



Western Area
Power Administration

Western Area Power Administration (WAPA) Upper Great Plains Region (WAPA-UGP) Transmission and Ancillary Services Rate Calculation

Effective January 1, 2023

WAPA-UGP 2023 Rate Estimate Calculation

(Rate Order No. WAPA-188)

WAPA-UGP

Transmission and Ancillary Services List of Workpapers and Schedules

Worksheet Tab Label

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Worksheet Tab Description

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WAPA-UGP 2023 Rate Estimate Calculation

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Summary-ATRR - Calculation of ATRRs (Sched 9, Sched 11)

12 Months Ending 09/30/2023 ESTIMATE

							TRANSMISSION
Line	REFERENCE	COMPANY TOTAL \$	ALLOCATOR	ALLOCATION %	ALLOCATED AMOUNT \$		
No.	(1)	(2)	(3)	(4)	(5)	(6)	
1	Gross Zonal Revenue Requirement-Sch 9	WS1-RateBase C5L1				154,317,743	
2	REVENUE CREDITS						
3	Firm Point-to-Point Revenue Credit	WS3-RevCredits C5L3+C5L6	(6,929,000)	NA	100%	(6,929,000)	
4	Non-Firm Point-to-Point Revenue Credit	WS3-RevCredits C5L9	(3,220,000)	NA	100%	(3,220,000)	
5	Revenue from Existing Transmission Agreements	WS3-RevCredits C5L12	(1,200,000)	NA	100%	(1,200,000)	
6	Scheduling, System Control, and Dispatch Service Credit	WS12-SSCD C2L11	(10,852,193)	NA	100%	(10,852,193)	
7	Account No. 454	WS3-RevCredits C5L18	(6,640)	TP	100%	(6,640)	
8	Z2 Nonfirm Point-to-Point Revenue Credit		-	NA	100%	-	
9	Schedule 11 Point-to-Point Revenue Credit	WS3-RevCredits C5L15	(74,000)	NA	100%	(74,000)	
10	TOTAL REVENUE CREDITS	Subtotal L3:L9	(22,281,833)			(22,281,833)	
11	TRUE-UP ADJUSTMENT (from TRUEUP Sheet)	Summary-TrueUp L12	(9,890,879)			(9,890,879)	
12	Net Revenue Requirement	Total L1-L10+L11				122,145,031	
13							
Line	TOTAL PROJECT ATRR \$	PTP REVENUE CREDIT \$	TRUE-UP ADJ \$	ZONAL \$	REGIONAL \$	ALLOCATED AMOUNT \$	
No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
14	SPP Upgrades - Gross Revenue Requirement-Sch 11*	834,822	(81,600)	(154,123)	726,866	107,957	599,099
15	Zonal less True-Up (from TRUEUP Sheet)			(126,349)			527,517
16	Regional less True-Up (from TRUEUP Sheet)			(27,774)			71,583
17	Breakout by Facility:						
18	Lewis-Richland 115 kV Ckt 1, 72052 /1	5,132	(515)	(892)	5,132	-	3,725
19	Roberts County 115 kV Substation, 71926	327,142	(30,613)	(65,874)	219,185	107,957	230,654
20	Roberts County 115/69 kV Transformer, 71927	502,508	(50,468)	(87,350)	502,508	-	364,691
21	Williston Substation 115kV Terminal Upgrades, 61856 /1	40	(4)	(7)	40	-	29
22							
23							
24							
25	Net Revenue Requirement						599,099
26	1/ The Region-Wide Revenue Requirement Amount for this project or reservation is 0%, pursuant to the provisions of Tariff Attachment J because the investment is less than \$100,000.						
27	The remainder of the Revenue Requirement is the Zonal Revenue Requirement Amount.						
28							

