Exh. KKS-2
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
DOCKET NO. UE-17
DOCKET NO. UG-17
EXH. KKS-2
KAREN K. SCHUH
REPRESENTING AVISTA CORPORATION

Traditional Pro Forma Study Projects:	<u>\$ (000's)</u>
Asset Condition	
Little Falls Plant Upgrade	\$ 10,481
Technology Refresh to Sustain Business Process Substation - Station Rebuilds	21,191 17,524
Distribution Grid Modernization	17,324
Distribution Wood Pole Management	9,000
Performance and Capacity	.,
New Downtown Netwk Bldg	6,559
COF Long-Term Restructuring Plan 2	13,695
Technology Expansion to Enable Business Process	13,941
Failed Plant and Operations	
Gas Non-Revenue Program	6,096
Mandatory and Compliance	
Gas Facilities Replacement Program (Aldyl A)	21,764
Gas Replacement Street and Highway Program	3,319
	\$ 138,621
and of Period Rate Base Study and Rate Year Projects:	
Generation / Production (SKJ-1T)	
Asset Condition:	
Automation Replacement	\$ 500
Cabinet Gorge Automation Replacement	330
Cabinet Gorge Unit 1 Refurbishment	4
Generation DC Supplied System Upgrade	1,220
Kettle Falls Stator Rewind	6,316
Long Lake Plant Upgrades	78
Nine Mile Rehab	9,526
Noxon Station Service	2,503 500
Peaking Generation Post Falls Redevelopment	300
Purchase Certified Rebuilt Cat D10R Dozer	814
Replace Cabinet Gorge Gantry Crane	74
Failed Plant and Operations:	,-
Base Load Hydro	1,401
Base Load Thermal Plant	2,494
Regulating Hydro	6,131
	0,131
Mandatory and Compliance	0.500
Colstrip Thermal Capital	9,500 7,394
Clark Fork Settlement Agreement	
Hydro Safety Minor Blanket	350
Kettle Falls RO System Spokane River License Implementation	4,510 2,007
Spokalie River License Implementation	\$ 55,654
eneral (HLR-1T):	ψ 25,654
Asset Condition	
COF Long-Term Restructuring Plan	\$ 2,064
Dollar Rd Service Center Addition and Remodel	\$ 321
Noxon & Clark Fork Living Facilities	1,411
Structures and Improvements/Furniture	3,294
Failed Plant and Operations	
Capital Tools & Stores Equipment	2,712
Performance and Capacity	
Apprentice Training	60
CNG Fleet Conversion	52
Company Aircraft Capital	296
Ergonomic Equipment	616
New Airport Hangar	1,500
New Deer Park Service Center	6
	\$ 12,331
atural Gas Distribution (HLR-1T):	\$ 12,331
atural Gas Distribution (HLR-1T): Asset Condition	\$ 12,331
	\$ 12,331 \$ 1,001
Asset Condition	
Asset Condition Gas Deteriorated Steel Pipe Replacement Program	\$ 1,001
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program	\$ 1,001 240
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program	\$ 1,001 240
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth	\$ 1,001 240 1,376
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance	\$ 1,001 240 1,376 23,099
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program	\$ 1,001 240 1,376 23,099
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program	\$ 1,001 240 1,376 23,099 900 5,275
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program	\$ 1,001 240 1,376 23,099 900 5,275 2,050
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project	\$ 1,001 240 1,376 23,099 900 5,275 2,050
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program	\$ 1,001 240 1,376 23,099 900 5,275 2,050 113
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program Gas PMC Program	\$ 1,001 240 1,376 23,099 900 5,275 2,050
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas RetT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program Gas PMC Program Performance and Capacity	\$ 1,001 240 1,376 23,099 900 5,275 2,050 113 500 1,200
