

**BEFORE THE WASHINGTON  
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

Respondent.

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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**

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**EXHIBIT PADS-17**

Avista Response to Public Counsel Data Request No. 208, Attachment A

**April 21, 2021**

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

JURISDICTION:	WASHINGTON	DATE PREPARED:	03/05/2021
CASE NO.:	UE-200900 & UG-200901	WITNESS:	Heather Rosentrater
REQUESTER:	Public Counsel	RESPONDER:	Glenn Madden
TYPE:	Data Request	DEPT:	Substation Engineering
REQUEST NO.:	PC - 208	TELEPHONE:	(509) 495-2146
		EMAIL:	glenn.madden@avistacorp.com

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

**REQUEST:**

**Please refer to Attachment A provided by Avista in response to Public Counsel Data Request No. 99, which provides a list of equipment replacements and the reasons for those replacements.**

For approximately 306 of the 512 pieces of equipment replaced, the reason for replacement given was "Obsolescence". For each piece of such equipment:

- a) Name the piece of equipment replaced.
- b) Provide the capital cost.
- c) Identify if the equipment was operating safely or not at the time of replacement.
- d) For each piece of equipment which was not operating, or not operating safely, provide the length of time the item had not been operating/safe.
- e) For each piece of equipment which was not operating, or not operating safely, identify if it failed in service.
- f) For each piece of equipment which was not operating, or not operating safely, identify if it failed an objective test or formal inspection.
- g) For each piece of equipment replaced, regardless of operation/safety, provide the age upon replacement of the oldest item of that equipment type ever replaced anywhere on Avista's system.
- h) For each piece of equipment replaced, regardless of operation/safety, provide the age of the oldest item of that equipment type currently operating anywhere on Avista's system.

**RESPONSE:**

- a) Please Refer to PC-DR-208 Attachment A, which provides additional information to the file originally provided as part of our response to PC-DR-099. The requested information is provided in sheets labeled "2018", "2019" and "2020," under Column C "Equipment Name."
- b) Please refer to "PC-DR-208 Attachment A". Sheets "2018", "2019" and "2020." Column D contains "Equipment Costs," which list dollar amounts for purchase cost of the equipment.
- c) Equipment replaced in the Substation Rebuilds Program during 2018-2020 for the reason of obsolescence was not specifically designated as being replaced due to safety concerns only. The need to mitigate safety concerns is a consideration among others we have already discussed in replacing equipment determined to be obsolete as part of an entire substation being rebuilt. Please refer to PC-DR-103 for our characterizations of the application of safety in infrastructure planning, and PC-DR-209 for the description and examples of the tools used to identify such equipment.
- d) Please see part (c), above.

- e) While the information provided in PC-DR-208 A does not indicate whether an obsolete piece of equipment failed in service, Avista endeavors to ensure this is a rare event, given our experience with the emergency replacement times for key pieces of substation equipment, as noted in the table below.

<b>Equipment Type</b>	<b>Estimated Replacement Duration</b>
Voltage Regulator	16 Hours
LV Breaker	2 Days
HV Breaker	1 Week
Power Transformer	1 Week

- f) To make the determination whether a piece of equipment is not operating properly, or not operating safely, Avista uses objective tests and/or formal inspections to make that determination. The tests vary depending on the piece of equipment in question.
- g) Please Refer to PC-DR-208 Attachment A. Sheet “2018”, “2019” and “2020”. Column F “Age upon Replacement.”
- h) Please refer to PC-DR-208 Attachment A, Sheets labeled PC-208, Part h, Equip Type Data.

PC-99 & PC-101 & PC-208

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Beacon 230kV	Hv-Lv Bushing	BUSHING H1		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	BUSHING H2		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	Bushing H2		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	BUSHING H3		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	Bushing H3		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	BUSHING X1		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	BUSHING X2		Operational and Maintenance Requirements	37
Beacon 230kV	Hv-Lv Bushing	BUSHING X3		Operational and Maintenance Requirements	37
Beacon 230kV	Surge Arrester	Arrester X1		Operational and Maintenance Requirements	Unknown
Beacon 230kV	Surge Arrester	Arrester X2		Operational and Maintenance Requirements	Unknown
Beacon 230kV	Surge Arrester	Arrester X3		Operational and Maintenance Requirements	Unknown
Big Creek 115kV	Voltage Regulator	412 A PH SVR		Operational and Maintenance Requirements	54
Big Creek 115kV	Voltage Regulator	411 A PH SVR		Operational and Maintenance Requirements	58
Big Creek 115kV	Voltage Regulator	411 B PH SVR		Operational and Maintenance Requirements	58
Big Creek 115kV	Voltage Regulator	411 C PH SVR		Operational and Maintenance Requirements	58
Big Creek 115kV	Voltage Regulator	412 B PH SVR		Operational and Maintenance Requirements	54
Big Creek 115kV	Voltage Regulator	412 C PH SVR		Operational and Maintenance Requirements	54
Chester 115kV	Air Switch	12F2 Transfer Bus Disc		Operational and Maintenance Requirements	39
Colville 115kV	Circuit Switcher	A-353 CKT SWR	\$ 78,820	Obsolescence	19
Colville 115kV	Hv-Lv Bushing	Bushing 163		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 164		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 165		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 166		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 167		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 168		Obsolescence	31
Colville 115kV	Hv-Lv Bushing	Bushing 73		Obsolescence	31
Colville 115kV	METS Auxiliary Equipment	Current Transducer		Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	Current Transducer		Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	Current Transducer		Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports	\$ 5,308	Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	SEL-9192 USB 56K DIAL-UP MODEM	\$ 230	Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	Voltage Transducer		Obsolescence	Unknown
Colville 115kV	METS Auxiliary Equipment	WV-25 Watt/Var Transducer 0-1mA		Obsolescence	Unknown
Colville 115kV	Power Transformer	Transformer #2	\$ 406,547	Obsolescence	67
Colville 115kV	Voltage Regulator	12F2 A PH SVR		Operational and Maintenance Requirements	48
Colville 115kV	Voltage Regulator	12F2 B PH SVR		Operational and Maintenance Requirements	40
Colville 115kV	Voltage Regulator	12F2 C PH SVR		Operational and Maintenance Requirements	40
Dalton 115kV	Hv-Lv Bushing	Bushing Transf 2		Operational and Maintenance Requirements	41
Fort Wright 115kV	Voltage Regulator	12F2 B PH SVR		Operational and Maintenance Requirements	New Install
Francis & Cedar 115kV	Voltage Regulator	12F5 C PH SVR		Operational and Maintenance Requirements	28
Garden Springs 115kV	Battery Charger	Battery Charger 48V		Obsolescence	27
Garden Springs 115kV	Battery	Battery Bank 48V		Theft	2
Grangeville 115kV	Battery	Battery Bank 48V		Obsolescence	5
Grangeville 115kV	Battery	Battery Bank 48V (Temporary Bank)		Obsolescence	0
Kamiah 115kV	Air Switch	1291 LINE/BYPASS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	1291 LINE/BYPASS DISC BPH		Obsolescence	40
Kamiah 115kV	Air Switch	1291 LINE/BYPASS DISC CPH		Obsolescence	40
Kamiah 115kV	Air Switch	1292 LINE/BYPASS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	1292 LINE/BYPASS DISC BPH		Obsolescence	40
Kamiah 115kV	Air Switch	1292 LINE/BYPASS DISC CPH		Obsolescence	40
Kamiah 115kV	Air Switch	1293 LINE/BYPASS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	1293 LINE/BYPASS DISC BPH		Obsolescence	40

