BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET UE-240006

DOCKET UG-240007

REBUTTAL TESTIMONY OF

JOSHUA D. DILUCIANO

REPRESENTING AVISTA CORPORATION

2

I. <u>INTRODUCTION</u>

- Q. Please state your name, employer, and business address.
- A. My name is Joshua D. DiLuciano and I am employed as the Vice President of
 Energy Delivery for Avista Utilities (Avista or Company), at 1411 East Mission Avenue,
 Spokane, Washington.
- 6

Q. Have you previously provided testimony in this case?

7 Yes. My direct testimony in this proceeding provided an overview of Avista's A. 8 electric and natural gas energy delivery facilities and explained the factors driving our 9 continuing investment in electric distribution infrastructure. I explained how our efforts to 10 maintain the asset health and performance of our electric transmission system, including 11 compliance with mandatory federal standards for transmission planning and operations, is 12 driving a continuing demand for new investment. Further, I described why our investments in 13 natural gas distribution are necessary in the timeframes completed and why each capital 14 investment in our operations facilities and fleet operations is needed to support efficient 15 delivery of service to our customers today, and into the future. Finally, I addressed the electric 16 and natural gas distribution, transmission, general plant, and fleet-related capital additions for 17 the periods July 1, 2023, through December 31, 2026.

18

Q. What is the scope of your rebuttal testimony?

A. My rebuttal testimony will respond to the testimony of Commission Staff
 (Staff) on electric distribution planning and investments in the electric distribution system,¹
 and the Sierra Club's testimony on non-pipe alternatives (NPAs).²

¹ Atitsogbe, Exh. SSAG-1T.

² Dennison, Exh. JAD-1T, at 19-31.

1	The following is a summary of the main points made within my rebuttal testimony:
2 3 4	• Avista's distribution planning process has been refined in response to policy changes in Washington state.
5 6 7	• Avista has incorporated the consideration of non-wire alternatives (NWAs) and distributed energy resources (DERs) into its planning processes.
8 9 10	• Avista bi-annually produces a ten-year plan for distribution system investments. This process allows for engagement with interested parties.
11 12 13 14	• Avista's strategy for a modern distribution system is to provide a diverse supply and resilient infrastructure that delivers reliable energy, withstand disruption, and expands to support the needs of our customers.
15 16 17	• DERs can provide value at specific locations in the electric system and Avista has begun incorporating the consideration of DERs.
18 19 20	• Avista has completed its first DER Potential Assessment and made progress on DER planning in compliance with RCW 19.280.100.
21 22 23	• Avista not achieving its 2022-2023 biennial conservation targets put no additional material strain on the Company's distribution system.
24 25 26	• Avista has historical experience with demand response programs and has additional pilots underway.
27 28 29 30	• Avista supports Staff's recommendation that Avista's provisional distribution investments be allowed into rates, however, does not support Staff's two conditions. ³
31 32 33	• Avista has complied with the requirement from its 2022 rate case settlement ⁴ regarding the consideration of NPAs into its gas planning processes.
34 35 36 37	• Although the Company has not performed any NPA analyses in Washington because it has not had any projects that have met its criteria or threshold for an NPA to be considered, it has completed NPA analyses in Oregon.
38 39 40 41	• Avista supports the adoption of the Oregon Public Utility Utilities Commission's (OPUC) NPA framework for pipeline capacity reinforcements not related to safety, compliance, or road moves, modified to incorporate compliance with the CCA. The Company does not support Sierra Club's

³ Atitsogbe, Exh. SSAG-1T at 24-30.
⁴ Dockets UE-220053 et. al, Order 10/04, Appendix A, p. 11.

1	proposal to assume all CCA allowances are purchased at the ceiling price	:e. ⁵
2 3	A table of the contents for my testimony is as follows:	
4	TABLE OF CONTENTS	
5	Description Pa	.ge
6		-
7	I. INTRODUCTION	1
8	II. DISTRIBUTION PLANNING AND INVESTMENTS	3
9	III. STAFF'S PROPOSED CONDITIONS ON DISTRIBUTION PLANNING	20
10	IV. NON-PIPE ALTERNATIVES	25
11		
12	Q. Are you sponsoring any exhibits in this proceeding?	
13	A. Yes. I am sponsoring the following exhibits associated with my rebuttal:	
14	• Exh. JDD-4 – 2023-2024 Avista System Assessment	
15	• Exh. JDD-5 – 2023-2024 Avista System Assessment Study Plan	
16	• Exh. JDD-6 – System Planning Challenges, Technology, and Non-Wi	res
17	Alterative Playbook	
18	• Exh. JDD-7 – Orin Capacity Mitigation Project Report	
19 20	 Exh. JDD-8 – Glenrose Capacity Mitigation Report Exh. JDD 0 – North Spokene Transmission Reinforcement Study 2023 	
20 21	 Exh. JDD-9 – North Spokale Transmission Remotement Study 2023 Exh. JDD-10 – Avista Distributed Energy Resources Potential Study Report 	rt
21 22		
23	II. DISTRIBUTION PLANNING AND INVESTMENTS	
24	Q. Does the Company agree with Staff witness Sofya Shafran Atitsog	gbe
25	Golo's (Atitsogbe) portrayal of the Company's electric distribution system investme	nts
26	prudency?	
27	A. No. Staff witness Atitsogbe is simply wrong when she states that:	
28	Avista has failed to present sufficient evidence to establish the prudency of	
29	its electric distribution system investments because the Company has not	
30	complied with many of the planning requirements relevant to its distribution	
31	system and has not offered sufficient evidence supporting the specific	

⁵ Dennison Exh. JAD-1T at 29:13-19.

