

**Exhibit No. DN-1T
Dockets UE-160228/UG-160229
Witness: David Nightingale**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**AVISTA CORPORATION d/b/a
AVISTA UTILITIES,**

Respondent.

**DOCKETS UE-160228 and
UG-160229 (*Consolidated*)**

TESTIMONY OF

DAVID NIGHTINGALE

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

***Deferring Prudence Review and Cost Recovery of Avista's
Advanced Metering Infrastructure Project***

August 17, 2016

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1 I. INTRODUCTION

2
3 Q. Please state your name and business address.

4 A. My name is David Nightingale. My business address is the Richard Hemstad
5 Building, 1300 South Evergreen Park Drive Southwest, P.O. Box 47250, Olympia,
6 Washington 98504.

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

9 A. I am employed by the Washington Utilities and Transportation Commission
10 (Commission) as a Senior Regulatory Engineering Specialist in the Conservation and
11 Energy Planning Section of the Regulatory Services Division.

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

14 A. I have been employed by the Commission since February 2009.

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

17 A. I hold a Bachelor of Arts degree in Business Administration from Western
18 Washington University, Bellingham. I also hold a Bachelor of Science degree in
19 Energy Engineering from the University of Washington, Seattle, where my studies
20 focused on fluid dynamics, thermodynamics, and alternative energy. I performed
21 research and designed projects, including testing residential conservation standards
22 in four fully-instrumented model homes, estimating the cost-effectiveness of

1 residential solar hot water heating, and designing a small wind turbine system for a
2 site on Orcas Island.

3 From 1987 to 1991, I worked for RW Beck and Associates, an engineering
4 consulting firm in Seattle. My responsibilities included county and state waste and
5 recycling system planning, landfill development, and waste-to-energy project
6 evaluation and analysis for clients in Washington and Alaska.

7 From October 1991 through January of 2009, I worked for the Washington
8 State Department of Ecology in various capacities: as a planner, engineer, technical
9 unit supervisor, statewide technical-lead, and policy staff. My projects included
10 technical review and regulatory compliance evaluation of renewable biomass
11 projects, such as landfill gas to energy projects, variously-fueled pyrolysis plants and
12 proposals, and fluidized-bed and mass-burn waste-to-energy plants. I was also
13 responsible for technical review and regulatory assistance for coal combustion
14 products recycling and disposal options for TransAlta's Centralia power generation
15 plant, as well as combustion products disposal for Avista's Kettle Falls wood-fueled
16 electric generating plant.

17 In the past few years I have increasingly focused on smart grid technologies
18 and issues of implementation for smart grid and variable resources. This has
19 included:

- 20 • Spokane site visit with staff of Avista Corporation to examine smart-grid
21 installation sites that were part of their ARRA grants. This included tours of
22 Avista's training center and substation, meter shop, field installations of

1 smart distribution devices, control center communications and software
2 upgrades.

- 3 • Completing the winter-term 2015 graduate course *Designing the Smart Grid*
4 *for Sustainable Communities* offered by Portland State University.
- 5 • Attending the September 2014 *Energy Storage System Peer Review Update*
6 regarding stationary battery research and bench-scale and pilot projects
7 sponsored by the Department of Energy.
- 8 • Attending *Offshore Wind Conference* October 2014 sponsored by American
9 Wind Energy Association.
- 10 • Attending February 25, 2015, *Pacific Northwest Demand Response Project*
11 *Meeting* sponsored by the Northwest Power and Conservation Council.

12
13 **Q. Have you testified previously before the Commission?**

14 A. Yes. And most notably on Avista's Advanced Meter Infrastructure proposal in the
15 prior Avista general rate case in consolidated Dockets UE-150204 and UG-150205
16 (2015 GRC).

17
18 **Q. Please summarize your testimony.**

19 A. My testimony addresses Avista's presentation of its Advanced Meter Infrastructure
20 (AMI) project. Because Avista has not yet placed AMI into service, I conclude that it
21 is premature for the Commission to make a prudence determination and for Avista to
22 recover any expenses for AMI.

1 **II. PRUDENCE AND COST RECOVERY OF AMI**

2

3 **Q. Has Avista included the costs of deploying AMI in a prior rate case?**

4 A. Yes. In its initial filing in the 2015 GRC, Avista requested approval of projected
5 AMI deployment expenses, which it had not yet incurred.¹

6

7 **Q. What did the Commission decide regarding AMI in the prior rate case?**

8 A. The Commission stated in its Final Order that it is premature to make a
9 determination regarding the prudence of AMI investment or to provide any
10 indication that implies pre-approval:

11 We decline Avista’s requested action because this issue is not ripe for
12 Commission determination. The Commission’s longstanding practice is to
13 review the prudence of a utility’s investment in plant after that plant is placed
14 in service and is used and useful. In contrast, this case discusses a proposal
15 for a future investment that, if we took that first step towards a prudence
16 determination, could be viewed as the Commission indicating pre-approval.²

17

18 The Commission based its denial of pre-approval in part on the fact that Avista had
19 not yet purchased or begun installation of the AMI that it plans to deploy. At
20 paragraph 192 of Order 05 in the 2015 GRC, the Commission stated:

21 The responsibility for a decision to move forward with an investment rests
22 with the Company. Avista’s proposal asks the Commission to make the
23 managerial decisions for it; we decline to do so. The Company must place

¹ See GRC 2015 Avista testimony of Don F. Kopczynski, Exhibit Nos. DFK-1 and DFK-5, James M. Kensok, Exhibit No. JMK-1 pp. 6-7, Karen K. Shuh, Exhibit No. KKS-1 pp. 26-28, and Elizabeth M. Andrews, Exhibit No. EMA-2 (Column C). See also Staff testimony of David Nightingale, Exhibit No. DN-1T, Chris R. McGuire, Exhibit No. CRM-1T p. 6, and Christopher S. Hancock, Exhibit No. CSH-1T pp. 26-27 & 29.

