

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

Respondent.

DOCKET NOS. UE-200900 and UG-200901 (*Consolidated*)

PAUL J. ALVAREZ AND DENNIS STEPHENS
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

EXHIBIT PADS-21

Avista Response to Public Counsel Data Request No. 101, Attachment E

April 21, 2021

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	02/05/2021
CASE NO.:	UE-200900 & UG-200901	WITNESS:	Heather Rosentrater
REQUESTER:	Public Counsel	RESPONDER:	Glenn Madden
TYPE:	Data Request	DEPT:	Substation Engineering
REQUEST NO.:	PC - 101	TELEPHONE:	(509) 495-2146
		EMAIL:	glenn.madden@avistacorp.com

SUBJECT: Capital Additions, Test Year (Electric)

REQUEST:

Please refer to Heather L. Rosentrater, Exhibit HLR-11 and the Substation Rebuilds program generally, at 33–38.

- a) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to obsolescence.
- b) For each item listed in response to subpart (a), provide the capital cost of the replacement.
- c) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to overloading.
- d) For each item listed in response to subpart (c), provide (i) the current capacity; (ii) the year in which the current capacity is expected to be exceeded; (iii) the forecast amount of overload in that year and in the three subsequent years; (iv) the forecast duration period for the overload amount; and (v) the overload rating for the item.
- e) For each item listed in response to subpart (c), provide the capital cost of the replacement.
- f) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to the “need to meet updated equipment spacing and operating standards”.
- g) For each item listed in response to subpart (f), provide the equipment spacing and/or operating standard which *required* that the item be replaced.
- h) For each item listed in response to subpart (f), provide the capital cost of the replacement.
- i) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to the need to meet “updated design and construction standards”.
- j) For each item listed in response to subpart (i), provide the design standard and/or construction standard which *required* that the item be replaced.
- k) For each item listed in response to subpart (i), provide the capital cost of the replacement.
- l) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to “operational and maintenance requirements”.
- m) For each item listed in response to subpart (l), provide the operational and maintenance requirement which *required* the item be replaced.
- n) For each item listed in response to subpart (l), provide the capital cost of the replacement.
- o) Provide a list of equipment Avista replaced in this program from 2018 through 2020 due to support for “SCADA communications”, “Grid Modernization”, or “Other Programs”.
- p) For each item listed in response to subpart (o), provide documentation that no alternative to replacement was available for “SCADA communications”, “Grid Modernization”, or “Other Programs” support.
- q) For each item listed in response to subpart (o), provide the capital cost of the replacement.

RESPONSE:

- a), b), c), e) Please refer to the data provided in response to PC-DR-099 Attachment A.
- d) For substation equipment listed in PC-DR-099, Attachment A, with the Reason listed as Overloading, the equipment was considered to be already overloaded by the time that it was replaced. Note that Avista considers anything loaded at or above 80% as being “overloaded.”
- f), g), h) Equipment replaced in the Substation Rebuilds Program during 2018-2020 was not specifically designated as being replaced due to only the “need to meet updated equipment spacing and operating standards.” The need to meet updated equipment spacing and operating standards is a consideration in replacing equipment as part of an entire substation being rebuilt. Please refer to the Engineering Roundtable (ERT) Engineering Project Request documents for information on specific substation rebuilds, provided as PC-DR-101 Attachments A-J.
- i), j), k) Equipment replaced in the Substation Rebuilds Program during 2018-2020 was not specifically designated as being replaced due to only the “updated design and construction standards.” The need to meet updated equipment design and construction standards is a consideration in replacing equipment as part of an entire substation being rebuilt. Please refer to the Engineering Roundtable (ERT) Engineering Project Request documents for information on specific substation rebuilds, provided in PC-DR-101 Attachment A.
- l), n), o), q) Please refer to PC-DR-099 Attachment A.
- m), p) Please refer to PC-DR-101 Attachment A.



Engineering Project Request

Instructions: If this is a new request, save this template to your local drive, complete the form, then upload it to ENSO Sharepoint.

Requested By	Substation Engineering (Ken Sweigart)		
Project Title <i>(e.g. "Benewah-Moscow 230kV Rebuild")</i>	Colville Transformer #2 Replacement	Proposed In-Service Date <i>Date that the project should be completed</i>	2018
Project Sponsor <i>Director sponsoring the project</i>	David Howell	Project Driver <i>Reason for initiating the project</i>	Condition/Asset Mgmt
Problem Statement <i>Provide a brief explanation of the problem that needs to be addressed</i>	Transformer dates to 1954 (one of our oldest units). Served a full life cycle at College & Walnut Substation before being moved to Colville in 1987 (was converted from a switchgear unit at that time). Oil leaks abound on this unit. Relaying on the unit does not have differential protection. Associated circuit switcher is under-rated for the fault duty.		
Solutions Considered <i>Provide a list of potential solutions</i>	<ol style="list-style-type: none"> 1. Do nothing and be ready to respond (mobile transformer or switching) when outage occurs. 2. Replace transformer on a planned basis, with associated circuit switcher and relaying. Time replacement so that switched load can mitigate the need for a mobile deployment. 		
Recommendation <i>Indicate which solution is recommended and why</i>	Replace transformer, circuit switcher and relaying. Mitigates need for mobile and allows for more control over the outage. Fixes leak issues in a yard that lacks oil containment.		
Supporting Documentation <i>Provide links to studies, lifecycle analyses, etc. that support this request.</i>	Recent Maximo work orders. Transformer population spreadsheet with ages.		
FAC-002.2 Compliance <i>(A Planning study will be required for interconnecting new or materially modified Facilities on the Bulk Electric System)</i> Will the project require a Facility Interconnect Study per FAC-002.2 Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> If Yes has the study been completed No <input type="checkbox"/> Yes <input type="checkbox"/> Attach study or have completed prior to moving to "Committed"			

Timeline

Date	Notes
3/31/2017	Composed ERT form at Engineering & Planning off-site meeting. BLC
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