1	distrik	oution investments included in this rate case. ⁶
2	Q.	Would you agree that Avista fully meets the prudence standard described
3	by witness A	titsogbe?
4	А.	Yes. Witness Atitsogbe cites four items as a threshold of prudence, which
5	include:	
6 7 8 9	1. Dei 2. Eva 3. Inv 4. Add	monstrated need for a project; aluation of alternatives; olvement of the Board of Directors in the decision process; and, equate documentation. ⁷
10	The Compan	y has demonstrated in its original testimony and exhibits, and again in our
11	rebuttal testir	nony and exhibits, that it has a robust planning standard the sets the foundation
12	for (1) the n	eed for projects it undertakes, (2) a review of alternatives, including in the
13	Business Cas	es included in this case, and (3) adequate documentation as demonstrated in what
14	has been pro	vided in this case. As it relates to involvement of the Board of Directors, the
15	purpose of th	e Board of Directors is not to manage the day-to-day affairs of the business –
16	that is the ro	le of the utility management (and in this case, my leadership for electric and
17	natural gas di	stribution). That said, the Board does approve the level of capital Avista invests
18	on behalf of i	its customers and approval of the capital budget and is otherwise kept apprised,
19	through the F	Finance Committee, of ongoing investment throughout the year. And, in certain
20	circumstance	s as appropriate, such as with critical projects or programs (e.g., wildfire
21	mitigation), t	he Board receives detailed briefings.
22	Q.	Please describe how Avista's distribution planning process has been

23 refined in response to policy changes in Washington State.

 ⁶ Atitsogbe, Exh. SSAG-1T at 2:15-19.
 ⁷ Id. at 13:1-8.

A. Avista's distribution planning process is intended to plan, design, construct, and operate the electric distribution system to assure continuity of service throughout a range of system scenarios and disturbances. The passing of Washington Engrossed House Bill 1126 in 2019 highlighted the increased focus on the impacts of DERs across the distribution system. Since the enactment of RCW 19.280.100, Avista has been refining its distribution planning process. Figure No. 1 below shows the planning process developed in response to the enactment of RCW 19.280.100.







The process includes consideration of the need for a Distribution Resource Plan, integration with the existing Integrated Resource Plan (IRP) processes and interested parties' involvement to contribute towards the selection of the most prudent corrective action plans for issues on the distribution system. Improvements to forecasting methodologies for both customer demand and growth of DERs are also part of this approach.

1 Further improvements to the distribution planning process as depicted in Figure No. 1 2 below led to a joint project with Avista and Modern Grid Solutions (MGS).⁸ The project's context 3 was in line with Avista's stated goal: "In April 2019, Avista announced a goal to be carbon neutral 4 by the end of 2027 and to have a 100% clean electric supply by 2045".⁹ While Avista was already 5 performing many of the steps needed to attain these goals, additional effort required the integration 6 of new approaches, such as NWAs, and aligning planning decisions and projects. MGS was asked 7 by Avista to develop an NWA/DER Playbook and an overall high-level operating model. Figure 8 No. 2 below provides a visual depiction illustrating the operating model which was developed.



⁸ <u>https://moderngridsolutions.com/</u>. Modern Grid Solutions is an energy consulting firm with the stated vision to provide expert advice on modern grid design by seamlessly bridging the gap between the specialized 'Smart Grid' and everyday grid practices. They help clients realize a truly transformed energy network and create value for all their stakeholders.

⁹ As discussed in Avista witness Jason Thackston's testimony, Exh. JRT-1T at 5, in December 2023, the Company adjusted its electric and natural gas system goals to support alignment with CETA and the CCA, to recognize the pace of technological advances and the related costs, and to align tracking of its goals with the integrated resource planning process. Accordingly, the Company's clean energy goals are to provide clean electric energy sources equivalent to 100 percent by 2045 and be carbon neutral on the natural gas side by 2045.

- 1 The operating model shown in Figure No. 2 highlights Avista's alignment with the 2 Legislature's vision of a modern grid that is flexible, resilient, DER-ready, and equitable, 3 contrary to witness Atitsogbe's assertions.¹⁰
- 4

Q. Please elaborate on how Avista incorporates the consideration of NWAs into the planning process.

6 A. As stated in RCW 19.280.100 regarding a distribution plan, "the goal of the 7 plan should be to provide the most affordable investments for all customers and avoid reactive 8 expenditures to accommodate unanticipated growth in distributed energy resources. An 9 analysis that fairly considers wire-based and non-wires alternatives on equal terms is foundational to achieving this goal."¹¹ There has been a focus on NWAs and DERs, as a subset 10 11 of NWAs, by policy makers and other parties over the past several years. Some portions of the 12 Country have been shown to already have high penetration of DERs, primarily roof-top and small 13 utility-grade solar generation facilities. Avista has not yet seen a high impact of DERs within its 14 service territory but is considering what the impacts will be if penetration increases.

The economic evaluation of the costs and benefits of alternatives will help ensure Avista continues to select optimal solutions. Implementing pilot projects, such as the Connected Communities project discussed in Exh. JDD-1T and later in my rebuttal, which include nontraditional methodologies and equipment, will allow Avista to gain a better understanding of the associated costs and benefits. This effort shows that we are, in fact, "exploring and pursuing more cost-effective and energy-efficient alternatives, such as DERs", contrary to Witness Atitsogbe's assertions.¹²

¹⁰ Atitsogbe, Exh. SSAG-1T at 8:2-6. ¹¹ RCW 19.280.100(2)(e).

¹² Id. at 9:17-18.

Q. Does Avista have a ten-year plan for distribution system investments and an analysis of NWAs for major transmission and distribution investments?

2

3 A. Yes. Avista bi-annually produces a system assessment to achieve two primary 4 outcomes: 1) documentation of technical analysis results demonstrating system performance 5 and 2) development of conceptual solutions to mitigate operational issues to maintain 6 expected performance. The most recent system assessment, the 2023-2024 System 7 Assessment Version 0, dated November 17, 2023, is provided as Exh. JDD-4. It was also 8 provided to Commission Staff in response to Data Request 200. The system assessment was 9 developed following the 2023 Avista System Planning Assessment Study Plan which is 10 provided as Exh. JDD-5. The development of a system assessment report has been occurring 11 consistently since 2013. Prior to 2013, the planning process was less formalized, although the 12 same primary functions within the planning process were still occurring.

13 Through the study and project development process, alternatives are considered to 14 optimize the utilization of existing assets prior to investing in new capital additions. Examples 15 of optimization may include balancing load equally by phase on the distribution system, 16 transferring load from heavily loaded equipment to more lightly loaded equipment, installing voltage regulators, consideration of Remedial Action Schemes,¹³ and the development of 17 18 system operating procedures to modify system configuration under specific scenarios. In some 19 instances, these methods of optimization require system upgrades, such as a new connection 20 between feeders or installation of a voltage regulator. Enhanced situational awareness and 21 control of the grid, through use of advanced metering infrastructure, the distribution

¹³ Remedial Action Schemes are special protection systems designed to detect predetermined System conditions and automatically take corrective actions that may include, but are not limited to, curtailing or tripping generation or other sources, curtailing or tripping load, or reconfiguring a System.

management system and supervisory control and data acquisition systems, also contribute to 2 the ability to optimize utilization of existing assets.

