

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

JURISDICTION:	WASHINGTON	DATE PREPARED:	06/17/2021
CASE NO.:	UE-200900 & UG-200901	WITNESS:	DiLuciano/La Bolle
REQUESTER:	Public Counsel	RESPONDER:	Larry La Bolle
TYPE:	Data Request	DEPT:	Transm Ops/System Planning
REQUEST NO.:	PC – 354	TELEPHONE:	(509) 495-4710
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**SUBJECT: Joint Rebuttal Testimony Exh. JD/LL-1**

**REQUEST:**

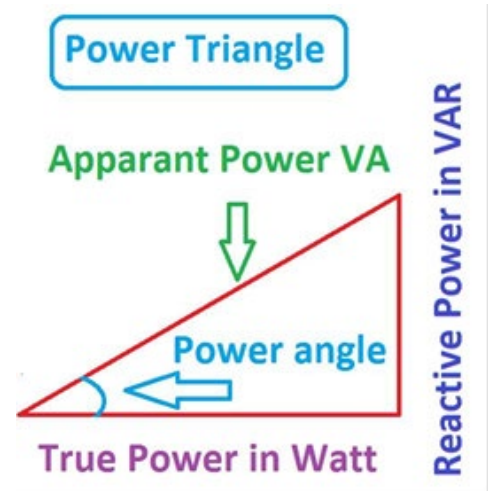
**RE: Capital Additions, Test Year (Electric)**

Please refer again to the Rebuttal Testimony of Larry D. La Bolle and Joshua D. Diluciano, Exh. JD-LL-1T, at 44:13-15, which states “Some of our substations are on radial transmission, and in addition, there are no interconnected ‘adjacent substations’ that can pick up the customers in the event of an outage....” Provide a list of substation Avista operates. For each substation, provide, in MS Excel format:

- a) Rated capacity in MW.
- b) Highest recorded peak load in MW, and the year such peak was recorded.
- c) Recorded peak load in MW by year from 2016 through 2020.
- d) Peak load capacity forecast for 2021 through 2025 by year in MW.
- e) Whether or not the substation is radially-served or not.
- f) The identities of all substations to which the listed substation is tied.
- g) The count of customers served by the substation as of 12/31/2020.

**RESPONSE:**

a) Please see the Excel file containing the requested information provided as PC-DR-354 Attachment A. The rated capacity is provided in column G. This capacity is limiting for most operating conditions, however, for colder ambient temperatures, standards permit operation above nameplate based on ambient temperature. Such operation can occur without taking loss of life on the equipment. Similarly, during very hot periods, typically in excess of 104 degrees F, the capacity is below the nameplate rating to prevent additional loss of life on the equipment. Also, note that nameplate capacity is provided in MVA, while loading is provided the requested units of MW. Avista provides this simple illustration at right showing the relationship between the components of real (MW), apparent (MVA) and reactive (MVAR) power.



b) The highest peak load and the year of such peak load is provided in PC-DR-354 Attachment A, in columns H and I, respectively. The highest peak load in the period 2016 through 2020 exceeds the nameplate capacity at four stations on this list, Barker Road 115kV, Spangle 115kV, Valley 115kV, and Wilbur 115kV. All of these exceedances occurred during winter months; Avista is still for the most part a winter-peaking utility.

- i. Exceedances at **Spangle** and **Wilbur** reflect the fact that these rural substations are not experiencing any significant load growth and they have no interconnections with any other substations, which would subject them to contingency loading. Consequently, Avista continues to operate them near 100% capacity during peak loading, and in excess of that at times during the colder winter months, as described above in part (a).
  - ii. Peak loading at the **Valley** station is operated more consistently closer to its 100% nameplate capacity, owing in part to its more-limited ability to pick up adjacent loads (see “Partial” in the discussion below).
  - iii. Peak loading at **Barker Road** substation occurred in January 2016. As noted, peak loads in the subsequent years are substantially reduced from the 2016 peak, owing to Avista shifting loads to interconnected stations, away from the Barker Road substation, to efficiently and cost-effectively relieve this overloading.
- c) Peak loads in MW by year for 2016 through 2020 are provided in PC-DR-354 Attachment A in columns J through N.
  - d) Avista objects to this request because it seeks future information that is neither within the scope of this proceeding nor is it reasonably calculated to lead to the discovery of admissible evidence. The information requested pertains to future investments that have not yet been made, that are not subject to a prudence review in this current case, and for which the Company is not seeking any cost recovery at this time. The only capital projects included in this case for the period 2021 and beyond, relate to Wildfire, Colstrip, EIM and AMI.
  - e) Please see column O in PC-DR-354 Attachment A for the substations that have no interconnections with other substations. Please see also column Q that lists the ‘offload’ capability for substations that do have interconnections, as well as column R, which indicates whether offload capabilities are year-round, or restricted based on seasonal capacity constraints. These capabilities are described briefly below:

**None** No interconnected capability to transfer customer loads.

**Partial** The substation CANNOT be fully offloaded – only a portion of the load of each feeder can be picked, or only a portion of the feeders can be picked up, without considering the further limitations of seasonal capacity constraints.

**Full** One transformer in the substation can be fully offloaded, subject to limitations of seasonal capacity constraints.

Results of these classifications, described above, are summarized in the table below. Of particular import, Avista has no distribution substations in its Washington service territory that are capable of being offloaded 100% of the time. Obviously, Avista makes the most effective use possible of the available windows for conducting inspections, testing, maintenance, repairs and equipment replacements.

No Interconnection	Partial Interconnection	Full	Interconnections Seasonally Constrained
21%	25%	55%	100%

- f) Interconnected substations are listed in PC-DR-354 Attachment A, column P.
- g) Customer count is provided in column S of PC-DR-354 Attachment A.



Spirit 115kV	SPI	No	Yes	Colville	WA	9.375	5.213	2020	4	4.412	3.8	4.005	5.213	Yes	None	None		1196
Spokane Ind. Park 115kV	SIP	No	No	Spokane Valley	WA	44.687	33.431	2016	33.431	33.08	31.487	30.638	32.426	No	OPT, GRA, MIL	Full But w/ Seasonal Constraints	Yes	2592
Sprague 115kV	SPR	No	No	Sprague	WA	3.75	1.89	2016	1.89	1.73	1.32	1.62	1.4	Yes	None	None		457
Sunset 115kV	SUN	No	No	Spokane	WA	55	42.5	2017	41.45	42.5	37	38.5	39.5	No	SE, C&W, 3HT, FWT, AIR, E	Full But w/ Seasonal Constraints	Yes	11661
Tekoa 115kV	TKO	No	No	Tekoa	WA	9.375	4.9	2018	4.268	3.4	4.9	4.5	4.45	No	GAR, LAT	Partial But w/ Seasonal Constraints	Yes	862
Terre View 115kV	TVW	No	No	Pullman	WA	20	9.368	2020	7.9	8.974	7.7	8.8	9.368	No	TUR, SPU	Full But w/ Seasonal Constraints	Yes	1982
Third & Hatch 115kV	3HT	No	No	Spokane	WA	90	56.49	2018	51.3	52.53	56.49	54.421	49.448	No	SE, GLN, ROS, BEA, 9CE, C	Full But w/ Seasonal Constraints	Yes	9436
Turner 115kV	TUR	No	No	Pullman	WA	60	18.655	2017	17.3	18.655	15.6	16.4	15.16	No	ECL, SPU, TVW	Full But w/ Seasonal Constraints	Yes	9713
Valley 115kV	VAL	No	No	Valley	WA	9.375	9.643	2018	8.424	7.677	9.643	8.811	9.201	No	LOO	Partial But w/ Seasonal Constraints	Yes	2226
Waikiki 115kV	WAK	No	No	Spokane	WA	40	36.26	2019	29.232	29.988	33.768	36.26	31.03	No	L&S, F&C, INT, NE, MEA	Full But w/ Seasonal Constraints	Yes	6941
Washtucna 115kV	WAS	No	No	Washtucna	WA	3.75	1.9	2016	1.9	1.5	1.7	0.21	1.043	No	Franklin PUD K-1	Full But w/ Seasonal Constraints	Yes	234
Wilbur 115kV	WIL	No	No	Wilbur	WA	7.5	8.933	2017	8.193	8.933	7.936	8.437	7.452	Yes	None	None		1329

\*Downtown Network Service Customers Only.

\*\*Not including Downtown Network Customers served.