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Kamiah 115kV	Air Switch	1293 LINE/BYPASS DISC CPH		Obsolescence	40
Kamiah 115kV	Air Switch	13KV MOBILE SUB DISC	\$ 11,634	Obsolescence	Unknown
Kamiah 115kV	Air Switch	13KV TRANSFORMER 1 DISC	\$ 11,634	Obsolescence	Unknown
Kamiah 115kV	Air Switch	A-322 AIR SWITCH	\$ 7,551	Obsolescence	Unknown
Kamiah 115kV	Air Switch	BUS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC APH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC BPH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC BPH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC BPH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC CPH		Obsolescence	40
Kamiah 115kV	Air Switch	BUS DISC CPH		Obsolescence	40
Kamiah 115kV	Breaker Recloser	1291 VCB	\$ 19,215	Obsolescence	18
Kamiah 115kV	Breaker Recloser	1292 VCB	\$ 19,215	Obsolescence	40
Kamiah 115kV	Breaker Recloser	1293 VCB	\$ 19,215	Obsolescence	43
Kamiah 115kV	Circuit Switcher	A-322 CKT SWR	\$ 44,514	Obsolescence	40
Kamiah 115kV	Hv-Lv Bushing	BUSHING H1		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING H2		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING H3		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING X0		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING X1		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING X2		Obsolescence	39
Kamiah 115kV	Hv-Lv Bushing	BUSHING X3		Obsolescence	39
Kamiah 115kV	Perimeter Security	PERIMETER SECURITY		Obsolescence	Unknown
Kamiah 115kV	Power Transformer	Transformer #1	\$ 297,500	Obsolescence	39
Kamiah 115kV	Pt	13KV BUS PT A PH	\$ 884	Obsolescence	Unknown
Kamiah 115kV	Pt	13KV BUS PT B PH	\$ 884	Obsolescence	Unknown
Kamiah 115kV	Pt	13KV BUS PT C PH	\$ 884	Obsolescence	Unknown
Kamiah 115kV	Surge Arrester	ARRESTER H1		Obsolescence	39
Kamiah 115kV	Surge Arrester	ARRESTER H2		Obsolescence	39
Kamiah 115kV	Surge Arrester	ARRESTER H3		Obsolescence	39
Kamiah 115kV	Surge Arrester	ARRESTER X1		Obsolescence	39
Kamiah 115kV	Surge Arrester	ARRESTER X2		Obsolescence	39
Kamiah 115kV	Surge Arrester	ARRESTER X3		Obsolescence	39
Kamiah 115kV	Voltage Regulator	1291 A PH SVR	\$ 11,281	Obsolescence	40
Kamiah 115kV	Voltage Regulator	1291 B PH SVR	\$ 11,281	Obsolescence	40
Kamiah 115kV	Voltage Regulator	1291 C PH SVR	\$ 11,281	Obsolescence	40
Kamiah 115kV	Voltage Regulator	1292 A PH SVR	\$ 11,281	Obsolescence	40
Kamiah 115kV	Voltage Regulator	1292 B PH SVR	\$ 11,281	Obsolescence	39
Kamiah 115kV	Voltage Regulator	1292 C PH SVR	\$ 11,281	Obsolescence	40
Kamiah 115kV	Voltage Regulator	1293 A PH SVR	\$ 11,281	Obsolescence	45
Kamiah 115kV	Voltage Regulator	1293 B PH SVR	\$ 11,281	Obsolescence	45
Kamiah 115kV	Voltage Regulator	1293 C PH SVR	\$ 11,281	Obsolescence	38
Kettle Falls 115kV	Pt	115KV PT APH		Operational and Maintenance Requirements	36
Kettle Falls 115kV	Pt	115KV PT BPH		Operational and Maintenance Requirements	36
Kettle Falls 115kV	Pt	115KV PT CPH		Operational and Maintenance Requirements	36
Lee & Reynolds 115kV	Breaker Recloser	514 VCB		Overloading	20
Lee & Reynolds 115kV	Breaker Recloser	513 VCB		Overloading	20
Lee & Reynolds 115kV	Breaker Recloser	512 VCB		Overloading	21
Lee & Reynolds 115kV	Circuit Switcher	A-1033 CKT SWT		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 115kV		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 115kV		Overloading	Unknown