Does Avista provide for the engagement of interested parties in the 3 0. 4 planning process?

5 Α. Yes. Engagement with third-party collaborators is a critical component to the 6 planning process. Engagement can also provide greater transparency, thereby increasing trust. 7 Following the completion of technical analysis which identifies system needs, parties are 8 encouraged to contribute input in selecting preferred mitigation alternatives.

9 There are presently two specific third-party engagement forums used in Avista's 10 planning process. The Distribution Planning Advisory Group (DPAG) was formed in 2023 to 11 meet the requirement of Condition 13 of Avista's 2021 Clean Energy Implementation Plan (CEIP). All existing advisory groups¹⁴ were invited to participate in the DPAG. The following 12 13 are the overarching goals of the DPAG: 1) develop a transparent, robust, holistic planning 14 process for electric system operations and investment; and 2) create a long-term plan to ensure 15 we are maximizing operational efficiency and customer value.

16 The second forum in Avista's planning process where parties are able to contribute is 17 defined in Attachment K – Transmission Planning Process of Avista's Open Access 18 Transmission Tariff, commonly referred to as "Attachment K.¹⁵" The process includes three 19 parts: 1) the Avista Local Transmission Planning Process (Local Planning Process), 2) the 20 NorthernGrid Enrolled Region Transmission Planning Process, and 3) Coordination with the 21 Interconnection Wide Planning Process (WECC). Specifically, in the Local Planning Process,

¹⁴ Avista Energy Efficiency Advisory Group, Energy Assistance Advisory Group, and Equity Advisory Group. ¹⁵ Avista Corporation FERC Electric Tariff Volume No. 8., Page 175, OATT 12.1.2023 (1).pdf (oati.com).

Avista hosts a Study Development Meeting to give participants the opportunity to provide
 comment for data gathering, and input into the study development. Following the study
 process, a Review of Study Results/Draft Transmission Plan Meeting is held where parties are
 encouraged to provide comments, including alternatives to the projects proposed in the draft
 Local Planning Report (System Assessment).

- 6
- 7

Q. Have participants of the DPAG and Local Planning Process shown engagement and contributed to the outcome of the planning process?

A. Because of its recent formation, the DPAG is still a maturing venue for interested parties and Avista staff to collaborate. Meetings have been hosted virtually with participants mostly representing the Commission, government-funded agencies, and Avista. To date, the most interest expressed by participants was in the assumptions of the DER Potential Assessment.

13

Q. What is Avista's vision and strategy for a modern distribution system?

A. As electricity demand is increasing, the energy sources we use to create electricity is shifting to renewable resources, which perform differently than traditional generation facilities. It is generally understood the combination of electrification, shift to renewable generation portfolio, and customer DERs requires a refreshed vision and strategy by Avista to avoid reactive expenditures and ensure we enable vibrant communities.

Avista's strategy is to provide a diverse supply and resilient infrastructure that delivers reliable energy, withstand disruption, to support the needs of our customers. Opportunities aligned with the strategy include designing for resiliency and disaster response, maintaining and upgrading current systems, and growing capacity.

23

Included in my exhibit JDD-2, p. 80-87 is a Business Case directly related to these

1 efforts, called UIASSIST. As described in that Business Case, Avista is leveraging its 2 Innovation Lab, located in Spokane, by partnering with universities, national laboratories, 3 solutions providers, and other utilities. This project refined the design for the microgrid at 4 Washington State University, such that other microgrids can be deployed in a standard manner 5 while accounting for operational concerns. The results of this project will help inform the 6 interconnection process, hosting capacity assessment methodologies, and planning for NWAs 7 with clear expectations for DER behavior.

8

9

As Avista plans for the future to meet capacity constraints and growth, is 0. it possible for DERs to mitigate identified system needs?

10 A. Yes, DERs can provide value at specific locations in the electric system. 11 Industry literature has been focusing on how DERs are able to defer and potentially eliminate 12 the need for traditional system investments to mitigate identified system needs. The definition of DER¹⁶ encompasses a broad set of technologies. Avista's work with MGS to create an 13 14 NWA/DER Playbook was intended to categorize specific types of DERs and their technical ability 15 to address various types of system needs. The playbook is provided as Exh. JDD-6.

- 16 О. Does Avista have planning documents that include an assessment of 17 **DERs**?
- 18

A. Yes, it does. Avista's project development process includes the evaluation of 19 alternatives to mitigate system needs. Examples of recent project reports provided in Exh. 20 JDD-7 Exh. JDD-8, and Exh. JDD-9 demonstrate the consideration of DERs, specifically

¹⁶ WAC 480-100-605: Distributed energy resource means a non-emitting electric generation or renewable resource or program that reduces electric demand, manages the level or timing of electricity consumption, or provides storage, electric energy, capacity, or ancillary services to an electric utility and that is located on the distribution system, any subsystem of the distribution system, or behind the customer meter, including conservation and energy efficiency.

1 b 2 e

3

battery technologies, as a possible alternative to traditional infrastructure investments. These examples represent projects planned to be executed beyond the proposed multiyear rate plan but show the trend of future consideration to non-traditional mitigation methods.

Exh. JDD-7 is a project report for a system need identified in the Colville area. A nearterm mitigation alternative was considered to install a battery along a feeder to reduce loading on a substation transformer. In Exh. JDD-8, both residential rooftop solar and batteries were considered as alternatives to mitigate capacity constraints on a substation located in South Spokane. The third example provided in Exh. JDD-9 is a system need identified on the transmission system located in North Spokane where batteries were considered as a potential solution.

Q. Has Avista completed the DER Potential Assessment as required by Condition 14 of its CEIP, contrary to the assertions of Witness Atitsogbe?¹⁷

A. Yes, Avista's DER Potential Assessment, included as Exh. JDD-10, was published on June 17, 2024. The primary objectives of the study were to develop reasonable estimates for new customer generation, battery energy storage, and electric vehicles on a localized basis within Avista's Washington electric service territory, and to investigate the effects of such DERs in Highly Impacted Communities or Vulnerable Population areas. A summary of results is shown in Figure No. 3.