Summary of incremental changes; Minor updates to increase transparency					
Date	Worksheet	Reference Cell(s)	Change From	Change To	Description
(1)	(2)	(3)	(4)	(5)	(6)
9/1/2023	Summary-ATTR	C21-28			Updated formatting for BPU display to SPP calculations In order to conform with the SPP Tariff regarding Regional sharing of BPU costs, the following footnote was added to select BPUs: The Region-Wide Revenue Requirement Amount for this project or reservation is 0%, pursuant to the provisions of Tariff Attachment J because the investment is less than \$100,000. The remainder of the Revenue Requirement is the Zonal Revenue Requirement Amount.
9/1/2023	Summary-ATTR	L26			

WAPA-UGP 2023 Rate Estimate Calculation						
Worksheet 1 - Schedule 9 Revenue Requirement - Non-Levelized						
Utilizing Financial Statement Results of Operations (ROOs)						
12 Months Ending 09/30/2023 ESTIMATE						
Line No.	REFERENCE	COMPANY TOTAL	ALLOCATOR		TRANSMISSION ALLOCATED AMOUNT	
(1)	(2)	(3)		(4)	(5)	
1	GROSS REVENUE REQUIREMENT	(L69)	154,317,743		154,317,743	
2	REVENUE CREDITS	Estimate	(22,281,833)		(22,281,833)	
3	PRIOR PERIOD TRUE-UP (Over-collection)		(9,890,879)		(9,890,879)	
4	NET REVENUE REQUIREMENT	(L1 + L2 + L3)	122,145,031		122,145,031	
RATE BASE:					(Col 3 times Col 4)	
GROSS PLANT IN SERVICE		(Note A)				
5	Production	WS4-CostData L4 C2+C3+C4	1,232,585,713	NA		
6	Transmission	WS4-CostData L3 C2+C3+C4	1,582,202,984	TP	1.00000	
7	Distribution	WS4-CostData C2 L2-L3-L4	64,226,858	NA		
	Bal Sheet - Other Assets - SGL					
8	General & Intangible	175002	-	W/S	1.00000	
9	Common		-	CE	0.00000	
10	TOTAL GROSS PLANT	(sum L5 : 9)	2,879,015,556	GP=	54.956%	
ACCUMULATED DEPRECIATION						
11	Production	WS4-CostData L15 C2+C3+C4	654,537,231	NA		
12	Transmission	WS4-CostData L14 C2+C3+C4	812,210,354	TP	1.00000	
13	Distribution	WS4-CostData C2 L13-L14-L15	32,889,809	NA		
	Bal Sheet - Other Assets - SGL					
14	General & Intangible	175902	0	W/S	1.00000	
15	Common		0	CE	0.00000	
16	TOTAL ACCUM. DEPRECIATION	(sum L11 : 15)	1,499,637,394		812,210,354	
NET PLANT IN SERVICE						
17	Production	(L5 - L11)	578,048,483			
18	Transmission	(L6 - L12)	769,992,630		769,992,630	
19	Distribution	(L7 - L13)	31,337,048			
20	General & Intangible	(L8 - L14)	0		0	
21	Common	(L9 - L15)	0		0	
22	TOTAL NET PLANT	(sum L17 : 21)	1,379,378,162	NP=	55.822%	
ADJUSTMENTS TO RATE BASE		(Note B)				
23	Account No. 281	(enter negative)	0		0.00000	
24	Account No. 282	(enter negative)	0	NP	0.55822	
25	Account No. 283	(enter negative)	0	NP	0.55822	