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 115kV		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 15kV		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 15kV		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 15kV		Overloading	Unknown
Lee & Reynolds 115kV	Hv-Lv Bushing	Bushing - 15kV		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	1991L LCD AccuTouch Monitor 12Vdc Input Dual Serial/USB		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	DC/DC Converter		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	GX450 LTE AT&T WIRELESS MODEM-DC		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	Line Sharing Switch		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	SEL2407-Satellite Synchronized Clock		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	SMP16/SG 48V Modernization Platform		Overloading	Unknown
Lee & Reynolds 115kV	Power Transformer	Transformer #2		Overloading	Unknown
Lee & Reynolds 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		Overloading	Unknown
Lee & Reynolds 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		Overloading	Unknown
Lee & Reynolds 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		Overloading	Unknown
Lee & Reynolds 115kV	Voltage Regulator	511 A PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	511 B PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	511 C PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	512 A PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	512 B PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	512 C PH SVR		Overloading	20
Lee & Reynolds 115kV	Voltage Regulator	516 A PH SVR		Overloading	New Install
Lee & Reynolds 115kV	Voltage Regulator	516 B PH SVR		Overloading	New Install
Lee & Reynolds 115kV	Voltage Regulator	516 C PH SVR		Overloading	New Install
Lind 115kV	Hv - Circuit Breaker	A-98 GCB	\$ 55,775	Obsolescence	60
Lind 115kV	Pt	13kV PT APH		Operational and Maintenance Requirements	Unknown
Marengo 115kV	Voltage Regulator	REA A PH SVR	\$ 9,299	Obsolescence	49
Marengo 115kV	Voltage Regulator	REA B PH SVR	\$ 9,299	Obsolescence	49
Marengo 115kV	Voltage Regulator	REA C PH SVR		Operational and Maintenance Requirements	49
Moscow City 115kV	Air Switch	13kV Bus Tie		Operational and Maintenance Requirements	38
Moscow City 115kV	Voltage Regulator	513 A PH SVR	\$ 17,815	Obsolescence	39
Moscow City 115kV	Voltage Regulator	513 B PH SVR	\$ 17,815	Obsolescence	39
Moscow City 115kV	Voltage Regulator	513 C PH SVR	\$ 17,815	Obsolescence	39
Moscow City 115kV	Voltage Regulator	514 A PH SVR	\$ 18,350	Obsolescence	39
Moscow City 115kV	Voltage Regulator	514 B PH SVR	\$ 18,350	Obsolescence	39
Moscow City 115kV	Voltage Regulator	514 C PH SVR	\$ 18,350	Obsolescence	39
Moscow City 115kV	Voltage Regulator	515 A PH SVR	\$ 17,815	Obsolescence	23
Moscow City 115kV	Voltage Regulator	515 B PH SVR	\$ 17,815	Obsolescence	23
Moscow City 115kV	Voltage Regulator	515 C PH SVR	\$ 17,815	Obsolescence	13
Moscow City 115kV	Voltage Regulator	514 C PH SVR		Operational and Maintenance Requirements	39
Ninth & Central 115kV	Air Switch	12F1 BUS DISC APH		Obsolescence	48
Ninth & Central 115kV	Air Switch	12F1 BUS DISC BPH		Obsolescence	48
Ninth & Central 115kV	Air Switch	12F1 BUS DISC CPH		Obsolescence	48
Ninth & Central 115kV	Air Switch	12F1 LINE/BYPASS DISC APH		Obsolescence	19
Ninth & Central 115kV	Air Switch	12F1 LINE/BYPASS DISC BPH		Obsolescence	19
Ninth & Central 115kV	Air Switch	12F1 LINE/BYPASS DISC CPH		Obsolescence	19
Ninth & Central 115kV	Air Switch	12F2 BUS DISC APH		Obsolescence	52
Ninth & Central 115kV	Air Switch	12F2 BUS DISC BPH		Obsolescence	52
Ninth & Central 115kV	Air Switch	12F2 BUS DISC CPH		Obsolescence	52
Ninth & Central 115kV	Air Switch	12F2 LINE/BYPASS DISC APH		Obsolescence	19
Ninth & Central 115kV	Air Switch	12F2 LINE/BYPASS DISC BPH		Obsolescence	19

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Ninth & Central 115kV	Air Switch	12F2 LINE/BYPASS DISC CPH		Obsolescence	19
Ninth & Central 115kV	Air Switch	12F3 BUS DISC APH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F3 BUS DISC BPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F3 BUS DISC CPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F3 LINE/BYPASS DISC APH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F3 LINE/BYPASS DISC BPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F3 LINE/BYPASS DISC CPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 BUS DISC APH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 BUS DISC BPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 BUS DISC CPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 LINE/BYPASS DISC APH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 LINE/BYPASS DISC BPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F4 LINE/BYPASS DISC CPH		Obsolescence	40
Ninth & Central 115kV	Air Switch	12F5 BUS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F5 BUS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F5 BUS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F5 LINE/BYPASS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F5 LINE/BYPASS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F5 LINE/BYPASS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 BUS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 BUS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 BUS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 LINE/BYPASS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 LINE/BYPASS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12F6 LINE/BYPASS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA BUS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA BUS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA BUS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA LINE/BYPASS DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA LINE/BYPASS DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	12FA LINE/BYPASS DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	13KV AUX BUS 2 DISC APH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	13KV AUX BUS 2 DISC BPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	13KV AUX BUS 2 DISC CPH		Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	13KV MAIN BUS 1&2 TIE	\$ 11,634	Obsolescence	Unknown
Ninth & Central 115kV	Air Switch	13KV TRANSFORMER 1 DISC	\$ 11,634	Obsolescence	39
Ninth & Central 115kV	Air Switch	13KV TRANSFORMER 2 DISC	\$ 11,634	Obsolescence	39
Ninth & Central 115kV	Air Switch	A-687 TRANSFORMER 2 DISC	\$ 7,627	Obsolescence	41
Ninth & Central 115kV	Air Switch	A-690 TRANSFORMER 1 DISC	\$ 7,551	Obsolescence	41
Ninth & Central 115kV	Battery	Battery Bank 125V		Obsolescence	19
Ninth & Central 115kV	Battery Charger	Battery Charger 125V		Obsolescence	20
Ninth & Central 115kV	Breaker Recloser	12F1 VCB	\$ 19,984	Obsolescence	52
Ninth & Central 115kV	Breaker Recloser	12F2 VCB	\$ 19,984	Obsolescence	45
Ninth & Central 115kV	Breaker Recloser	12F3 VCB	\$ 19,984	Obsolescence	41
Ninth & Central 115kV	Breaker Recloser	12F4 VCB	\$ 19,984	Obsolescence	41
Ninth & Central 115kV	Breaker Recloser	12F5 VCB	\$ 19,984	Obsolescence	41
Ninth & Central 115kV	Breaker Recloser	12F6 VCB	\$ 19,984	Obsolescence	63
Ninth & Central 115kV	Breaker Recloser	AUX VCB	\$ 19,984	Obsolescence	65
Ninth & Central 115kV	Current Transformer	13KV BUS CT A PH		Obsolescence	Unknown
Ninth & Central 115kV	Current Transformer	13KV BUS CT B PH		Obsolescence	Unknown
Ninth & Central 115kV	Current Transformer	13KV BUS CT C PH		Obsolescence	Unknown
Ninth & Central 115kV	Distribution Transformer	STATION SERVICE #1 ASSET 208678562		Obsolescence	Unknown
Ninth & Central 115kV	Distribution Transformer	STATION SERVICE #2 ASSET 10405870	\$ 1,375	Obsolescence	Unknown