¹⁷ Atitsogbe Exh. SSAG-1T at 16:5-8.

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105

33

Assessmen	<u>it</u>	itto Stilling,	<u>Reference</u> <u>Sec</u>		
Resource	Nameplate Capacity (MW)	Annual Load Impact (GWh)	Share of Nameplate Capacity in Named Community ³	July Peak Load Impactª (MW)	Decembe Peak Loa Impactª (MW
Customer Solar	105	-127	46%	-33	

2

-0.3

853

841

206

58%

45%

38%

67%

60%

-3

-0.1

62

101

33

1 3 – 2045 Results Summary, Reference Scenario from DER Potential Figure No.

11 12

7

8

9

10

Customer Battery

Storage Customer

Wind Residential

EVSE Fleet EVSE

EVSE

Public and Workplace

a.

The term "peak" refers to a planning peak beginning at 17:00 and ending at 18:00 local time.

96

1

1,544

692

171

13 The results of the study are intended to be incorporated into technical studies for the 14 2024-2025 System Assessment. It is assumed the impacts from the forecasted electric vehicles 15 will contribute to the identification of additional system needs, which may not have been 16 captured in previous assessments. Total load impact of electric vehicles in the Washington 17 service territory is projected to be 196 megawatts during a summer peak and 200 megawatts 18 during a winter peak by 2045. Investment decisions will be necessary to mitigate the newly 19 identified system needs. As identified in the DER Potential Assessment report, direct load 20 control and time-of-use rates "will become increasingly important as Avista develops its strategy for managing the growth of charging loads in its service territory"¹⁸ and should be 21 22 considered as a mitigation alternative.

23

Is Avista complying with RCW 19.280.100 regarding DER planning? Q.

¹⁸ DiLuciano, Exh. JDD-10 at 15.

1	A. Yes. Both prior to and following Washington House Bill 1126 becoming
2	effective on July 28, 2019, Avista has been making progress on meeting the policy outlined
3	in RCW 19.280.100. Activities such as the DER Potential Assessment, deployment of smart
4	devices with grid monitoring capability, advancements in utilizing Advanced Metering
5	Infrastructure data, and continued publication of a ten-year plan are examples of Avista
6	engaging in the process to prepare for the distributed energy future. Additionally, Chapter 5
7	of Avista's 2023 Electric IRP contains information related to DERs and data specific to
8	Avista's service territory. Avista disagrees with witness Atitsogbe's assertions that "Avista
9	has failed to make any additional headway to fulfill the Legislature's detailed distribution
10	planning expectations laid out in RCW 19.280.100 and the Commission's requirement
11	codified in WAC 480-100-620." ¹⁹
12	Q. Would you provide examples of proposed distribution investments
13	included in the GRC which contribute to Avista's vision for a modern distribution
14	system?
14 15	system?A. Avista will be installing several technologies in 2025 and 2026, which will
14 15 16	system? A. Avista will be installing several technologies in 2025 and 2026, which will prepare the system to better handle a more distributed and digitized energy future. Investments
14 15 16 17	system? A. Avista will be installing several technologies in 2025 and 2026, which will prepare the system to better handle a more distributed and digitized energy future. Investments will enhance situational awareness and control of the grid to allow for management of
14 15 16 17 18	system? A. Avista will be installing several technologies in 2025 and 2026, which will prepare the system to better handle a more distributed and digitized energy future. Investments will enhance situational awareness and control of the grid to allow for management of distributed assets in ways that benefit both transmission and distribution system utilization.
14 15 16 17 18 19	system? A. Avista will be installing several technologies in 2025 and 2026, which will prepare the system to better handle a more distributed and digitized energy future. Investments will enhance situational awareness and control of the grid to allow for management of distributed assets in ways that benefit both transmission and distribution system utilization. Projects with these investments as part of their scope include the Advanced Distribution
14 15 16 17 18 19 20	system? A. Avista will be installing several technologies in 2025 and 2026, which will prepare the system to better handle a more distributed and digitized energy future. Investments will enhance situational awareness and control of the grid to allow for management of distributed assets in ways that benefit both transmission and distribution system utilization. Projects with these investments as part of their scope include the Advanced Distribution Management System (ADMS), Connected Communities, and the Solar Plus Storage

ADMS is a foundational technology required for situational awareness, operation and

¹⁹ Atitsogbe, Exh. SSAG-1T at 16:8-11.

automation related to distributed energy resources. As part of the ADMS project, Distributed
Energy Resource Management (DERM) approaches will be evaluated and demonstrated in
conjunction with the ADMS, showing how the system will provide the flexibility to support
new approaches like non-wires alternatives and grid energy efficiency utilizing Distributed
Energy Resources (DER).

6 The Connected Communities program, part of a grant from the Department of Energy, 7 will demonstrate the benefits of coordinating DERs such as grid-enabled and efficient 8 buildings and energy storage. Customer DERs and utility DERs will provide location-specific 9 grid services via a distributed grid control framework called OpenDSO. The program has been 10 discussed at multiple EEAG meetings and mentioned in the last three Annual Conservation 11 Plans (2022, 2023, and 2024).

The MLK Community Center Microgrid will install energy storage and distribution upgrades to coordinate resilient operation of the building, storage and solar. Resilience applications include distribution infrastructure peak load management during extreme weather (heat or cold) and "islanded" operation as a community resilience center during grid outages. The system will be integrated with Avista's ADMS and operated by Distribution Operations. The project is also partially funded by the 2021 CEIP's Named Communities Investment Fund and Connected Communities Business Case.

19

20

Q. Do you agree with Witness Atitsogbe's assessment of "radial" distribution systems?

A. No. Avista's distribution system is primarily a radial system with the exception of the downtown Spokane area which is operated as a network system. Within urban areas, the radial system is also interconnected with normally open switch points which creates a

network of distribution feeders. The concept of a radial system allowing for a "cascading disruption effect"²⁰ is not accurate as the network of distribution feeders can be used to quickly restore service. With the deployment of Avista's Fault Detection Isolation Restoration program in the early 2000's, the major metropolitan area of Spokane can have service restored automatically following the isolation of the failed equipment.