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ReRT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program Gas PMC Program Performance and Capacity Gas N Spokane Hwy 2 HP Main Reinforcement Project	\$ 1,001 240 1,376 23,099 900 5,275 2,050 113 500 1,200
Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas HP Pipeline Remediation Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program Gas PMC Program Performance and Capacity Gas N Spokane Hwy 2 HP Main Reinforcement Project Gas Reinforcement Program	\$ 1,001 240 1,376 23,099 900 5,275 2,050 113 500 1,200
Asset Condition Gas Deteriorated Steel Pipe Replacement Program Gas ReRT Replacement Program Gas Regulator Stn Replacement Program Customer Requested New Revenue - Growth Mandatory and Compliance Gas Cathodic Protection Program Gas HP Pipeline Remediation Program Gas Isolated Steel Replacement Program Gas N-S Corridor Greene St HP Main Project Gas Overbuilt Pipe Replacement Program Gas PMC Program Performance and Capacity Gas N Spokane Hwy 2 HP Main Reinforcement Project	\$ 1,001 240 1,376 23,099 900 5,275 2,050 113 500 1,200

Mandatory and Compliance	Other Plant (HLR-1T):			\$ (000's)
Piete Budget	Mandatory and Compliance			\$ 1,718
Fleet Budget				\$ 1,710
Property Property			·-	\$ 7,898
Microwave Refresh	Enterprise Technology (JMK-1T):		-	\$ 9,616
Project Alas	Asset Condition			
Customer Service Quality and Reliability				\$ 5,322
AvistaUtilities.com Redesign Customer Facing Technology 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Project Atlas			6,563
Customer Facing Technology Mandatory and Compliance High Voltage Protection for Substations Next Generation Radio Refresh	Customer Service Quality and Reliability			
High Voltage Protection for Substations Next Generation Radio Refresh				9,093 1,830
High Voltage Protection for Substations Next Generation Radio Refresh	Mandatory and Compliance			
Enterprise Business Continuity Plan Enterprise Security Total	High Voltage Protection for Substations			937 102
Enterprise Business Continuity Plan Enterprise Security Total	Performance and Capacity			
Enterprise Security				665
Electric Transmission / Distribution (HLR-IT): Transmission SCADA - SOO & BUCC \$1,270 \$1, 17 Transmission Minor Rebuild \$1,32 \$1, 55, 17 Transmission Minor Rebuild \$1,32 \$1, 55, 17 Transmission Major Rebuild - Asset Condition 9,536 \$1,270 \$1, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50				3,816
Pransmission Distribution HLR-1T : Transmission Distribution Distribu			-	\$ 28,329
Electric Transmission / Distribution (HLR-1T): Transmission Distribution Asset Condition \$1,270 \$1,270 \$5,12 SCADA - SOO & BUCC \$1,270 \$5,12 \$5,5 Transmission Minor Rebuild \$5,132 \$5,5 Transmission Major Rebuild - Asset Condition 9,536 \$3,000 33,000 Distribution Transformer Change-Out Program \$3,000 \$3,000 33,000 33,000 Primary URD Cable Replacement \$1,458 \$2,000 \$2,3775 \$23,775 \$				
Asset Condition SCADA - SOO & BUCC \$ 1,270 \$ 1,				Transmission &
SCADA - SOO & BUCC		Transmission	Distribution	Distribution
Transmission Minor Rebuild 5,132 5, Transmission Major Rebuild - Asset Condition 9,536 9, Distribution Transformer Change-Out Program 3,000 3, Primary URD Cable Replacement 503 Customer Requested Growth - Hallet and White 1,458 1, New Revenue - Growth 23,775 23, Failed Plant and Operations 2 3,183 3, Electric Storms 3,183 3, 3, Distribution Minor Rebuild 9,105 9, Meter Minor Blanket 505 505 Spokane Electric Network 2,605 2, Mandatory and Compliance 2 2,605 2, Colstrip Transmission 325 5 Environmental Compliance 72 350 Garden Springs 230/115kV Station Integration 56 350 Noxon Switchyard Rebuild 2,504 2, S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 7				* * *
