilities to set a baseline for its reliability measurements in its annual electric
5 reliability reports, and Avista chose 2005. Puget Sound Energy and Pacific Power
6 each chose 2003 as its baseline.^{10,11} There is nothing inherently significant about the
7 year 2003 or 2005 as a benchmark to judge adequate reliability. Rather, the
8 companies were allowed to choose a baseline so as to provide a beginning year for
9 trend analysis.

10 Although trends are important for identifying a changing level of reliability,
11 and it is certainly important for the Company to be responsive to its customer
12 opinion, neither the annual electric reliability report nor the customer surveys answer
13 the question, ‘Is Avista currently providing adequate electric service reliability?’ It is
14 possible for the service to be consistently, year-after-year, reliable beyond what is
15 necessary, and for customers to be satisfied with that aspect of service, but paying
16 too much. It is also possible that the company is consistently providing inadequate
17 reliability but the customers are conditioned to accept the current quality of service
18 or are simply not aware service should, or could, be improved.

19

¹⁰ *Puget Sound Energy 2014 SQI and Electric Service Reliability Report*, March 27, 2015, Dockets UE-072300 and UG-072301, at 47.

¹¹ *Pacific Power Washington Service Quality Review Annual Report*, January 1 – December 31, 2014, UE-150717, at 8.

1 **Q. Is Avista currently providing adequate electric service reliability?**

2 A. Staff does not know. Staff has not seen a definitive evaluation as to whether the
3 Company's SAIDI and SAIFI scores demonstrate reliable service. Importantly, Staff
4 has not seen definitive evidence that the company's service is unreliable. Simply
5 tracking SAIDI and SAIFI performance relative to the Company's 2005 baseline
6 does not provide sufficient evidence of adequate reliability. Rather, that baseline
7 was chosen by Avista so that it could evaluate changes in service reliability, not
8 because reliability was determined to be sufficiently reliable in 2005. In fact, Staff
9 still does not know if Avista's SAIDI and SAIFI scores for 2005 demonstrated
10 sufficient reliability, or not.

11 One way of assessing whether Avista's service is sufficiently reliable is to
12 compare the Company's performance to other utilities. Unfortunately, peer utility
13 comparison suffers from a critical flaw; it does not control for the fact that each
14 utility's service territory has a unique combination of attributes that affect its
15 reliability (e.g., miles of distribution line, percentage of lines underground,
16 vegetation coverage, population density, etc.). Avista is a midsized utility with a
17 very large, rural service territory, located in the interior of the Pacific Northwest.

18 Even if we use a peer-comparison for Avista as a benchmark, there is a risk
19 of an unintended incentive to either under- or over-invest in its distribution plant to
20 achieve an inadequately benchmarked reliability score. That risk is also present if
21 the Company's reliability benchmarks are set using a specific – or even an average –
22 year's score. Due to this concern, Staff cannot conclude that reliability is acceptable
23 until the reliability metrics have meaningful company-specific benchmarks.

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Q. What evaluation tool would allow staff to determine if the company's SAIDI and SAIFI scores demonstrate adequate reliability?

A. Staff is currently developing an econometric model that aims to take into account company-specific service territory attributes to determine appropriate, utility-specific benchmarks. The model will use data on as many relevant variables as necessary and available, collected from regulated utilities across the country, to quantify the relationship of service territory characteristics to reliability performance. For example, the model will quantify the relationship and relative impact of the percentage of distribution lines underground on SAIDI and SAIFI scores. It will also quantify the significance of population density upon the scores, amongst other variables. Once the model has quantified the relative impact of each of the identified variables, we can enter in each company's specific service territory characteristics to the model to create a proper benchmark that is specific to that company.

Staff will need to identify as many relevant variables that affect reliability as possible, and collect that data from as many regulated utilities as possible. Obviously, this is a laborious task and participation from the regulated utilities in identifying key data sources and developing the model will be critical.

Q. Does this conclude your testimony?

A. Yes.