6 Some concepts to improve the use of a radial system include reinforcing the 7 infrastructure. Investments spent on hardening the grid, including targeted undergrounding, 8 tree trimming, pole replacement, and other physical upgrades, can make the grid more resilient 9 to the threats and contribute to the speed of recovery.²¹

10Q.Do you agree with Staff's assertion that "Avista's failure to meet its most11recent biennial conservation target indicates limited success in implementing effective12measures promoting energy efficiency and could contribute to the strain facing the13Company's distribution system."?22

A. No, I do not. First, prior to the 2022-2023 biennium, Avista had never missed an EIA biennial target since the conservation provisions of RCW 19.285 became effective in January 2010. Second, as reported in the 2022-2023 Biennial Conservation Report (BCR), Avista achieved 74,372 MWh of verified savings toward the Energy Independence Act (EIA) Penalty Threshold of 91,054 MWh. This equates to 82% of the target. It is important to note the adaptive management that Avista employed in an attempt to reach the biennial target had significant impacts. After 2022 savings were reported as 23,021 MWh, several new programs

²⁰ Atitsogbe, Exh. SSAG-1T at 9:5 and 15:4.

²¹ Mark Dyson & Becky Xilu Li of Rocky Mountain Institute, *Reimagining Grid Resilience* at 17-27 (2020), page 40.

²² Atitsogbe, Exh. SSAG-1T at 20:3-6.

2

were launched, resulting in 2023 savings of 51,354 MWh. Avista's energy efficiency programs have been robust and adaptively managed with an eye to cost-effectiveness.

2

3 Several factors converged during the biennium that were extraordinary in nature and 4 unforeseen by the Company. Washington State's emergency orders to slow the spread of the 5 COVID-19 were not lifted until the end of October 2022. These orders, while in place, 6 effectively eliminated in-person contact between Avista and its customers and significantly 7 diminished energy efficiency projects. Supply chain issues hampered distributors and 8 suppliers from stocking energy efficient equipment, and labor shortages impacted installers. 9 As the impacts from the pandemic began to resolve in 2023, high interest rates and inflation 10 contributed to a reluctance for businesses to invest in capital intensive energy efficiency 11 projects.

Lastly, the result of Avista not meeting its 2022-2023 biennium conservation targets put no additional material strain on the Company's distribution system as compared to if Avista had achieved its targets.

15

Q. Please explain Avista's experience with demand response programs.

A. Demand response has been studied in Avista's IRPs since the 2015 IRP but has not been selected as a cost-effective resource at any point in history. Avista's time-of-use pilots that were prescribed in the settlement stipulation of the Company's 2020 general rate case are currently underway.

Additionally, Avista has run several demand response pilot programs since 2001. In response to the energy crisis, Avista offered an all-customer buyback program and a separate irrigation buyback program. Avista also negotiated several bi-lateral agreements with large industrial customers for voluntary curtailment. In 2006 and 2021, Avista invoked immediate

demand response through media and public requests to conserve energy for various capacity
constraints due to high temperatures. In 2007, Avista ran a residential load control pilot, which
ran for two years. In 2010, Avista ran residential and commercial demand response pilots,
which were part of its smart grid demonstration project, which ended in 2014. Avista also has
an ongoing bilateral demand response agreement, which was signed in 2022, for curtailment
with a large industrial customer.

7

8

9

Q. Avista is implementing a new Advanced Distribution Management System. With the proposed benefits of the project on DER implementation, please explain the proposed timeline and effects to advancing DER integration.

10 A. Avista's Business Case for the Outage Management System and Advanced Distribution Management System (OMS/ADMS) project²³ states the existing Distribution 11 12 Management System "marginally meets the current business needs but will not meet future 13 needs for additional distribution grid automation and Distributed Energy Resources 14 requirements to meet customer choice and Clean Energy Transformation Act requirements."²⁴ 15 The new system is proposed to have functionality to support DER Management, which may 16 include a combination of aggregate DER management and demand response programs. Many 17 forms of DERs, however, can be integrated on the distribution system without the 18 implementation of the new system.

19

Q. Would you please summarize your testimony thus far and how you believe

20 21

A. Yes. In the end, Witness Atitsogbe argues²⁵ that Avista has:

Rebuttal Testimony of Joshua D. DiLuciano Avista Corporation Dockets UE-240006 and UG-240007

it fully rebuts witness Atitsogbe's conclusions?

²³ Manuel, Exh. WOM-2 at 321-340.

²⁴ Id at 321.

²⁵ Atitsogbe, SSAG-1T at 24:1-9.

1 2 3	(1) failed to include sufficient DER assessments in any of its recent planning documents,
4	(2) not yet completed a DER potential study to inform its investment decisions,
5	
6	(3) failed to offer any evidence that it is engaging in the planning process
7	contemplated by the Legislature in RCW 19.280.100,
8	(4) follow wall show of its most report concernation terrate and
9	(4) Tanen wen short of its most recent conservation targets, and
10	(5) presented pehylous distribution investments for the proposed MVPD which wholly
11	(5) presented neotious distribution investments for the proposed with Ki which whony lack an accompanying analysis of non-wires alternatives and do not appear to be a
12	nart of a larger strategy to bring Avista's distribution planning and grid up to
13	modern standards
15	
16	These arguments are without merit, because:
17	
18	(1) Avista has provided sufficient DER assessments as discussed. The DER Potential
19	Assessment, deployment of smart devices with grid monitoring capability,
20	advancements in utilizing Advanced Metering Infrastructure data, and continued
21	publication of a ten-year plan are examples of Avista engaging in the process to
22	prepare for the distributed energy future. Additionally, Chapter 5 of Avista's 2023
23	Electric IRP ²⁶ contains information related to DERs and data specific to Avista's
24	service territory.
25	
26	(2) Avista has completed a DER potential study – see Exh. JDD-10,
27	
28	(3) Avista has provided evidence that it is engaging in the planning process
29	contemplated by the Legislature in RCW 19.280.100,
30	
31	(4) Avista has, through adaptive management, overcome many of the effects of the
32	COVID-19 pandemic and resulting effects on inflation, supply chain, return to
33	work, and many other factors affecting energy efficiency adoption, and
34	
35	(5) <u>Avista has proposed</u> distribution investments for the proposed MYRP which are a
36	part of a larger strategy to enhance Avista's distribution planning efforts.