Transmission Major Rebuild - Asset Condition 9,536 9, 0 instribution Transformer Change-Out Program 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3, 3,000 3,000				\$ 1,270
Distribution Transformer Change-Out Program 3,000 3, primary URD Cable Replacement 503				5,132
Primary URD Cable Replacement 503 Customer Requested 3,458 1,458 Growth - Hallet and White 1,458 1, New Revenue - Growth 23,775 23, Failed Plant and Operations 3,183 3, Electric Storms 3,183 9,105 9, Meter Minor Blanket 505 505 Spokane Electric Network 2,605 2, Mandatory and Compliance 2,605 2, Colstrip Transmission 325 5 Environmental Compliance 72 350 Garden Springs 230/115kV Station Integration 56 2 Noxon Switchyard Rebuild 2,504 2,5 S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 7 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 621		9,536	3,000	9,536 3,000
Customer Requested Growth - Hallet and White 1,458 1, New Revenue - Growth 23,775 23, Failed Plant and Operations 3,183 3, Electric Storms 3,183 9,105 9, Meter Minor Blanket 505 505 Spokane Electric Network 2,605 2, Mandatory and Compliance 325 2,605 2, Colstrip Transmission 325 350 350 350 360				503
Growth - Hallet and White New Revenue - Growth 23,775 23,			505	505
New Revenue - Growth		1 //58		1,458
Failed Plant and Operations Electric Storms 3,183 3,183 3, 3,		1,450	23.775	23,775
Electric Storms			,	,,,,,
Distribution Minor Rebuild 9,105 9, Meter Minor Blanket 505		3.183		3,183
Spokane Electric Network 2,605 2,		-,	9,105	9,105
Mandatory and Compliance Colstrip Transmission 325 Environmental Compliance 72 350 Garden Springs 230/115kV Station Integration 56 Noxon Switchyard Rebuild 2,504 2, S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 2 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 621 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,	Meter Minor Blanket		505	505
Colstrip Transmission 325 Environmental Compliance 72 350 Garden Springs 230/115kV Station Integration 56 20 Noxon Switchyard Rebuild 2,504 2, S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 2 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 5 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,	Spokane Electric Network		2,605	2,605
Environmental Compliance	Mandatory and Compliance			
Garden Springs 230/115kV Station Integration 56 Noxon Switchyard Rebuild 2,504 2, S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 5, Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				325
Noxon Switchyard Rebuild 2,504 2, S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374			350	422
S Region Voltage Control 5,733 5, Spokane Valley Transmission Reinforcement 374 2 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 5 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				56
Spokane Valley Transmission Reinforcement 374 Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 5 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				2,504
Transmission - NERC Low Priority Mitigation 2,014 2, Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				5,733 374
Transmission - NERC Medium Priority Mitigation 2,000 2, Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				2,014