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Ninth & Central 115kV	Hv - Circuit Breaker	A-687 GCB	\$ 58,750	Obsolescence	New Install
Ninth & Central 115kV	Hv - Circuit Breaker	A-690 GCB	\$ 58,750	Obsolescence	New Install
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING H1		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING H1		Obsolescence	17
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING H2		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING H2		Obsolescence	17
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING H3		Obsolescence	17
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X0		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X0		Obsolescence	17
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X1		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X1		Obsolescence	17
Ninth & Central 115kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X2		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X2		Obsolescence	17
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X3		Obsolescence	41
Ninth & Central 115kV	Hv-Lv Bushing	BUSHING X3		Obsolescence	17
Ninth & Central 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports	\$ 5,308	Obsolescence	Unknown
Ninth & Central 115kV	METS Auxiliary Equipment	SEL2407-Satellite Synchronized Clock	\$ 1,380	Obsolescence	Unknown
Ninth & Central 115kV	Power Transformer	Transformer #1	\$ 455,929	Obsolescence	52
Ninth & Central 115kV	Power Transformer	Transformer #2	\$ 347,150	Obsolescence	41
Ninth & Central 115kV	Pt	13KV BUS PT A PH		Obsolescence	40
Ninth & Central 115kV	Pt	13KV BUS PT A PH		Obsolescence	40
Ninth & Central 115kV	Pt	13KV BUS PT B PH		Obsolescence	40
Ninth & Central 115kV	Pt	13KV BUS PT B PH		Obsolescence	40
Ninth & Central 115kV	Pt	13KV BUS PT C PH		Obsolescence	40
Ninth & Central 115kV	Pt	13KV BUS PT C PH		Obsolescence	40
Ninth & Central 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 125V	\$ 1,866	Obsolescence	Unknown
Ninth & Central 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 125V	\$ 1,866	Obsolescence	Unknown
Ninth & Central 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 125V	\$ 1,866	Obsolescence	Unknown
Ninth & Central 115kV	Surge Arrester	Arrester H1		Obsolescence	40
Ninth & Central 115kV	Surge Arrester	Arrester H1		Obsolescence	17
Ninth & Central 115kV	Surge Arrester	Arrester X1		Obsolescence	40
Ninth & Central 115kV	Surge Arrester	Arrester X1		Obsolescence	17
Ninth & Central 115kV	Voltage Regulator	12F1 A PH SVR	\$ 17,815	Obsolescence	48
Ninth & Central 115kV	Voltage Regulator	12F1 B PH SVR	\$ 17,815	Obsolescence	48
Ninth & Central 115kV	Voltage Regulator	12F1 C PH SVR	\$ 17,815	Obsolescence	48
Ninth & Central 115kV	Voltage Regulator	12F2 A PH SVR	\$ 17,815	Obsolescence	52
Ninth & Central 115kV	Voltage Regulator	12F2 B PH SVR	\$ 17,815	Obsolescence	40
Ninth & Central 115kV	Voltage Regulator	12F2 C PH SVR	\$ 17,815	Obsolescence	48
Ninth & Central 115kV	Voltage Regulator	12F3 A PH SVR	\$ 17,815	Obsolescence	15
Ninth & Central 115kV	Voltage Regulator	12F3 B PH SVR	\$ 17,815	Obsolescence	41
Ninth & Central 115kV	Voltage Regulator	12F3 C PH SVR	\$ 17,815	Obsolescence	41
Ninth & Central 115kV	Voltage Regulator	12F4 A PH SVR	\$ 17,815	Obsolescence	17
Ninth & Central 115kV	Voltage Regulator	12F4 B PH SVR	\$ 17,815	Obsolescence	17
Ninth & Central 115kV	Voltage Regulator	12F4 C PH SVR	\$ 17,815	Obsolescence	17
Ninth & Central 115kV	Voltage Regulator	12F5 A PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	12F5 B PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	12F5 C PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	12F6 A PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	12F6 B PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	12F6 C PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	AUX A PH SVR	\$ 17,815	Obsolescence	New Install
Ninth & Central 115kV	Voltage Regulator	AUX B PH SVR	\$ 17,815	Obsolescence	New Install



Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Ninth & Central 115kV	Voltage Regulator	AUX C PH SVR	\$ 17,815	Obsolescence	New Install
North Moscow 115kV	Air Switch	BUS DISC APH		Obsolescence	53
North Moscow 115kV	Air Switch	BUS DISC APH		Obsolescence	53
North Moscow 115kV	Air Switch	BUS DISC BPH		Obsolescence	53
North Moscow 115kV	Air Switch	BUS DISC BPH		Obsolescence	53
North Moscow 115kV	Air Switch	BUS DISC CPH		Obsolescence	53
North Moscow 115kV	Air Switch	BUS DISC CPH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC APH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC APH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC BPH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC BPH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC CPH		Obsolescence	53
North Moscow 115kV	Air Switch	LINE/BYPASS DISC CPH		Obsolescence	53
Noxon Rapids 230kV Switchyard	METS Auxiliary Equipment	SEL2488-Satellite Synchronized Network Clock		Operational and Maintenance Requirements	Unknown
Oden 115kV	Air Switch	A-552 LINE DISC		Operational and Maintenance Requirements	39
Oden 115kV	Air Switch	A-553 LINE DISC		Operational and Maintenance Requirements	39
Orofino 115kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Orofino 115kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Osburn115kV	Voltage Regulator	521 A PH SVR		Operational and Maintenance Requirements	11
Osburn115kV	Voltage Regulator	521 B PH SVR		Operational and Maintenance Requirements	11
Osburn115kV	Voltage Regulator	521 C PH SVR		Operational and Maintenance Requirements	11
Post Street 115kV	METS Auxiliary Equipment	SMP16/SG 125V Modernization Platform	\$ 13,822	Obsolescence	Unknown
Priest River 115kV	Air Switch	24kV MOBILE DISC		Obsolescence	Unknown
Priest River 115kV	Air Switch	24kV TRANSFORMER DISC	\$ 10,331	Obsolescence	Unknown
Priest River 115kV	Battery	Battery Bank 48V		Obsolescence	4
Priest River 115kV	Battery Charger	Battery Charger 48V		Obsolescence	23
Priest River 115kV	Breaker Recloser	751 VCB	\$ 22,048	Obsolescence	40
Priest River 115kV	Breaker Recloser	752 VCB	\$ 22,048	Obsolescence	New Install
Priest River 115kV	METS Auxiliary Equipment	1991L LCD AccuTouch Monitor 12Vdc Input Dual Serial/USB	\$ 685	Obsolescence	Unknown
Priest River 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports	\$ 5,308	Obsolescence	Unknown
Priest River 115kV	METS Auxiliary Equipment	SMP16/SG 48V Modernization Platform	\$ 14,570	Obsolescence	Unknown
Priest River 115kV	Voltage Regulator	751 A PH SVR	\$ 13,899	Obsolescence	14
Priest River 115kV	Voltage Regulator	751 B PH SVR	\$ 13,899	Obsolescence	14
Priest River 115kV	Voltage Regulator	751 C PH SVR	\$ 13,899	Obsolescence	23
Priest River 115kV	Voltage Regulator	752 A PH SVR	\$ 13,899	Obsolescence	New Install
Priest River 115kV	Voltage Regulator	752 B PH SVR	\$ 13,899	Obsolescence	New Install
Priest River 115kV	Voltage Regulator	752 C PH SVR	\$ 13,899	Obsolescence	New Install
Ramsey Rd 115kV SS	Pt	115KV LINE PT B PH		Operational and Maintenance Requirements	22
Rathdrum 230kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Reardan 115kV	Voltage Regulator	12F1 A PH SVR		Operational and Maintenance Requirements	21
Reardan 115kV	Voltage Regulator	12F1 B PH SVR		Operational and Maintenance Requirements	41
Reardan 115kV	Voltage Regulator	12F1 C PH SVR		Operational and Maintenance Requirements	41
Sandpoint 115kV	Air Switch	2S100 LINE DISC		Overloading	Unknown
Sandpoint 115kV	Air Switch	2S103 BUS SECT SW		Overloading	32
Sunset 115kV	Capbank	Capacitor Bank #1		Obsolescence	Unknown
Valley 115kV	Voltage Regulator	12F3 A PH SVR	\$ 11,281	Obsolescence	37
Valley 115kV	Voltage Regulator	12F3 B PH SVR	\$ 11,281	Obsolescence	37
Valley 115kV	Voltage Regulator	12F3 C PH SVR	\$ 11,281	Obsolescence	37
Waikiki 115kV	Breaker Recloser	12F1 OCR		SCADA Communication, Grid Modernization or Other Programs	40
Waikiki 115kV	Voltage Regulator	12F3 A PH SVR	\$ 18,350	Obsolescence	18
Waikiki 115kV	Voltage Regulator	12F3 B PH SVR	\$ 18,350	Obsolescence	40
Waikiki 115kV	Voltage Regulator	12F3 C PH SVR	\$ 18,350	Obsolescence	17
Warden 115kV SS	Hv - Circuit Breaker	A-310 GCB	\$ 66,455	Obsolescence	60

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Warden 115kV SS Westside 230kV	Pt Sub-Gen Meters	115kV PT BPH JEMSTAR METER JS-09R6010-53 RS-485/DNP3	\$ 8,568	Obsolescence Operational and Maintenance Requirements	Unknown Unknown

