

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION D/B/A/ AVISTA UTILITIES

Respondent.

DOCKETS UE-220053, UG-220054, and UE-210854 (Consolidated)

**AARON TAM
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT AT-4

Wildfire Work Plan Analysis

July 29, 2022

David James Rev. 7/28/2022

All Values in \$000's

Changes to WF2021 Baseline		Capital Budget Forecast										10-yr	Comments and notes	
System & Transmission	2022 Expected Capx	2020 YE Actual	2021 YE Actual	2022	2023	2024	2025	2026	2027	2028	2029			
Fire-Weather Dashboard	0	197.75	189										388	2020-2021 Development of FW Dashboard Version 1.0 and 2.0
Conforming Rights-of-Way	0		0	0	0	0	0	0	0	0	0	0	1,602	Removed from plan August 2021. See WFRES 2022 for explanation
Transmission Inspection Pgm	200	1.27	1	200	200	200	200	200	200	200	200	200		Capx follow-up on Tx aerial and ground patrols related to fire ignition
Transmission Steel Conversion	4,000	73.57	5,455	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	37,528	See 2022 WFRES Plan for updated decision matrix on where wood pole will be converted to steel. Will be based on fire history on a go-forward basis. Not WUI
Transmission Total	\$4,200	\$273	\$5,644	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$39,517	
Capital Budget Forecast														
Electric Distribution	2022 Expected Capx	2020 YE Actual	2021 YE Actual	2022	2023	2024	2025	2026	2027	2028	2029	10-yr		
Fire Ignition Tracking System	0	2.51	3	0									6,686	DMT work around is allowing tracking for fire-ignition events. Any new development of fire ignition tracking will be paired with the DNS replacement project.
Distribution Auto DLM	750	30.53	1,355	750	650	650	650	650	650	650	650	650	29,015	Replacing midline reclosers with DLM Automation devices.
Substation Auto DLM	1,500	0.40	515	1,500	1,500	3,000	4,500	4,500	4,500	4,500	4,500	4,500	24,015	
WPM Make-Ready for GH (XD007)	3,000		15	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	115,547	
DE Sponsored GH (XD008)	9,000		1										68,051	
WA Dist Grid Hardening (XD005)		1,513.27	7,134	9,000	11,500	12,500	14,700	14,700	14,700	14,700	14,700	14,700		
ID Dist Grid Hardening (XD006)	6,595	2,602.65	4,714	6,595	6,650	7,650	7,820	7,820	8,400	8,400	8,400	8,400		
Distribution Total	\$20,845	\$1,148	\$13,731	\$20,845	\$23,300	\$26,800	\$30,670	\$30,670	\$31,250	\$31,250	\$31,250	\$31,250	\$242,913	
T&D Capx Total	\$25,045	\$3,421	\$19,376	\$25,045	\$27,500	\$31,000	\$34,870	\$34,870	\$35,450	\$35,450	\$35,450	\$35,450	\$282,431	
Total Grid Hardening:														
		2020 oct	2021 oct	2022	2023	2024	2025	2026	2027	2028	2029	Totals		
Distribution	\$8,115	\$11,848	\$15,995	\$18,150	\$20,150	\$22,520	\$22,520	\$23,100	\$23,100	\$23,100	\$23,100		188,198	
Miles Projected at \$60k/mi (forecast)	67	146	260	303	336	375	375	385	385	385	385			
Cumulative Miles	67	213	472	775	1,111	1,486	1,861	2,246	2,631	3,016				
Operating														
System & Transmission	2022 Expected O&M	2020 YE Actual	2021 YE Actual	2022	2023	2024	2025	2026	2027	2028	2029	10-yr		
WFRES Transmission Planning	147	92	187	147	147	147	147	147	147	147	147	1,470	WFRES Team Labor based on 2021 HC	
Fire-Weather Dashboard	150		0	150	75	75	75	75	75	75	75	675	On going support of FW DB	
Digital Data Collection (Geo Digital)	750	491	450	750	750	750	750	750	750	750	750	6,941	Based on \$450/mile (GeoDigital). 2022 is full system	
Transmission RR Pole Wraps	550	178	421	550	550	550	550	550	550	550	550	4,999	Generic fire mesh \$90/pole (assume H-frame \$500/structure 500 structures/year - 8 structure/miles - 62.5 miles/year)	
Risk Reduction Partner	300		0	300	300	300	300	300	300	300	300	2,400	Based on Adash Contract - 705/miles for 7050 miles OH System (535 base, 2021 reflects a negotiated price to establish baseline)	
Non-PC Fire Damage (risk tree)	150		513	150	150	150	150	150	150	150	150	513		
Transmission Inspection Pgm	150	237	172	150	150	150	150	150	150	150	150	1,500	Transmission Fire Inspection and O&M followup	
Transmission O&M	\$2,047	\$899	\$1,743	\$2,047	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$18,493		
Operating														
Electric Distribution	2022 Expected O&M	2020 YE Actual	2021 YE Actual	2022	2023	2024	2025	2026	2027	2028	2029	10-yr		
WFRES Distribution Planning	294	233	269	294	294	294	294	294	294	294	294	2,854	WFRES Team Labor based on 2021 HC	
WA Dv Risk Tree	5,544		2,111	3,086	3,232	3,232	2,688	2,688	2,688	2,688	2,688	25,700	Estimate from AM C.H. 100% system minus heavy incorporated and no veg areas (17%). 11.02.21	
ID Dv Risk Tree	2,856	1,239	3,152	1,899	1,818	1,818	1,512	1,512	1,512	1,512	1,512	4,100	Includes Public Outreach, Media messaging, and voucher remove/replace program	
Customer Choice RTP	350		0	350	500	750	750	750	500	300	200	4,400	Includes Public Outreach, Media messaging, and voucher remove/replace program	
Digital Data Collection (ADASH)	510	59	327	510	510	510	510	510	510	510	510	4,400	Based on Adash Contract - 705/miles for 7050 miles OH System (535 base, 2021 reflects a negotiated price to establish baseline)	
Distribution O&M	\$9,579	\$1,531	\$5,859	\$6,764	\$6,379	\$6,629	\$5,779	\$5,779	\$5,529	\$5,329	\$5,329	\$54,800	Dv Grid Hardening Blended WA/ID Rate = \$58.14/mile	
T&D O&M	\$11,626	\$2,430	\$7,602	\$8,811	\$8,351	\$8,601	\$7,751	\$7,751	\$7,501	\$7,301	\$7,301	\$73,300		