²⁶ Kinney, SJK-2 at 106-127.

- STAFF'S PROPOSED CONDITIONS ON DISTRIBUTION PLANNING 2 Please summarize Staff's proposed conditions relating to the Company's О. 3 distribution Planning. 4 Staff recommended "the Commission tentatively allow Avista's provisional A. 5 distribution capital additions into rates as part of this MYRP, subject to two conditions that 6 will establish the prudency of Avista's distribution investments and ensure that the Company's distribution system planning aligns with state policy."²⁷ Staff's two proposed conditions are 7 as follows:²⁸ 8 9 1. By March 31st following the completion of each calendar year, as proposed by Avista's witness Benjamin, Avista must produce and concurrently file evidence of 10 prudence of the incurred costs. This evidence must include a comprehensive 11 12 financial analysis of alternatives and outline the dates when the Company re-13 evaluated the projects and the results of such a re-evaluation for projects with a 14 duration longer than two years. 15 16 2. For the Company's 2025 electric IRP, Avista must update its chapter on distribution planning according to Staff's proposed additional requirements 17 18 outlined below and file it no later than June 1, 2025. 19 Q. Do you agree with Staff's recommendation and conditions? No. While the Company supports Staff's recommendation that Avista's 20 A. 21 provisional distribution investments be allowed into rates, it does not support Staff's two 22 conditions. 23 Q. Please describe your concerns with Staff's Condition 1. 24 A. Staff proposes an extensive list of documentation for the Company to provide 25 for five preceding years of distribution system investments. These include providing financial 26 data regarding Avista's distribution system investments by categories, "data on and a
 - ²⁷ Id. at 24:18-21.

III.

²⁸ Id. at 24-30.

1 discussion of Avista's distribution system operation and maintenance expenses", and a "five-2 year long-range forecast of distribution system capital investments and operational and maintenance expenses".²⁹ The Company already provides thousands of pages of 3 4 documentation to support capital investments when filing a general rate case and then provides 5 hundreds of pages of additional documentation as part of the provisional review proceeding, 6 showing the investments as used and useful. A Business Case justification narrative (e.g., 130 7 Business Cases in this case) is filed as part of a general rate case for every capital investment 8 the Company includes on a pro-forma or provisional basis. This document includes an overall 9 executive summary, project drivers, alternatives considered, offsetting factors, project 10 ownership and oversight, and references to additional supporting documents that may be 11 available. Then, when the capital investments are placed into service, the Company files a report which provides a description of any variances³⁰ that have occurred in the period, 12 13 discussion of management oversight for variances, updating any offsetting factors, attaches 14 supporting documentation and updated Business Case justification narrative if changes have 15 occurred for the period.

In short, the Commission already has before it a wealth of information supporting each project. To request the Company to provide the additional level of detail that Staff recommends for <u>all</u> distribution capital investment would be an additional and unnecessary burden on the Company. Importantly, the parties can also make extensive use of the discovery process if they have additional concerns about any Business Cases.

21

On July 25, 2024, Avista received its second compliance letter in Dockets UE-220053

²⁹ Atitsogbe, SSAG-1T at 26:3-23.

 $^{^{30}}$ Avista has defined variances for automatic reporting as +/-\$500,000 and 10% of the planned investment in the year.

et al., where Staff opines that the Company's 2023 provisional capital report was compliant.
Staff reviewed the Company's compliance filing, and found "the report, accompanying
workpapers, and follow-up discussions show the provisional plant identified in the report to
be known and measurable, used and useful, and prudent."³¹ This was the second compliance
filing found to be sufficient <u>by Staff</u>, demonstrating that the Company is already providing
sufficient information for Staff to review and determine prudency through the Provisional
Reporting process.

8 With the information already being provided through the general rate case process and 9 in the accompanying provisional capital review, Staff's request for the additional list of 10 information specific to distribution investments is unnecessary. The Company is always more 11 than willing to provide any additional information Staff determines it needs during the 12 pendency of a general rate case and within the provisional capital review process, when 13 specific questions arise.

14

Q. Please describe your concerns with Staff's Condition 2.

A. Staff's proposed second condition requires the 2025 IRP to include additional analysis that is not possible to include, given the current schedule of the 2025 IRP and this proceeding. This analysis would include extensive information on "DERs in Avista's distribution system" and "grid development scenarios".³² The draft of the 2025 IRP will be filed with the Commission on September 2, 2024 (less than three weeks after the filing of this testimony), the rate effective date in this case is December 21, 2024, and the final draft of the IRP is due on January 2, 2025. As such, if the Commission approves of Staff's Condition 2,

³¹ Dockets UE-220053, UG-220054, & UE-210854 (*Consolidated*), Letter from Commission Staff, July 25, 2024.

 $^{^{32}}$ Atitsogbe, SSAG-1T at 27:21 - 29:14.

- it is simply not possible to include the requested analysis in the 2025 IRP. And requiring an
 updated chapter to the 2025 IRP on June 1, 2025, would require a refiling of the 2025 IRP,
 after work has already been started on the 2027 IRP.³³
- 4

Q. Would Avista otherwise agree with Condition 2 if it was to be included in its two-year IRP update or 2027 IRP?

6 Α. No, it would not. First, the IRP is not the appropriate place to provide 7 distribution level data and to address all system delivery planning challenges. The IRP's 8 emphasis should continue to be focused on developing a resource plan to meet system loads, 9 without becoming a plan for the delivery of energy on the distribution system. There is already 10 an array of "new" requirements added to the IRP for Clean Energy Transformation Act 11 (CETA) compliance, Climate Commitment Act (CCA) compliance, equity and other issues 12 that have stretched the IRP process to a level of complexity and detracted from its essential 13 focus on resource planning. Furthermore, Avista created a DPAG that is better suited, in any 14 event, to handle the elements proposed in Condition 2, as discussed above.

Second, the electric IRP should consider the Distribution System Plan, only if and where it impacts the resource strategy. Avista already exceeds this requirement by not only including DERs in its plan when known, but it also forecasts economic net benefits and projects tied to Named Community Investments in DERs in an effort to account for the potential resource additions.

20

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In short, the IRP should not morph into a combined delivery and power plan, that detracts from its essential focus on resource planning.

³³ Although an IRP is due every four years in Washington, the Company must prepare a two-year update for Washington and full IRP for the State of Idaho every two years.