² *Wash. Utils. & Transp. Comm’n v. Avista Corp.*, Dockets UE-150204 and UG-150205, Order 05, 68, ¶ 191 (Jan. 6, 2016) (emphasis as in original; citations omitted).

1 new plant in service for its ratepayers before the Commission will opine on
2 the prudence of its decision.³
3

4 **Q. What is Avista's AMI proposal in the current general rate case?**

5 A. Avista discusses AMI in the context of its "cross check" studies and also includes
6 AMI as an "after-attrition adjustment." The cross check adjustments for AMI include
7 only speculative 2017 and 2018 costs of the implementation of AMI.⁴ The "cross
8 check" presentation is, in Avista's words, "for comparison purposes only" and,
9 accordingly, the Company is not explicitly asking for rate recovery of any specific
10 expenditure related to implementation of AMI based on its cross check studies.
11 Staff's treatment of "cross check" adjustments to the results of operations is
12 discussed in the testimony of Staff witness Ms. Joanna Huang.

13 In addition, the Company provides extensive testimony that describes the
14 nature of the project, references studies of the benefits of AMI from elsewhere,
15 models projected benefits to the Company and customers, presents national AMI
16 implementation trends, provides a NARUC resolution in favor of AMI, and includes
17 speculative cost and benefit estimates for the project over its expected life.

18
19 **Q. Is Avista asking for approval of the AMI project?**

20 A. Staff believes that the Company is implicitly asking for pre-approval for this project;
21 otherwise, this information would not need to be provided in the context of a general
22 rate case. Therefore, Staff believes that it is useful to review, at the highest level, the

³ 2015 GRC Order 05 at 69, citing *WUTC v. Puget Sound Energy, Inc.*, Docket UG-110723, Order 07, ¶¶ 35-36 (May 18, 2012) (A utility "alone shoulders the obligation to . . . determine which [projects] should be constructed and when").

⁴ Smith, Exh. No. ___ (JSS-1T) 5:1-4.

1 state of the AMI project at this time. Staff has done so and concludes that, as in the
2 prior general rate case, a prudence review is still premature. Consistent with the
3 Commission decision in Avista's last general rate case, the Commission should
4 avoid any suggestion of pre-approval in this case.
5

6 **Q. What is Avista's estimated cost of this potential AMI investment?**

7 A. Avista estimates that the deployment of AMI will cost approximately \$166.7 million
8 in capital and \$123.4 million in operating expenses over the life of the AMI system.⁵
9 In this case, Avista requests recovery of AMI expenses in after-attrition adjustments
10 of \$20.7 million for electric and \$9 million for gas service in both the 2017 and the
11 2018 rate periods.⁶
12

13 **Q. Are these estimated costs known and measurable?**

14 A. No. Although Avista has within the past few months contracted with software and
15 hardware consultants to start preparing to support the deployment of AMI, the larger
16 costs of purchasing and installing the AMI meters and other implementation and
17 operating expenses have yet to be contracted and are not yet known or measurable.⁷
18

⁵ Rosentrater, Exh. No. ___ (HLR-1T) 20:10.

⁶ Andrews, Exh. No. ___ (EMA-1T) 29:13, 30:9-11, 30:19 - 31:3; Exh. No. ___ (EMA-2) p. 5 (electric 2017 RR); Exh. No. ___ (EMA-3) p. 5 (gas 2017 RR); Exh. No. ___ (EMA-2) p. 5 (electric 2018 RR); Exh. No. ___ (EMA-3) p. 5 (gas 2018 RR).

⁷ See Cheesman, Exh. No. MC-17.

1 **Q. Has Avista put the proposed AMI technology into service so that it is now used**
2 **and useful to Washington customers?**

3 A. No. Avista is still preparing to put AMI plant into service. On page 31 of Ms.
4 Rosentrater's testimony, she states that Avista is still planning for the
5 implementation of the AMI system and she anticipates "execut[ing] vendor contracts
6 and. . . begin[ning] the installation of supporting computer hardware and software
7 systems in mid-2016." Regarding the actual installation of the AMI communication
8 systems and meters, that will not occur until 2017 and will continue through full
9 deployment, which Avista expects to accomplish by 2021⁸.

10

11 **Q. Based on these facts is there any compelling reason for the Commission to take**
12 **any action towards pre-approval of the proposed AMI capital expenditures?**

13 A. No. Although the Company has executed five contracts to start preparing for the
14 deployment of AMI, the Company still has not actually purchased or installed any
15 new AMI meters in the field, where they could be made used and useful to serve
16 Washington customers.⁹

17

18 **Q. What do you recommend based on the current set of circumstances and**
19 **testimony presented in the instant case?**

20 A. Staff recommends that the Commission again decline to make a prudence
21 determination pertaining to the AMI project. To allow or suggest pre-approval would
22 be counter to the Commission's prudence practice and would limit the Commission's

⁸ Rosentrater, Exh. No. ___ (HLR-1T) 31:6-7.

⁹ Cheesman, Exh. No. MC-17.

1 ability to hold the Company accountable after the fact for appropriate expenditures
2 and levels of expenditures for capital additions and operations. Nor should Avista be
3 allowed to recover costs in the current rate case for future investments in AMI
4 technology prior to such investments becoming used and useful to Avista's
5 Washington customers.

6

7 **Q. Does this conclude your testimony?**

8 A. Yes.

9

10