Transmission Construction - Compliance 15,309 15, Tribal Permits and Settlements 621 Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				2,000
Westside 230/115kV Station Rebuild 5,566 5, Elec Replacement/Relocation 2,600 2, 600 2, 600 2, 600 2, 600 1, 594 1, 594 1, 594 1, 594 1, 594 1, 594 4, 204 4, 204 4, 204 4, 204 4, 204 2, 242 2, 2, 200 2, 2, 200 2, 2, 200 2, 2, 200 2, 2, 200 2, 2, 200 2, 3, 20				15,309
Elec Replacement/Relocation 2,600 2, Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				621
Franchising for WSDOT 1,594 1, Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,	Westside 230/115kV Station Rebuild	5,566		5,566
Performance and Capacity Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				2,600
Substation - Capital Spares 4,204 4, Substation - New Distribution Stations 2,424 2, LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,	Franchising for WSDOT		1,594	1,594
Substation - New Distribution Stations2,4242,LED Change Out Program2,9002,Segment Reconductor and FDR Tie Program6,5876,				
LED Change Out Program 2,900 2, Segment Reconductor and FDR Tie Program 6,587 6,				4,204
Segment Reconductor and FDR Tie Program		2,424	2.000	2,424
				2,900 6,587
	Segment Reconductor and FDR The Program	\$ 61,779		\$ 115,303
Total Capital \$397,	Total Capital		-	\$ 397,158
Total Idaho Direct Capital Additions 2017 \$4,	Total Idaho Direct Capital Additions 2017		-	\$ 4,426
Total Oregon Direct Capital Additions 2017 \$3,	Total Oregon Direct Capital Additions 2017		-	\$ 3,901
Total Capital Additions in 2017 \$405,	Total Capital Additions in 2017		- -	\$ 405,485

End of Period Rate Base Study and Rate Year Projects:	<u>\$ (000's)</u>
Generation / Production (SKJ-1T)	
Asset Condition:	
Automation Replacement	\$ 450
Cabinet Gorge Automation Replacement	2,093
Cabinet Gorge Station Service Replacement	2,137
Generation DC Supplied System Upgrade	1,646
Kettle Falls CT Control Upgrade Little Falls Plant Upgrade	669 16,444
Long Lake Plant Upgrades	3,950
Nine Mile Rehab	2,213
Noxon Station Service	1,290
Peaking Generation	500
Post Falls Redevelopment	4,500
Replace Cabinet Gorge Gantry Crane	3,637
Failed Plant and Operations:	
Base Load Hydro	1,149
Base Load Thermal Plant	2,200
Regulating Hydro	3,533
Mandatory and Compliance	
Colstrip Thermal Capital	4,420
Clark Fork Settlement Agreement	6,052
Hydro Safety Minor Blanket	50
Spokane River License Implementation	2,786
	\$ 59,718
General (HLR-1T):	
Asset Condition	0.45.510
Dollar Rd Service Center Addition and Remodel	\$ 17,710
Noxon & Clark Fork Living Facilities	1,563
Structures and Improvements/Furniture	3,600
Failed Plant and Operations	2,400
Capital Tools & Stores Equipment	2,400
Performance and Capacity Apprentice Training	60
COF LngTrm Restruct Ph2	10,000
Company Aircraft Capital	3,000
Ergonomic Equipment	300
New Deer Park Service Center	6,247
	\$ 44,880
Natural Gas Distribution (HLR-1T):	
Asset Condition	
Gas Deteriorated Steel Pipe Replacement Program	\$ 1,000
Gas ERT Replacement Program	260
Gas Regulator Stn Replacement Program	800
Customer Requested	
New Revenue - Growth	22,239
Failed Plant and Operations	
Gas Non-Revenue Program	6,000
Mandatory and Compliance	
Gas Cathodic Protection Program	700
Gas Facilities Replacement Program (Aldyl A)	20,700
Gas HP Pipeline Remediation Program	2,925
Gas Isolated Steel Replacement Program	2,000
Gas Overbuilt Pipe Replacement Program	500
Gas PMC Program Gas Penlacement Street and Highway Program	1,200 3,000