2

Q. Regarding the specifics of Condition 2, please share your thoughts on each part.

A. Part 1 requests data of DERs on the system, including those not owned by Avista.³⁴ Avista already provides much of this information in its CEIP reporting of CBIs and it can otherwise be requested at any time by the Commission, as required.

Part 2 implies the IRP should study scenarios in the IRP regarding DERs.³⁵ IRP 6 7 scenarios are determined by Avista's recommendations and by TAC participants. During the 8 2025 IRP process, neither Staff witness Atitsogbe nor other participating Staff, proposed any 9 of these scenarios, even though they had the opportunity to do so. Avista already conducts a 10 high DER penetration scenario in the IRP as part of meeting the requirements of the Maximum Customer Benefit scenario.³⁶ This scenario shows the impacts to the resource strategy and 11 12 additional costs to the power supply system. The IRP does not model the distribution delivery 13 system or have the capability within the IRP modeling process. Impacts to the distribution 14 system is not part of the IRP.

- 15 The IRP does not directly help determine if investing in additional DERs is cost-16 effective for the delivery system or elevate local system issues. The IRP is not a process where 17 every customer, line, and substation is modeled; it is high-level resource planning process.
- 18

Q. How does Avista account for DERs such as solar and storage in the IRP?

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A. Avista models both small scale solar and storage as resource options to meet overall power needs of the system. It includes the cost of potential resources and the benefits to the bulk power system. Given the IRP is modeling the total system, it can only include

³⁶ WAC 480-100-620(10)(c).

³⁴ Atitsogbe, Exh. SSAG-1T at 27:22 – 28:13.

³⁵ Id. at 28:14 – 29:14.

average financial impacts of improving the delivery system. Further, if Avista knows of a
 material DER investment or a need determined within the distribution plan, it would include
 the resource in the plan as a fixed resource.

4

5

Q. Does Avista agree with the request to evaluate DERs as a substitution of traditional investment in the distribution system?³⁷

A. Avista should only study DER solutions if the DER can actually resolve the delivery system deficiency. Not every distribution level problem can be solved with DERs; moreover, the addition of DERs provides another possible point of failure on the distribution system that must be considered. If Avista determines a DER can solve the problem, then and only then, should a study be conducted to determine if the DER is lower cost than a traditional solution. In this case, using the IRP's information regarding the DER's avoided cost should be used.

13

Q. How can the Electric IRP assist distribution planning?

A. Results from the Electric IRP can help determine if DERs are cost-effective when evaluated on a case-by-case basis. The IRP produces avoided costs, which can be used to evaluate the financial aspects of non-delivery benefits of the DER.

- 17
- 18

IV. <u>NON-PIPE ALTERNATIVES</u>

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Q. Please respond to Sierra Club's claims that Avista has not performed any NPA analyses as required by its 2022 rate case settlement.³⁸

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A. The rate case settlement did not require that any NPA analyses be performed;

³⁷ Atitsogbe, Exh. SSAG-1T at 9:15-18.

³⁸ Dennison, Exh. JAD-1T at 24:14-19.

- 1 rather, the settlement required that the consideration of NPAs be incorporated into gas
- 2 planning. The settlement term states:

Avista shall integrate the consideration of "non-pipe alternatives" in its gas 3 4 distribution planning process. "Non-pipe alternatives," at minimum, shall 5 include the use of demand-side management ("DSM") measures, including but 6 not limited to building envelope efficiency measures, electrification, and gas demand response programs. Avista must discuss its consideration of "non-pipe 7 8 alternatives" within its future natural gas Integrated Resource Plans ("IRPs") and agrees to discuss with its Energy Efficiency Advisory Group ("EEAG") 9 how DSM measures or programs may best be used as a "non-pipe alternative."³⁹ 10

- 11 Avista has indeed incorporated a methodology for incorporating NPAs into gas planning, as
- 12 described below. Sierra Club is correct that no NPA analyses have been performed in
- 13 Washington since approval of the settlement from the 2022 rate case, however, this is because
- 14 the Company has not had any projects that have met its criteria or threshold for an NPA to be
- 15 <u>considered</u>. If and when such a project arises, the Company will consider NPAs.
- 16

Q. Has the Company complied with this settlement provision to incorporate

- 17 NPAs into its gas distribution planning processes?
- A. Yes, it has. Avista's gas distribution planning process includes an evaluation of non-pipe alternatives (NPAs) when considering reinforcement alternatives not related to safety, compliance, or road moves that exceed \$500,000. This process and methodology was presented to the Company's EEAG (Energy Efficiency Advisory Group) at its Fall 2023 meeting. At that time, no advisory group members expressed concern or offered suggestions on altering the proposed methodology.
- 24

Has the Company performed any NPA analyses in its other jurisdictions?

- 25
- Yes, the Company has completed NPA analyses in Oregon. For example, one

Avista Corporation

Q.

A.

³⁹ Dockets UE-220053 et. al, Order 10/04, Appendix A, p. 11.

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1 such analysis was performed in Sutherlin, Oregon, where a large customer requested new 2 service. An NPA analysis was completed to evaluate alternatives to distribution system 3 upgrades to support this new load. This analysis considered recommended guidelines from 4 the Staff of the OPUC for NPA analysis, specifically, electrification, demand response, and 5 targeted energy efficiency as performed by the Energy Trust of Oregon (ETO). The study 6 results showed targeted energy efficiency quantities were insufficient to offset the additional 7 volumes of gas demand. In addition, electrification was over 250% of the cost to upgrade the 8 gate station while demand response would not address a daily supply shortage, nor was it cost 9 effective.

Q. Avista is currently developing its 2025 Natural Gas IRP. As part of that process, has the Company reviewed its NPA methodology with its Technical Advisory Committee (TAC)?

- A. Yes, we have. The NPA methodology as required by the OPUC was presented to the Technical Advisory Committee (TAC) on June 5, 2024. To date, no comments or suggestions have been received from our TAC members suggesting an alternative set of guidelines for NPA analysis.
- 17

18

Q. Can you please summarize what the Sierra Club has recommended in an effort to improve Avista's NPA analysis in Washington?