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Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Arden 115kV	Voltage Regulator	12F1 A PH SVR		Operational and Maintenance Requirements	49
Arden 115kV	Voltage Regulator	12F1 B PH SVR		Operational and Maintenance Requirements	49
Arden 115kV	Voltage Regulator	12F1 C PH SVR		Operational and Maintenance Requirements	49
Arden 115kV	Voltage Regulator	12F2 A PH SVR		Operational and Maintenance Requirements	39
Arden 115kV	Voltage Regulator	12F2 B PH SVR		Operational and Maintenance Requirements	39
Arden 115kV	Voltage Regulator	12F2 C PH SVR		Operational and Maintenance Requirements	39
Benewah 230kV	METS Auxiliary Equipment	SMP SG-4260 125V SUBSTATION GATEWAY	\$ 4,117	Obsolescence	Unknown
Benewah 230kV	METS Auxiliary Equipment	R-461 Sync Controller		Operational and Maintenance Requirements	Unknown
Chester 115kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	3
Clearwater 115kV	Hv-Lv Bushing	Bushing X1		Obsolescence	Unknown
Clearwater 115kV	Hv-Lv Bushing	Bushing X2		Obsolescence	Unknown
Clearwater 115kV	Battery	Battery Bank 125V		Operational and Maintenance Requirements	17
College & Walnut 115kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	10
Colville 115kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	3
Colville 115kV	Voltage Regulator	12F4 B PH SVR		Operational and Maintenance Requirements	32
Devil's Gap 115kV SS	Battery	Battery Bank 125V		Obsolescence	21
Ford 115kV	Breaker Recloser	12F1 VCB	\$ 19,215	Obsolescence	11
Ford 115kV	Breaker Recloser	12F2 VCB	\$ 19,215	Obsolescence	New Install
Ford 115kV	Breaker Recloser	AUX VCB	\$ 19,215	Obsolescence	New Install
Ford 115kV	Hv-Lv Bushing	Bushing - 115kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 115kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 115kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 15kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 15kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 15kV		Obsolescence	Unknown
Ford 115kV	Hv-Lv Bushing	Bushing - 15kV		Obsolescence	Unknown
Ford 115kV	Power Transformer	Transformer #1	\$ 298,585	Obsolescence	New Install
Ford 115kV	Pt	70:1 15kV PT - GE JVV-5		Obsolescence	Unknown
Ford 115kV	Pt	70:1 15kV PT - GE JVV-5		Obsolescence	Unknown
Ford 115kV	Pt	70:1 15kV PT - GE JVV-5		Obsolescence	Unknown
Fort Wright 115kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	3
Francis & Cedar 115kV	Voltage Regulator	12F3 A PH SVR		Operational and Maintenance Requirements	23
Francis & Cedar 115kV	Voltage Regulator	12F3 B PH SVR		Operational and Maintenance Requirements	21
Francis & Cedar 115kV	Voltage Regulator	12F3 C PH SVR		Operational and Maintenance Requirements	21
Grangeville 115kV	Air Switch	A-339 Air Switch		Operational and Maintenance Requirements	11
Grangeville 115kV	Battery Charger	Battery Charger 48V		Overloading	14
Grangeville 115kV	Voltage Regulator	1273 B PH SVR		Operational and Maintenance Requirements	7
Grangeville 115kV	Voltage Regulator	1272 A PH SVR		Operational and Maintenance Requirements	51
Grangeville 115kV	Voltage Regulator	1272 B PH SVR		Operational and Maintenance Requirements	51
Grangeville 115kV	Voltage Regulator	1272 C PH SVR		Operational and Maintenance Requirements	51
Greenacres 115kV	Voltage Regulator	12F1 A PH SVR		Operational and Maintenance Requirements	5
Hallett & White 115kV	Voltage Regulator	12F2 A PH SVR		Operational and Maintenance Requirements	1
Lakeview 230/13kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	5
Lakeview 230/13kV	Battery Charger	Battery Charger 48v		Operational and Maintenance Requirements	8
Latah Jct 115kV	Voltage Regulator	422 B PH SVR		Operational and Maintenance Requirements	15
Lee & Reynolds 115kV	Battery	Battery Bank 48V		Overloading	4
Lee & Reynolds 115kV	Battery Charger	Battery Charger 48v		Overloading	22
Lee & Reynolds 115kV	Breaker Recloser	511 VCB		Overloading	22
Lee & Reynolds 115kV	Circuit Switcher	A-1031 CKT SWT		Overloading	21
Lee & Reynolds 115kV	METS Auxiliary Equipment	GX450 LTE AT&T WIRELESS MODEM-DC		Overloading	Unknown
Lee & Reynolds 115kV	METS Auxiliary Equipment	GX450 LTE AT&T WIRELESS MODEM-DC		Overloading	Unknown

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Lee & Reynolds 115kV	Power Transformer	Transformer #1		Overloading	21
Lee & Reynolds 115kV	Voltage Regulator	515 A PH SVR		Overloading	New Install
Lee & Reynolds 115kV	Voltage Regulator	515 B PH SVR		Overloading	New Install
Lee & Reynolds 115kV	Voltage Regulator	515 C PH SVR		Overloading	New Install
Liberty Lake 115kV	Hv-Lv Bushing	Bushing X1		Operational and Maintenance Requirements	Unknown
Mead 115kV	Breaker Recloser	12F3 VCB		SCADA Communication, Grid Modernization or Other Programs	New Install
Mead 115kV	Voltage Regulator	12F3 A PH SVR		SCADA Communication, Grid Modernization or Other Programs	New Install
Mead 115kV	Voltage Regulator	12F3 B PH SVR		SCADA Communication, Grid Modernization or Other Programs	New Install
Mead 115kV	Voltage Regulator	12F3 C PH SVR		SCADA Communication, Grid Modernization or Other Programs	New Install
Opportunity 115kV	Air Switch	A-18 Air Switch		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Current Transformer	BUSHING CT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Current Transformer	BUSHING CT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Current Transformer	BUSHING CT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Pt	115kV PT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Pt	115kV PT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Pt	115kV PT		Operational and Maintenance Requirements	Unknown
Opportunity 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 125V		Operational and Maintenance Requirements	Unknown
Orofino 115kV	Battery	Batter Bank 48V		Obsolescence	21
Otis Orchards 115kV SS	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Pine Creek 230kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Pound Lane 115kV	Voltage Regulator	1201 A PH SVR		SCADA Communication, Grid Modernization or Other Programs	46
Pound Lane 115kV	Voltage Regulator	1201 B PH SVR		SCADA Communication, Grid Modernization or Other Programs	33
Pound Lane 115kV	Voltage Regulator	1201 C PH SVR		SCADA Communication, Grid Modernization or Other Programs	46
Rathdrum 230kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Rathdrum 230kV	Power Transformer	Transformer #1		SCADA Communication, Grid Modernization or Other Programs	Mid-Life Rebuild
Rosalia 115kV	Voltage Regulator	431 B PH SVR		Operational and Maintenance Requirements	23
Ross Park 115kV	METS Auxiliary Equipment	SMP16/SG 48V Modernization Platform		Operational and Maintenance Requirements	Unknown
South Lewiston 115kV	Air Switch	1348 Line/Bypass Disc		Operational and Maintenance Requirements	Unknown
South Lewiston 115kV	Voltage Regulator	1316 B PH SVR		Operational and Maintenance Requirements	47
South Lewiston 115kV	Voltage Regulator	1348 C PH SVR		Operational and Maintenance Requirements	49
Spirit 115kV	Air Switch	13kV Bus Disc		Overloading	Unknown
Spirit 115kV	Air Switch	A-229 AIR SWITCH		Overloading	Unknown
Spirit 115kV	Power Transformer	Transformer #1		Overloading	73
Spokane Ind. Park 115kV	Voltage Regulator	12F5 B PH SVR		Operational and Maintenance Requirements	28
Tenth & Stewart 115kV	Voltage Regulator	1255 A PH SVR		Operational and Maintenance Requirements	43
Tenth & Stewart 115kV	Voltage Regulator	1253 A PH SVR		Operational and Maintenance Requirements	16
Tenth & Stewart 115kV	Voltage Regulator	1253 B PH SVR		Operational and Maintenance Requirements	16
Tenth & Stewart 115kV	Voltage Regulator	1253 C PH SVR		Operational and Maintenance Requirements	16
Tenth & Stewart 115kV	Voltage Regulator	1255 B PH SVR		Operational and Maintenance Requirements	40
Tenth & Stewart 115kV	Voltage Regulator	1255 C PH SVR		Operational and Maintenance Requirements	46
Third & Hatch 115kV	Battery	Battery Bank 125V		Obsolescence	21
Third & Hatch 115kV	Voltage Regulator	12F5 A PH SVR		Operational and Maintenance Requirements	33
Third & Hatch 115kV	Voltage Regulator	12F5 B PH SVR		Operational and Maintenance Requirements	38
Third & Hatch 115kV	Voltage Regulator	12F5 C PH SVR		Operational and Maintenance Requirements	46
Turner 115kV	METS Auxiliary Equipment	SMP16/SG 48V Modernization Platform		Operational and Maintenance Requirements	Unknown
Westside 230kV	Battery	Battery Bank 125V		Obsolescence	21
Wickes 115kV	Voltage Regulator	1279 A PH SVR	\$ 11,281	Obsolescence	43
Wickes 115kV	Voltage Regulator	1279 B PH SVR	\$ 11,281	Obsolescence	43
Wickes 115kV	Voltage Regulator	1279 C PH SVR	\$ 11,281	Obsolescence	43