Gas Replacement Street and Highway Program	3,000
Performance and Capacity Gas Painforcement Program	1,000
Gas Reinforcement Program Gas Telemetry Program	200
Sas Tolomony Hogiani	\$ 62,524
	Ψ 02,024

Other Plant (HLR-1T):			\$ (000's)
Mandatory and Compliance			
Jackson Prairie Storage			\$ 1,562
Asset Condition			
Fleet Budget			7,850
Enterprise Technology (JMK-1T):			\$ 9,412
Asset Condition			
Microwave Refresh			\$ 2,100
Project Atlas			9,734
Technology Refresh to Sustain Business Process			16,957
Customer Service Quality and Reliability			
Customer Facing Technology			2,237
Mandatory and Compliance			
High Voltage Protection for Substations			30
Performance and Capacity			
Enterprise Business Continuity Plan			486
Enterprise Security Technology Expansion to Enable Business Process			3,639 14,350
reclinology Expansion to Enable Business Frocess			\$ 49,534
			Ψ 13,554
Electric Transmission / Distribution (HLR-1T):	Transmission	Distribution	Total Transmission & Distribution
Asset Condition	Transmission	Distribution	& Distribution
SCADA - SOO & BUCC	\$ 920		\$ 920
Substation - Station Rebuilds	7,867		7,867
Transmission Minor Rebuild	1,843		1,843
Transmission Major Rebuild - Asset Condition	12,025		12,025
Distribution Transformer Change-Out Program		1,200	1,200
Distribution Grid Modernization		13,929	13,929
Distribution Wood Pole Management		9,500	9,500
Primary URD Cable Replacement		1,000	1,000
Customer Requested Growth - Hallet and White	1,409		1,409
New Revenue - Growth	1,409	23,249	23,249
Failed Plant and Operations		23,217	23,217
Electric Storms	3,278		3,278
Distribution Minor Rebuild	,	8,900	8,900
Meter Minor Blanket		300	300
Spokane Electric Network		2,300	2,300
Mandatory and Compliance			
Colstrip Transmission	449	250	449
Environmental Compliance Saddle Mountain 230/115kV Station Integration	50 1,500	350	400 1,500
Spokane Valley Transmission Reinforcement	7,750		7,750
Transmission - NERC Low Priority Mitigation	1,500		1,500
Transmission Construction - Compliance	13,159		13,159
Tribal Permits and Settlements	250		250
Elec Replacement/Relocation		2,700	2,700
Franchising for WSDOT		200	200
Performance and Capacity	2.500		2.500
SCADA Build-Out Program	2,500 5,065		2,500 5,065
Substation - Capital Spares Substation - New Distribution Stations	5,065 850		5,065 850
LED Change Out Program	350	2,000	2,000
Segment Reconductor and FDR Tie Program		4,900	4,900
	\$ 60,416	\$ 70,528	\$ 130,944
Total Capital			\$ 357,013
Total Idaho Direct Capital Additions 2018			\$ 1,500
Tour Idano Errect Capital Additions 2010			
Total Oregon Direct Capital Additions 2018			\$ 4,000

End of Period Rate Base Study and Rate Year Projects:	<u>\$ (000's)</u>
Generation / Production (SKJ-1T)	
Asset Condition:	
Automation Replacement	\$ 600
Generation DC Supplied System Upgrade	750
Long Lake Plant Upgrades	5,000
Nine Mile Rehab	16,210
Peaking Generation Post Falls Redevelopment	500 7,200
	7,200
Failed Plant and Operations:	1 140
Base Load Hydro Base Load Thermal Plant	1,149 2,200
Regulating Hydro	3,533
Mandatory and Compliance	3,333
Colstrip Thermal Capital	10,370
Clark Fork Settlement Agreement	39,097
Hydro Safety Minor Blanket	55
Spokane River License Implementation	533
Spokane River Electise implementation	\$ 87,196
General (HLR-1T):	Ψ 07,170
Asset Condition	
Structures and Improvements/Furniture	\$ 3,600
*	φ 3,000
Failed Plant and Operations Capital Tools & Stores Equipment	2,400
Performance and Capacity	