26	Account No. 190		0	NP	0.55822	
27	Account No. 255	(enter negative)	0	NP	0.55822	
28	TOTAL ADJUSTMENTS	(sum L23 : 27)	0			
29	LAND HELD FOR FUTURE USE	(Note C)	0	TP	1.00000	
WORKING CAPITAL		(Note D)				
30	CWC	calculated	25,358,207		0	
	Bal Sheet - Other Assets - SGL					
31	Materials & Supplies	151191 (Note C)	0	TE	0.00000	
32	Prepayments	Bal Sheet Other Assets	0	GP	0.54956	
33	TOTAL WORKING CAPITAL	(sum L30 : 32)	25,358,207		0	
34	RATE BASE	(sum L22, 28, 29, 33)	1,404,736,369		769,992,630	
O&M						
Transmission		ROOs Schedule 11 (Note E)				
35	Western-UGP	WS4-CostData L105 C2	76,194,288	PTP/UGP	0.94859	
36	Western-RMR	WS4-CostData L105 C3	46,417,099	PTP/RMR	0.00890	
37	COE	WS4-CostData L105 C4	51,502,422	PTP/COE	0.07150	
38	Less Account 565	(Note E)	0	NA	1.00000	
A&G		ROOs Schedule 11 (Note F)				
39	Western-UGP	WS4-CostData L79 C2	15,419,000	PTP/UGP	0.94859	
40	Western-RMR	WS4-CostData L79 C3	13,332,847	PTP/RMR	0.00890	
41	Less FERC Annual Fees		0	W/S	1.00000	
42	Less EPRI & Reg. Comm. Exp. & Non-safety Ad	(Note G)	0	W/S	1.00000	
43	Plus Transmission Related Reg. Comm. Exp	(Note G)	0	TE	0.00000	
44	Common		0	CE	0.00000	
45	Transmission Lease Payments		0	NA	1.00000	
	(sum L35, 36, 37, 39, 40, 43, 44 less 38, 41, 42)		202,865,656		91,117,571	
DEPRECIATION EXPENSE						
Transmission		ROOs Schedule 4				
48	Western-UGP	WS4-CostData L38 C2	32,259,162	PTP/UGP	0.94859	
49	Western-RMR	WS4-CostData L38 C3	18,484,301	PTP/RMR	0.00890	
50	COE	WS4-CostData L38 C4	18,035,038	PTP/COE	0.07150	
51	General		0	W/S	1.00000	
52	Common		0	CE	0.00000	
53	TOTAL DEPRECIATION	(sum L47 : 52)	68,778,501		32,054,695	
TAXES OTHER THAN INCOME TAXES		(Note H)				
LABOR RELATED						
54	Payroll		0	W/S	1.00000	
55	Highway and vehicle		0	W/S	1.00000	
PLANT RELATED						
56	Property		0	GP	0.54956	
57	Gross Receipts		0		0.00000	
58	Other		0	GP	0.54956	
59	Payments in lieu of taxes		0	GP	0.54956	
60	TOTAL OTHER TAXES	(sum L54 : 59)	0		0	
INCOME TAXES		(Note I)				
61	T=1 - (((1 - SIT) * (1 - FIT)) / (1 - SIT * FIT * p)) =		0.00%	NA		
62	CIT=(T/(1-T) * (1-(WCLTD/R))) =		0.00%			
where WCLTD= (line 100) and R= (line 102) and FIT, SIT & p are as given in footnote I.						
63	1 / (1 - T) = (from line 61)		0.0000			
64	Amortized Investment Tax Credit	(enter negative)	0		0	
65	Income Tax Calculation	(L62 * L68)	0	NA	0	
66	ITC adjustment	(L63 * L64)	0	NP	0.55822	
67	Total Income Taxes	(L65 + L66)	0		0	
68	RETURN [Rate Base * Rate of Return]	(L34 * L102)	56,820,263	NA	31,145,477	
69	REV. REQUIREMENT	(sum L46, 53, 60, 67, 68)	328,464,420		154,317,743	