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A. Sierra Club has proposed that "the Commission require Avista to implement the Oregon PUC's NPA framework in Washington, as set forth in Attachment C to PUC Staff's comments on Avista's 2023 IRP, with a few modifications."⁴⁰ The modifications include changing references from the Oregon Climate Protection Program to the Washington

⁴⁰ Dennison, Exh. JAD-1T at 29:10-12.

Climate Commitment Act and assuming all CCA allowances are purchased at the price ceiling and setting the project cost threshold for when to perform an NPA analysis at no higher than \$500,000. In addition, Sierra Club asks the Commission to "direct Avista to perform NPA analyses for at least five gas infrastructure projects in its next IRP, even if not all of these projects are growth-driven projects that exceed a \$500,000 threshold."⁴¹

6

Q. Can Avista support Sierra Club's recommendations?

7 Avista supports the adoption of the OPUC's NPA framework for pipeline A. 8 capacity reinforcements not related to safety, compliance, or road moves, modified to 9 incorporate compliance with the CCA, in lieu of the CPP. However, Avista does not support 10 Sierra Club's proposal to assume all CCA allowances are purchased at the ceiling price. Contrary to the belief of Sierra Club witness Dennison,⁴² Avista witness Bonfield discusses 11 that the CCA does allow for an allowance-based compliance strategy.⁴³ As such, requiring an 12 assumption that allowances will be purchased at the ceiling price is not realistic or appropriate. 13 14 The following outlines what Avista does support adopting in this case: 15 a. Upon the rate-effective date, NPA analysis will be performed for supply-side resources and for distribution system reinforcements and expansion projects not 16 related to safety, compliance, or road moves, that exceed a threshold of \$500,000 17 18 for individual projects or groups of geographically related projects. 19 20 i. "Supply-side resources" includes but is not limited to all resources upstream 21 of Avista's distribution system and city gates, and supply-side contracts. 22 23 "Geographically-related projects" means a group of projects that are ii. 24 interdependent or interrelated. 25 26 b. If a NPA is not selected, Avista will include the NPA analysis as part of the 27 justification when it seeks recovery of the resource addition or distribution system 28 reinforcement or expansion in a rate case.

⁴¹ Id. at 30:10-12.

⁴² Dennison, Exh. JAD-1T at 29:13-19.

⁴³ Bonfield, Exh. SJB-5 at 51-53.

1				
2	с.	Th	e NPA	analysis conducted for projects will include all the elements:44
3				
4		1.	Future	distribution system planning should identify the rationale for projects
5			as eith	er Safety/General System Reliability, or Customer Growth/Reliability
6			Relate	d to Growth.
7				
8			i	When proposing growth-driven projects in IRPs the utility should be
9			1.	prepared to present project data on relationship to CCA compliance
10				strategy modeling and verified measurement local load forecast and
10				assessment of alternatives through the NPA framework
11				assessment of alternatives through the TATA framework.
12		r	Futura	distribution system planning should include an NPA framework in
13		۷.	Washi	noton. The framework should include:
14			vv asiii	ngton. The framework should metude.
1J 16			;	NDA analysis will be performed for supply side resources (these
10			1.	include but are not limited to all recourses unstream of Avisto's
17				distribution system and situ setes, and supply side contracte) and for
10				distribution system and city gates, and suppry-side contracts) and for
19				a threshold of \$500,000 for individual projects or groups of
20				a intestion of \$500,000 for individual projects of groups of
21				internal and an intermelated)
22				interdependent or interretated).
23			::	NDA analysis will include cost han of the analysis that not loots on availed
24			11.	NPA analysis will include cost benefit analysis that reflects an avoided
25				GHG compliance cost element consistent with a nign-cost estimate of
26				inture alternative fuels prices. Non-Energy impacts must be included
27				as part of the NPA analysis.
28				
29			111.	NPA analysis will include electrification, targeted energy efficiency,
30				targeted demand response, and other alternative solutions.
31				
32			1V.	NPA analysis should look forward five years to allow ample time for
33				evaluation and implementation.
34				
35			v.	NPA analysis will include an explanation of solutions considered and
36				evaluated including a description of the projected timeline and annual
37				implementation rate for the solutions evaluated, the technical feasibility
38				of the solutions, and the strategy to implement the solutions evaluated.
39				
40			V1.	NPA analysis should include an explanation of the resulting investment
41				selection (either NPA or a traditional investment) including the costs
42				and ranking of the solutions, and the criteria used to rank or eliminate
43				them.

⁴⁴ The identified elements are the same as all the elements specified in Attachment C to the Final Comments of OPUC Staff on Avista's 2023 IRP, filed in OPUC Docket # LC 81.

1	
2	1. If a NPA is not selected and the reason is insufficient
3	implementation time, it should include steps the Company will take
4	to perform NPA analysis to provide sufficient implementation time
5	for future projects.
0 7	2 Future IBDs should include the results of distribution system planning
8	including project data and NPA analysis for any proposed traditional
9	investments, and NPA analysis for any proposed NPA.
10	
11	4. Future IRPs should include a database containing information about feeders,
12	in service dates of pipes, and lowest recent observed pressures.
13	
14	d. The NPAs considered shall include, at minimum, all technically achievable use of
15	demand-side management (DSM) measures, including but not limited to building
16	envelope efficiency measures, electrification, and gas demand response programs.
17	The NPA analysis shall clearly state the portfolio of NPA measures considered for
18	each gas infrastructure project, the load reduction expected from each measure in
19	the portfolio, the expected cost to Avista of each measure in the portfolio, and the
20	basis for these estimates.
21	Q. What about the proposed recommendation to perform an NPA analysis
22	on five projects in the next IRP? ⁴⁵
23	A. Avista disagrees with this recommendation. First, the Company may not have
24	five projects to perform such an analysis on. Second, the 2025 IRP is due on April 1, 2025,
25	with a draft to be published in Q1 2025, thereby leaving little to no time to complete such an
26	analysis, even if directed to do so by the Commission. Third, performing an NPA analysis on
27	projects that do not meet the \$500,000 threshold is not the best use of Avista's time and
27 28	projects that do not meet the \$500,000 threshold is not the best use of Avista's time and resources, which are ultimately paid for by customers.
27 28 29	projects that do not meet the \$500,000 threshold is not the best use of Avista's time and resources, which are ultimately paid for by customers. Q. Does this conclude your rebuttal testimony?

⁴⁵ Dennison, Exh. JAD-1T at 30:10-19.