Apprentice Training	60
	\$ 6,060
Natural Gas Distribution (HLR-1T):	
Asset Condition	
Gas Deteriorated Steel Pipe Replacement Program	\$ 1,000
Gas ERT Replacement Program	280
Gas Regulator Stn Replacement Program	800
Customer Requested	
New Revenue - Growth	22,941
Failed Plant and Operations	
Gas Non-Revenue Program	6,000
Mandatory and Compliance	
Gas Cathodic Protection Program	700
Gas Facilities Replacement Program (Aldyl A)	21,160
Gas HP Pipeline Remediation Program	3,013
Gas Isolated Steel Replacement Program	2,000
Gas Overbuilt Pipe Replacement Program	500
Gas PMC Program	1,200
Gas Replacement Street and Highway Program	3,000
Performance and Capacity	
Cheney HP Reinforcement	5,000
Gas Reinforcement Program	1,000
Gas Telemetry Program	200
Gas Warden HP Reinforcement	6,000
CALL DI LA CALL DI ATTO	\$ 74,793
Other Plant (HLR-1T):	
Mandatory and Compliance	
Jackson Prairie Storage	\$ 1,483
Asset Condition	
Fleet Budget	7,850
	\$ 9,333

Enternate Technology (DMZ 1T).			¢ (0001a)
Enterprise Technology (JMK-1T):			\$ (000's)
Asset Condition Microwave Refresh			\$ 2,100
Project Atlas			\$ 2,100 807
Technology Refresh to Sustain Business Process			14,140
Customer Service Quality and Reliability			14,140
Customer Facing Technology			1,900
Performance and Capacity			1,500
Enterprise Business Continuity Plan			450
Enterprise Security Enterprise Security			1,710
Technology Expansion to Enable Business Process			12,315
		-	\$ 33,422
			Total
			Transmission &
Electric Transmission / Distribution (HLR-1T):	Transmission	Distribution	Distribution
Asset Condition			
SCADA - SOO & BUCC	\$ 1,013		\$ 1,013
Substation - Station Rebuilds	15,800		15,800
Transmission Minor Rebuild	1,908		1,908
Transmission Major Rebuild - Asset Condition	11,000		11,000
Distribution Transformer Change-Out Program		1,200	1,200
Distribution Grid Modernization		14,333	14,333
Distribution Wood Pole Management		9,500	9,500
Primary URD Cable Replacement		1,000	1,000
Customer Requested			
New Revenue - Growth		22,668	22,668
Failed Plant and Operations			
Electric Storms	3,377	0.000	3,377
Distribution Minor Rebuild		8,900	8,900
Meter Minor Blanket		300	300
Spokane Electric Network		2,300	2,300
Mandatory and Compliance	201		391
Colstrip Transmission	391 50	350	391 400
Environmental Compliance Garden Springs 230/115kV Station Integration	725	330	725
Saddle Mountain 230/115kV Station Integration	14,500		14,500
Transmission - NERC Low Priority Mitigation	1,500		1,500
Transmission Construction - Compliance	13,000		13,000
Tribal Permits and Settlements	150		150
Elec Replacement/Relocation		2,800	2,800
Franchising for WSDOT		200	200
Performance and Capacity			
SCADA Build-Out Program	6,000		6,000
Substation - Capital Spares	4,025		4,025
Substation - New Distribution Stations	6,375		6,375
LED Change Out Program		2,320	2,320
Segment Reconductor and FDR Tie Program		5,001	5,001
	\$ 79,814	\$ 70,871	\$ 150,685
Total Canital Additions in 2010		-	¢ 261 400
Total Capital Additions in 2019		=	\$ 361,489

(Catenaar Tear Transfers to Tant)	
End of Period Rate Base Study and Rate Year Projects:	\$ (000's)
Generation / Production (SKJ-1T)	<u>+ (*** *)</u>
Asset Condition:	
Automation Replacement	\$ 602
Cabinet Gorge Station Service Replacement	2,138
Generation DC Supplied System Upgrade	1,698
Little Falls Install Obermeyer Gate	14,723
Long Lake Plant Upgrades	250
Peaking Generation	500
Failed Plant and Operations:	
Base Load Hydro	1,149
Base Load Thermal Plant	2,200