SUPPORTING CALCULATIONS AND NOTES									
TRANSMISSION PLANT INCLUDED IN UMZ RATES									
70	Total transmission plant	(L6, C3)						1,582,202,984	
71	Less transmission plant excluded from UMZ rates	(Note K)						0	
72	Less transmission plant included in OATT Ancillary Services	(Note L)						0	
73	Transmission plant included in UMZ rates	(L70 less L71 and L72)						1,582,202,984	
74	Percentage of transmission plant included in UMZ Rates	(L73 / L70)				TP=		1.00000	
TRANSMISSION EXPENSES									
75	Total transmission expenses	(sum L35 to L37, C3)							
76	Less transmission expenses included in OATT Ancillary Services	(Note J)						0	
77	Included transmission expenses	(L75 - L76)						0	
Percentage of transmission expenses after adjustment (line 8 divided by line 6)									
78		(L77/ L75)						0.00000	
79	Percentage of transmission plant included in UMZ Rates	(L74)				TP		1.00000	
80	Percentage of transmission expenses included in UMZ Rates	(L79 * L78)				TE=		0.00000	
WAGES & SALARY ALLOCATOR (W&S)									
			\$		TP	Allocation			
81	Production		0		0.00	0			
82	Transmission		14,626,233		1.00	14,626,233			
83	Distribution		0		0.00	0			
84	Other		0		0.00	0			
85	Total	(sum L81 to L84)	14,626,233			14,626,233	=	1.00000	
PERCENTAGE OF TOTAL PLANT ALLOCATOR PTP									
		(Note M)	\$						
86	Transmission Plant in Service Western-UGP		1,481,185,106						
87	Total Plant in Service Western-UGP		1,561,467,883						
88	UGP Percentage of Transmission Plant to Total Plant	(L86 / L87)				PTP/UGP	=	0.94859	
89	Transmission Plant in Service Western-RMR		7,335,303						
90	Total Plant in Service Western-RMR		823,752,671						
91	RMR Percentage of Transmission Plant to Total Plant	(L89 / L90)				PTP/RMR	=	0.00890	
92	Transmission Plant in Service COE		93,682,575						
93	Total Plant in Service COE		1,310,212,369						
94	COE Percentage of Transmission Plant to Total Plant	(L92 / L93)				PTP/COE	=	0.07150	
COMMON PLANT ALLOCATOR (CE)									
		(Note N)	\$			% Electric		Labor Ratio =	CE
95	Electric		0			(L95 / L98)		(L85)	0.00000
96	Gas		0						
97	Water		0			0.00000	*	1.00000	
98	Total	(sum L95 : L97)	0						
RETURN (R)									
99	Long Term Interest ROOs Schedule 5		\$35,794,692						
			\$		%	Cost		Weighted	=WCLTD
		HFD Sch's 21RX & 21X Col 8				(Note O)			
100	Long Term Debt	L23,25,26,29,30	884,932,638		100%	0.0404		0.0404	=R
101	Proprietary Capital		0		0%	0.1238		0.0000	
102	Total (sum L100 : 101)	(sum L100 : 101)	884,932,638		100%			0.0404	
103						Proprietary Capital Cost Rate =		12.38%	
104						TIER =		1.00	
REVENUE CREDITS									
								Load	
ACCOUNT 447 (SALES FOR RESALE)									
105	a. Bundled Non-RQ Sales for Resale	(Note P)						0	
106	b. Bundled Sales for Resale included in Divisor on page 1							0	
107	Total of (a)-(b)							0	
108	ACCOUNT 454 (RENT FROM ELECTRIC PROPERTY)	(Note Q)						6,640	
109	ACCOUNT 456 (OTHER ELECTRIC REVENUES)							0	
110	a. Transmission charges for all transmission transactions							0	
111	b. Transmission charges for all transmission transactions included in Divisor on page 1							0	
112	Total of (a)-(b)							0	
Note Letter									
General Note: References to Results of Operations in this revenue requirement template indicate the Financial Statement Results of Operations (ROOs) Schedule where data is located.									
To the extent the references to ROOs data are missing, the entity will include a "Notes" section to provide this data.									
A	Combines plant data for both the Western-Upper Great Plains Region (Western-UGP) and Western-Rocky Mountain Region (Western-RMR).								