Total Risk Tree

Wildfire Work Plan Analysis

This analysis compares a handful of examples of actual and planned units of work reported in the 2022 wildfire plan and estimated units of work based on actual and budgeted total and incremental wildfire program component costs.

By: Aaron Tam, Public Counsel Unit Regulatory Analyst

Wildfire Mitigation Component	Cost (\$/Unit)	Source	Units of Work										Cost (\$000s)/Unit Calculations/Cross-check												
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	10-yr	2021	2021	2022	2023	2024	2025	2026	2027	2028	2029		
Transmission Steel Replacement	\$ 45,000	PC DR 305	2	121	89	89	89	89	89	89	89	89	834	\$ 45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$	45.00 \$
Transmission Steel Replacement	\$ 25,000	2022 Wildfire Plan, p. 10	3	218	160	160	160	160	160	160	160	160	1501	\$ 25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$	25.00 \$
Transmission Steel Replacement	\$ 15,000	2022 Wildfire Plan, p. 10	5	364	267	267	267	267	267	267	267	267	2502	\$ 15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$	15.00 \$
Actual Transmission Steel Replacement	~\$200-6,090	2022 Wildfire Plan, p. 12	368	896	852									\$ 0.20 \$	6.09 \$	4.69									
Distribution Auto DLM	\$ 60,000	PC DR 305	1	23	13	11	11	11	11	11	11	11	88	\$ 60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$	60.00 \$
Actual Distribution Auto DLM	\$30,830-20,850	2022 Wildfire Plan, p. 21	65	36										\$ 30.85 \$	20.83										
Substation Auto DLM	\$ 750,000	PC DR 305	0	1	2	2	4	6	6	6	6	6	38	\$ 750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$	750.00 \$
Substation Auto DLM Goals	\$300,000-900,000	2022 Wildfire Plan, p. 21	0	1	5	5	5	5	5	5	5	5	41	\$ 750.00 \$	514.70 \$	300.00 \$	300.00 \$	600.00 \$	900.00 \$	900.00 \$	900.00 \$	900.00 \$	900.00 \$	900.00 \$	900.00 \$
Transmission Wood Pole Wraps	\$ 90.00	2022 Wildfire Plan, p. 10	1980	4676	6111	6111	6111	6111	6111	6111	6111	6111	48889	\$ 0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$	0.09 \$
Actual Transmission Wood Pole Wraps	\$140-340	2022 Wildfire Plan, p. 13	1235	1938	1600									\$ 0.14 \$	0.22 \$	0.34									