Regulating Hydro	3,533
Mandatory and Compliance	
Colstrip Thermal Capital	8,945
Clark Fork Settlement Agreement	4,622
Hydro Safety Minor Blanket	50
Spokane River License Implementation	419
Performance and Capacity	
Energy Imbalance Market	11,200
	\$ 52,029
General (HLR-1T):	
Asset Condition	
New Davenport Facility	\$ 6,500
Sandpoint Renovation	5,500
Structures and Improvements/Furniture	3,600
Failed Plant and Operations	
Capital Tools & Stores Equipment	3,000
Performance and Capacity	
Apprentice Training	60
COF LngTrm Restruct Ph2	14,000
Jack Stewart Training Center Expansion New Pullman Service Center	10,300 7,600
New Fulliman Service Center	\$ 50,560
Natural Gas Distribution (HLR-1T):	Ψ 2 0,2 0 0
Asset Condition	¢ 1 000
Gas Deteriorated Steel Pipe Replacement Program Gas ERT Replacement Program	\$ 1,000 330
Gas Regulator Stn Replacement Program	800
Customer Requested	800
New Revenue - Growth	23,455
	25,433
Failed Plant and Operations	6,000
Gas Non-Revenue Program	6,000
Mandatory and Compliance Gas Cathodic Protection Program	700
Gas Cathodic Protection Program Gas Facilities Replacement Program (Aldyl A)	
Gas HP Pipeline Remediation Program	21,629 3,062
Gas Isolated Steel Replacement Program	2,000
Gas Overbuilt Pipe Replacement Program	500
Gas PMC Program	1,200
Gas Replacement Street and Highway Program	3,000
Performance and Capacity	3,000
Gas Pullman HP Reinforcement	2,500
Gas Reinforcement Program	1,000
Gas Telemetry Program	200
Gas 1994an	\$ 67,377
Other Plant (HLR-1T):	+ ***,****
Mandatory and Compliance	
Jackson Prairie Storage	\$ 1,478
Asset Condition	. ,
Fleet Budget	7,850
	\$ 9,328

terprise Technology (JMK-1T):			\$ (000's)
Asset Condition			
Microwave Refresh			\$ 2,247
Project Atlas			12,500
Technology Refresh to Sustain Business Process			18,000
Customer Service Quality and Reliability			
Customer Facing Technology			2,000
Performance and Capacity			
Enterprise Business Continuity Plan			450
Enterprise Security			4,000
Technology Expansion to Enable Business Process			14,000
Toomstop, E. Paulision to Entario European Trocess		- -	\$ 53,197
			Total
ectric Transmission / Distribution (HLR-1T):	Transmission	Distribution	Transmission & Distribution
Asset Condition			
SCADA - SOO & BUCC	\$ 920		\$ 920
Substation - Station Rebuilds	4,185		4,185
Transmission Minor Rebuild	1,970		1,970
Transmission Major Rebuild - Asset Condition	23,550		23,550
Distribution Transformer Change-Out Program	23,330	1.200	1,200
Distribution Grid Modernization		12.942	\$ 12,942
Distribution Wood Pole Management		9,000	\$ 9,000
Primary URD Cable Replacement		1,000	1,000
		1,000	1,000
Customer Requested New Revenue - Growth		23,055	23,055
		25,033	25,05
Failed Plant and Operations	2.1.50		2.1.6
Electric Storms	3,169		3,169
Distribution Minor Rebuild		8,900	8,900
Meter Minor Blanket		300	300
Spokane Electric Network		2,300	2,300
Mandatory and Compliance			
Colstrip Transmission	365		365
Environmental Compliance	50	350	400
Garden Springs 230/115kV Station Integration	8,250		8,250
Transmission - NERC Low Priority Mitigation	1,500		1,500
Tribal Permits and Settlements	250		250
Elec Replacement/Relocation		3,000	3,000
Franchising for WSDOT		200	200
Performance and Capacity			
SCADA Build-Out Program	7,670		7,670
Substation - Capital Spares	4,025		4,025
LED Change Out Program		2,000	2,000
Segment Reconductor and FDR Tie Program	ф де 00.4	5,000	5,000
	\$ 55,904	\$ 69,247	\$ 125,151
Total Capital Additions in 2020		=	\$ 357,643