B	Does not apply to Western. For others, the balances in Accounts 190, 281, 282 and 283, as adjusted by any contra accounts identified as regulatory assets amounts in or liabilities related to FASB 106 or 109. Balance of Account 255 is reduced by prior flow throughs and excluded if the utility chose to utilize amortization of tax credits against taxable income as discussed in Note K. Account 281 is not allocated.								
C	Transmission related only.								
D	Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission at line 46 column 5. Prepayments are the electric related prepayments booked to Account No. 165 and reported in the Other Assets Section of the Balance Sheet.								
E	For O&M Expense, Calculated from ROOs Schedule 11 as Total O&M less Purchase Power, Transmission Service Provided by Others (FERC 56S), O&M Expense Fort Peck Powerhouse, Prior Year Adjustments, A&G Expense from ROOs Schedule 11, plus CME and Warehouse Interest from ROOs Schedule 5. Depreciation Expense from ROOs Schedule 4.								
F	Totals of ROOs Schedule 11A Object Classes 1411, 1412, 1415, 1416, 1421, 1422, 1425, 1426, 1431, 1432, 1441, 1442.								
G	Line 42 - EPRI Annual Membership Dues, all Regulatory Commission Expenses, and non-safety related advertising. Line 43 - Regulatory Commission Expenses directly related to transmission service, ISO filings, or transmission siting.								
H	Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded. Gross receipts taxes are not included in transmission revenue requirement in the Rate Formula Template, since they are recovered elsewhere.								
I	Western is not subject to Federal or State Income Tax.								
	Inputs Required:								
		FIT =			0.00%				
		SIT=			0.00%	(State Income Tax Rate or Composite SIT)			
		p =			0.00%	(percent of federal income tax deductible for state purposes)			
J	Removes dollar amount of transmission expenses included in the OATT ancillary services rates, including Acct No. 561. Western does not include transmission expenses in ancillary service rates.								
K	Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until RUS 12 balances are adjusted to reflect application of seven-factor test).								
L	Removes dollar amount of transmission plant included in the development of OATT ancillary services rates and generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no through-flow when the generator is shut down.								
M	Percentage of Total Plant Allocators are developed separately for Western-UGP and Western-RMR to allocate O&M, A&G, and Depreciation Expenses between Transmission and Generation.								
N	Western does not have Common Plant.								
O	Debt cost rate = long-term interest (line 99) / long term debt (line 100). The Proprietary Capital Cost rate is implicit, a residual calculation after TIER is determined. TIER will be supported in the filing and no change in TIER may be made absent a filing with the ISO and the FERC, if the entity is under FERC's jurisdiction.								
P	Line 105 must equal zero since all short-term power sales must be unbundled and the transmission component reflected in Account No. 456 and all other uses are to be included in the divisor.								
Q	Includes income related only to transmission facilities, such as pole attachments, rentals and special use.								
R	The revenues credited shall include only the amounts received directly reflecting the Transmission Owner's integrated transmission facilities. They do not include revenues associated with FERC annual charges, gross receipts taxes, facilities not included in this template (e.g., direct assignment facilities and GSUs) which are not recovered under this Revenue Requirement Template.								