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Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Battery Trailer 1	Battery	Battery Bank 125V		Obsolescence	5
Big Creek 115kV	Timber/Structure			Operational and Maintenance Requirements	Unknown
Bronx 115kV	Battery	Battery Bank 48V		Obsolescence	4
Bunker Hill Ltd. 115kV	Voltage Regulator	424 A PH SVR		Operational and Maintenance Requirements	60
Bunker Hill Ltd. 115kV	Voltage Regulator	424 B PH SVR		Operational and Maintenance Requirements	26
Bunker Hill Ltd. 115kV	Voltage Regulator	424 C PH SVR		Operational and Maintenance Requirements	54
College & Walnut 115kV	Hv - Circuit Breaker	A-432 GCB		Obsolescence	47
Dry Gulch 115kV	Circuit Switcher	A-113 CKT SWR		SCADA Communication, Grid Modernization or Other Programs	40
Dry Gulch 115kV	METS Auxiliary Equipment	1991L LCD AccuTouch Monitor 12Vdc Input Dual Serial/USB		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	METS Auxiliary Equipment	Ethernet Switch w/ Fiber Ports		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	METS Auxiliary Equipment	POWER ONE DC/DC CONVERTER		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	METS Auxiliary Equipment	SEL2407 Satellite Synchronized Clock		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	METS Auxiliary Equipment	SMP SG-4260 48V SUBSTATION GATEWAY		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 48V		SCADA Communication, Grid Modernization or Other Programs	Unknown
Dry Gulch 115kV	Voltage Regulator	1208 A PH SVR		SCADA Communication, Grid Modernization or Other Programs	40
Dry Gulch 115kV	Voltage Regulator	1208 B PH SVR		SCADA Communication, Grid Modernization or Other Programs	40
Dry Gulch 115kV	Voltage Regulator	1208 C PH SVR		SCADA Communication, Grid Modernization or Other Programs	41
Dry Gulch 115kV	Voltage Regulator	1209 A PH SVR		SCADA Communication, Grid Modernization or Other Programs	40
Dry Gulch 115kV	Voltage Regulator	1209 B PH SVR		SCADA Communication, Grid Modernization or Other Programs	40
Dry Gulch 115kV	Voltage Regulator	1209 C PH SVR		SCADA Communication, Grid Modernization or Other Programs	41
Ford 115kV	Voltage Regulator	12F1 A PH SVR	\$ 14,291	Obsolescence	47
Ford 115kV	Voltage Regulator	12F1 B PH SVR	\$ 14,291	Obsolescence	47
Ford 115kV	Voltage Regulator	12F1 C PH SVR	\$ 14,291	Obsolescence	55
Ford 115kV	Voltage Regulator	12F2 A PH SVR	\$ 14,291	Obsolescence	New Install
Ford 115kV	Voltage Regulator	12F2 B PH SVR	\$ 14,291	Obsolescence	New Install
Ford 115kV	Voltage Regulator	12F2 C PH SVR	\$ 14,291	Obsolescence	New Install
Ford 115kV	Voltage Regulator	AUX A PH SVR	\$ 14,291	Obsolescence	New Install
Ford 115kV	Voltage Regulator	AUX B PH SVR	\$ 14,291	Obsolescence	New Install
Ford 115kV	Voltage Regulator	AUX C PH SVR	\$ 14,291	Obsolescence	New Install
Fort Wright 115kV	METS Auxiliary Equipment	SEL2407-Satellite Synchronized Clock		Operational and Maintenance Requirements	Unknown
Greenwood 115kV	Breaker Recloser	12F1 VCB	\$ 18,300	Obsolescence	47
Greenwood 115kV	Breaker Recloser	12F3 VCB	\$ 18,950	Obsolescence	46
Metro 115kV	Battery	Battery Bank 48V		Operational and Maintenance Requirements	17
Metro 115kV	Pt	115kV PT - Trench - VEOTA 123		Operational and Maintenance Requirements	Unknown
Metro 115kV	Pt	115kV PT - Trench - VEOTA 123		Operational and Maintenance Requirements	Unknown
Metro 115kV	Pt	115kV PT - Trench - VEOTA 123		Operational and Maintenance Requirements	Unknown
Mission 115kV	Pt	13kV PTs		Obsolescence	Unknown
Mission 115kV	Surge Arrester	115kV Arrestors		Obsolescence	Unknown
Nine Mile 115kV	Hv - Circuit Breaker	A-654 GCB		Operational and Maintenance Requirements	27
Nine Mile 115kV	Pt	115kV PT - BPH		Operational and Maintenance Requirements	Unknown
North Lewiston 230kV	Pt	A-583 BPD		Operational and Maintenance Requirements	Unknown
Northeast 115kV	Air Switch	A-416 Line Disc		Operational and Maintenance Requirements	11
Northeast 115kV	Hv - Circuit Breaker	A-416 GCB		Operational and Maintenance Requirements	42
Northeast 115kV	Pt	115kV PT - BPH		Operational and Maintenance Requirements	Unknown
O'Gara 115kV	Voltage Regulator	611 A PH SVR	\$ 10,988	Obsolescence	49
O'Gara 115kV	Voltage Regulator	611 B PH SVR	\$ 8,762	Obsolescence	47
O'Gara 115kV	Voltage Regulator	611 C PH SVR	\$ 8,762	Obsolescence	49
O'Gara 115kV	Voltage Regulator	611 A PH SVR		Operational and Maintenance Requirements	7
Osburn115kV	Battery Charger	Battery Charger 48v		Obsolescence	Unknown