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End of Period Rate Base Study and Rate Year Projects: Generation / Production (SKJ-1T)	<u>\$ (000's)</u>
, , , ,	
Asset Condition: Automation Replacement	\$ 390
Generation DC Supplied System Upgrade	3,484
LL HED Emergency Generator Plant	725
Long Lake Plant Upgrades	12,600
Peaking Generation	500
Post Falls Redevelopment	53,575
Failed Plant and Operations:	
Base Load Hydro	1,149
Base Load Thermal Plant	2,200
Regulating Hydro	3,533
Mandatory and Compliance	
Colstrip Thermal Capital	2,940
Clark Fork Settlement Agreement	10,794
Hydro Safety Minor Blanket	55
Spokane River License Implementation	613
Performance and Capacity	
Energy Imbalance Market	300
	\$ 92,859
General (HLR-1T):	
Asset Condition	
Structures and Improvements/Furniture	\$ 3,600
Failed Plant and Operations	
Capital Tools & Stores Equipment	3,150
Performance and Capacity	
Apprentice Training	60
COF LngTrm Restruct Ph2	10,000
	\$ 16,810
Natural Gas Distribution (HLR-1T):	
Asset Condition	
Gas Deteriorated Steel Pipe Replacement Program	\$ 1,000
Gas ERT Replacement Program	716
Gas Regulator Stn Replacement Program	800
Customer Requested	
New Revenue - Growth	23,434
Failed Plant and Operations	
Gas Non-Revenue Program	6,000
Mandatory and Compliance	.,
Gas Cathodic Protection Program	700
Gas Facilities Replacement Program (Aldyl A)	22,109
Gas HP Pipeline Remediation Program	3,000
Gas Isolated Steel Replacement Program	2,000
Gas Overbuilt Pipe Replacement Program	400
Gas PMC Program	1,200
Gas Replacement Street and Highway Program	3,000
Performance and Capacity	
Gas Reinforcement Program	1,000
Gas Telemetry Program	200
	\$ 65,559
Other Plant (HLR-1T):	
Mandatory and Compliance	
Jackson Prairie Storage	\$ 1,483
Asset Condition	
Fleet Budget	7,850
	\$ 9,333

Enterprise Technology (JMK-1T):			\$ (000's)
Asset Condition			
Project Atlas			\$ 11,600
Technology Refresh to Sustain Business Process			23,000
Customer Service Quality and Reliability			
Customer Facing Technology			2,000
Performance and Capacity			
Enterprise Business Continuity Plan			450
Enterprise Security			3,600
Technology Expansion to Enable Business Process		_	14,000
		-	\$ 54,650
			Total
Electric Transmission / Distribution (HLR-1T):	Transmission	Distribution	Transmission & Distribution
Asset Condition			
SCADA - SOO & BUCC	\$ 920		\$ 920
Substation - Station Rebuilds	15,385		15,385
Transmission Minor Rebuild	2,015		2,015
Transmission Major Rebuild - Asset Condition	24,500		24,500
Distribution Grid Modernization	,,,,,,,,	12,942	12,942
Distribution Wood Pole Management		12,000	12,000
Primary URD Cable Replacement		1,000	1,000
Customer Requested			
New Revenue - Growth		23,123	23,123
Failed Plant and Operations			
Electric Storms	3,200		3,200
Distribution Minor Rebuild	., .,	8,900	8,900
Meter Minor Blanket		300	300
Spokane Electric Network		2,300	2,300
Mandatory and Compliance			
Colstrip Transmission	442		442
Environmental Compliance	50	350	400
Noxon Switchyard Rebuild	21,600		21,600
Tribal Permits and Settlements	250		250
Elec Replacement/Relocation		3,100	3,100
Franchising for WSDOT		200	200
Performance and Capacity			
SCADA Build-Out Program	7,670		7,670
Substation - Capital Spares	4,025		4,025
Substation - New Distribution Stations	5,000		5,000
Segment Reconductor and FDR Tie Program		5,000	5,000
	\$ 85,058	\$ 69,215	\$ 154,273
Total Capital Additions in 2021		-	¢ 202 494
Total Capital Additions in 2021		=	\$ 393,484