WAPA-UGP 2023 Rate Estimate Calculation
Worksheet 2 - Allocation Factor, Determination of Pick-Sloan Missouri Basin Program--Eastern Division Annual Costs
12 Months Ending 09/30/2023 ESTIMATE

Line No.	DESCRIPTION (1)	TRANSMISSION (2)	GENERATION (3)	COE GENERATION (5)	BASE PLAN UPGRADES- REGIONAL (4)	BASE PLAN UPGRADES- ZONAL (5)	REFERENCE (6)
1	A. Operation and Maintenance Expense						
2	O&M Expense	\$76,372,613	\$97,626,923	\$47,819,905	\$53,182	\$358,069	WS4-Cost Data (O&M Expenses Worksheet)
3	Transmission of Electricity by Others	\$0	\$0	\$0	\$0	\$0	
4	Total O&M Expense	\$76,372,613	\$97,626,923	\$47,819,905	\$53,182	\$358,069	L2 + L3
5	Net Plant Investment	\$769,992,630	\$755,265,595	\$570,214,609	\$531,759	\$3,580,297	WS4-Cost-Data (Net Plant Investment Worksheet)
6	O&M as % of Net Plant Investment	9.919%	12.926%	8.386%	10.001%	10.001%	L4/L5
7	B. A&G Expense						
8	A&G Expense	\$14,744,959	\$158,547	\$0	\$10,762	\$72,460	WS4-CostData (A&G Expenses Worksheet)
9	Net Plant Investment	\$769,992,630	\$755,265,595	\$570,214,609	\$531,759	\$3,580,297	L5
10	A&G as % of Net Plant Investment	1.915%	0.021%	0.000%	2.024%	2.024%	L8/L9
11	C. Depreciation Expense						
12	Depreciation Expense	\$32,054,695	\$21,848,440	\$16,745,500	\$22,516	\$151,599	WS4-CostData (Depreciation Expense Worksheet)
13	Net Plant Investment	\$769,992,630	\$755,265,595	\$570,214,609	\$531,759	\$3,580,297	L5
14	Depreciation as a % of Net Plant Investment	4.163%	2.893%	2.937%	4.234%	4.234%	L12/L13
15	D. Taxes Other than Income Taxes for Transmission						
16	Not applicable.						
17	E. Allocation of General Plant						
18	No General Plant identified at this time, all plant is identified as either generation or transmission related.						
19	F. Cost of Capital						
20	Weighted Transmission Composite Interest Rate	4.043%	3.174%	3.174%	4.043%	4.043%	WS4-CostData (Cost of Capital Worksheet)
21	G. Fixed Charge Rate						
22	Operation and Maintenance Expense	9.919%	12.926%	8.386%	10.001%	10.001%	L6
23	A&G Expense	1.915%	0.021%	0.000%	2.024%	2.024%	L10
24	Depreciation Expense	4.163%	2.893%	2.937%	4.234%	4.234%	L14
25	Taxes Other than Income Taxes	0.000%	0.000%	0.000%	0.000%	0.000%	
26	Allocation of General Plant to Transmission	0.000%	0.000%	0.000%	0.000%	0.000%	
27	Cost of Capital	4.043%	3.174%	3.174%	4.043%	4.043%	L20
28	Total	20.039%	19.014%	14.497%	20.302%	20.302%	
29	H. Revenue Requirement						
30	Fixed Charge Rate	20.039%	19.014%	14.497%	20.302%	20.302%	L28
31	Net Plant Investment	\$769,992,630	\$755,265,595	\$570,214,609	\$531,759	\$3,580,297	L5
32	Annual Western-UGPR Cost	\$154,299,841	\$143,607,997	\$82,665,493	\$107,957	\$726,866	L30 * L31