Substation	Equipment Type	Equipment Name	Equipment Costs	Reason (use for PC-101)	Age upon Replacement
Palouse 115kV	Voltage Regulator	312 A PH SVR		Operational and Maintenance Requirements	22
Palouse 115kV	Voltage Regulator	312 B PH SVR		Operational and Maintenance Requirements	22
Palouse 115kV	Voltage Regulator	312 C PH SVR		Operational and Maintenance Requirements	22
Pound Lane 115kV	Air Switch	12F2 BUS DISC APH		Obsolescence	Unknown
Pound Lane 115kV	Air Switch	12F2 BUS DISC BPH		Obsolescence	Unknown
Pound Lane 115kV	Air Switch	12F2 BUS DISC CPH		Obsolescence	Unknown
Pound Lane 115kV	Air Switch	12F4 BUS DISC APH		Obsolescence	Unknown
Pound Lane 115kV	Air Switch	12F4 BUS DISC BPH		Obsolescence	Unknown
Pound Lane 115kV	Air Switch	12F4 BUS DISC CPH		Obsolescence	Unknown
Pound Lane 115kV	Battery	Battery Bank		Obsolescence	4
Pound Lane 115kV	Battery Charger	Battery Charger		Obsolescence	42
Rathdrum 230kV	METS Auxiliary Equipment	Misc Relay Equipment		Operational and Maintenance Requirements	Unknown
Ross Park 115kV	Hv-Lv Bushing	Bushing - 115kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 115kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 115kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 15kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 15kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 15kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 15kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Hv-Lv Bushing	Bushing - 15kV		Operational and Maintenance Requirements	42
Ross Park 115kV	Power Transformer	Transformer #1		Operational and Maintenance Requirements	42
Sandpoint 115kV	Breaker Recloser	4S30 VCB		Operational and Maintenance Requirements	6
Sandpoint 115kV	Hv-Lv Bushing	Bushing X0		Obsolescence	Unknown
Sandpoint 115kV	Hv-Lv Bushing	Bushing X1		Obsolescence	Unknown
Sandpoint 115kV	Hv-Lv Bushing	Bushing X2		Obsolescence	Unknown
Sandpoint 115kV	Hv-Lv Bushing	Bushing X3		Obsolescence	Unknown
South Othello 115kV	Circuit Switcher	A-57 CKT SWR (Interruption only)		Operational and Maintenance Requirements	49
South Othello 115kV	Battery Charger	Battery Charger 48V		Obsolescence	13
South Othello 115kV	Voltage Regulator	522 B PH SVR		Operational and Maintenance Requirements	48
Southeast 115kV	Voltage Regulator	12F5 B PH SVR		Operational and Maintenance Requirements	17
Spokane Ind. Park 115kV	Voltage Regulator	12F4 B PH SVR		Operational and Maintenance Requirements	4
Tenth & Stewart 115kV	Air Switch	A-446 Air Switch		Operational and Maintenance Requirements	12
Tenth & Stewart 115kV	Air Switch	A-447 Air Switch		Operational and Maintenance Requirements	12
Terre View 115kV	Sub-Gen Meters	SEL-735 REVENUE METER 125V		Operational and Maintenance Requirements	12
Thornton 230kV	Air Switch	R-664 LINE DISC		Operational and Maintenance Requirements	Unknown
Waikiki 115kV	Voltage Regulator	12F4 A PH SVR	\$ 17,815	Obsolescence	40
Waikiki 115kV	Voltage Regulator	12F4 B PH SVR	\$ 17,815	Obsolescence	40
Waikiki 115kV	Voltage Regulator	12F4 C PH SVR	\$ 17,815	Obsolescence	41
Wallace 115kV	Voltage Regulator	542 A PH SVR	\$ 11,929	Obsolescence	47
Wallace 115kV	Voltage Regulator	542 B PH SVR	\$ 11,929	Obsolescence	47
Wallace 115kV	Voltage Regulator	542 C PH SVR	\$ 11,929	Obsolescence	47
Wallace 115kV	Voltage Regulator	543 A PH SVR	\$ 11,182	Obsolescence	53
Wallace 115kV	Voltage Regulator	543 B PH SVR	\$ 11,182	Obsolescence	26
Wallace 115kV	Voltage Regulator	543 C PH SVR	\$ 11,182	Obsolescence	43
Wallace 115kV	Voltage Regulator	544 A PH SVR	\$ 11,182	Obsolescence	61
Wallace 115kV	Voltage Regulator	544 B PH SVR	\$ 11,182	Obsolescence	61
Wallace 115kV	Voltage Regulator	544 C PH SVR	\$ 10,988	Obsolescence	61
Westside 230kV	Power Transformer	Auto Transformer #2		Overloading	44

**PC-208 Part h**

Equipment Type	Mfg Year	Age of Oldest Currently Operating
Air Switch	1930	90
Battery Bank	2001	19
Battery Charger	1970	50
Breaker Recloser	1924	96
Capbank*	1983	37
Circuit Switcher	1968	52
Current Transformer*	1973	47
Distribution Transformer*	1973	47
HV Circuit Breaker	1952	68
HV-LV Bushing*	1974	46
METS Auxiliary Equipment	1990	30
Perimeter Security*	1966	54
Potential Transformer (PT)*	1979	41
Power Transformer	1946	74
Sub-Gen Meters*	1968	52
Surge Arrestor*	1975	45
Switchgear	1963	57
Voltage Regulator	1966	54

\* These Equipment Types are newer to Asset Management (Maximo) tracking, the Mfg Year is based on oldest Received Date or oldest Install Date when available.