WAPA-UGP 2023 Rate Estimate Calculation
Worksheet 3 - Revenue Credit Calculation
12 Months Ending 09/30/2023 ESTIMATE

12 Months Ending 09/30/2023 ESTIMATE

TRANSMISSION

Line No.	ACCOUNT	MONTH (1)	REFERENCE (2)	COMPANY TOTAL \$ (3)	ALLOCATOR	ALLOCATION % (4)	ALLOCATED AMOUNT \$ (5)
1	Z2 Sch 11		Z2	(19,000)	NA	100%	(19,000)
2	Z2 Sch 11 Adjustments		Z2	-		100%	0
3	Subtotal			(19,000)			(19,000)
4	Schedule 7		FIRM PTP	(6,910,000)	TP	100%	(6,910,000)
5	Schedule 7 Adjustments		FIRM PTP	-	TP	100%	0
6	Subtotal			(6,910,000)			(6,910,000)
7	Schedule 8		NONFIRM PTP	(3,220,000)	TP	100%	(3,220,000)
8	Schedule 8 Adjustments		NONFIRM PTP	-	TP	100%	0
9	Subtotal			(3,220,000)			(3,220,000)
10	Sch 7/8/11		MISO SEAMS	(1,200,000)	TP	100%	(1,200,000)
11	Sch 7/8/11 Adjustments		MISO SEAMS	-	TP	100%	0
12	Subtotal			(1,200,000)			(1,200,000)
13	Schedule 11		ZONAL PTP	(74,000)	NA	100%	(74,000)
14	Schedule 11 Adjustments		ZONAL PTP ADJUSTMENTS	-	NA	100%	0
15	Subtotal			(74,000)			(74,000)
16	45420		RENT FROM ELECTRIC PROPERTY	(6,640)	TP	100%	(6,640)
17	45420 Adjustments		RENT FROM ELECTRIC PROPERTY	-	TP	100%	0
18	Subtotal			(6,640)			(6,640)
19	Sch 11		BPU-ZONAL PTP	(73,000)	NA	100%	(73,000)
20	Sch 11 Adjustments		BPU-ZONAL PTP	-	NA	100%	0
21	Subtotal			(73,000)			(73,000)
22	Sch 11		BPU-REGIONAL PTP	(8,600)	NA	100%	(8,600)
23	Sch 11 Adjustments		BPU-REGIONAL PTP	-	NA	100%	0
24	Subtotal			(8,600)			(8,600)
25	NOTES:	Includes twelve months of revenue credits from January-December or February-January depending on when WAPA began receiving revenue credits from SPP.					
26		Revenue credit sheet may be updated or adjusted as necessary to include all revenue credits received.					
27		Z2 Schedule 7/8 clawbacks					
28		Schedule 7 - Firm PTP Transmission revenues					
29		Schedule 8 - Non-Firm PTP Transmission revenues					
30		Schedule 7/8/11 - MISO's SPP PTP transmission service revenues					
31		Schedule 11 - Zonal PTP adjustment revenues					
32		45420 - Other Rental revenues					
33		Schedule 11 Base Plan Upgrade, Zonal and Regional revenues					

WAPA-UGP 2023 Rate Estimate Calculation
Worksheet 4 - Cost Support Data
12 Months Ending 09/30/2023 ESTIMATE

[\(Back to Worksheet Links\)](#)

Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)				
1	Net Plant investment Worksheet									
2	Total PS Plant-in-Service	1,561,467,883	1/	823,752,671	2/	1,310,212,369	3/	554,721,824	12/	4,250,154,748
3	PS-ED Transmission Plant-in-Service	1,481,185,106	4/	7,335,303	5/	93,682,575	6/	0		1,582,202,984
4	PS-ED Generation Plant-in-Service	16,055,919	7/	0		1,216,529,794	L2-L3	554,721,824	L2-L3	1,787,307,538
5	PS-ED SSCD Plant-in-Service	23,426,453	8/							23,426,453
6	BPU-Regional Plant-in-Service	1,089,866								1,089,866
7	BPU-Zonal Plant-in-Service	7,337,999								7,337,999
8	Generation Plant to Total Plant	0.01028	L4/L2	0.00000	L4/L2	0.92850	L4/L2	1.00000	L4/L2	
9	Transmission Plant to Total Plant	0.94859	L3/L2	0.00890	L3/L2	0.07150	L3/L2	0.00000	L3/L2	
10	SSCD Plant to Total Plant	0.01500	L5/L2							
11	BPU-Regional Plant to Total Plant	0.00070	L6/L2							
12	BPU-Zonal Plant to Total Plant	0.00470	L7/L2							
13	PS Accumulated Depreciation	799,609,117	9/	442,643,574	10/	696,086,651	11/	377,504,713	12/	2,315,844,054
14	PS-ED Trans. Accumulated Depreciation	758,497,262	L13*L9	3,941,626	L13*L9	49,771,465	L13*L9	0	L13*L9	812,210,354
15	PS-ED Gen. Accumulated Depreciation	8,222,045	L13*L8	0		646,315,186	L13-L14	377,504,713	L13*L8	1,032,041,943
16	PS-ED SSCD Accumulated Depreciation	11,996,408	L13*L10							11,996,408
17	BPU-Regional Accumulated Depreciation	558,108	L13*L11							558,108
18	BPU-Zonal Accumulated Depreciation	3,757,702	L13*L12							3,757,702
19	PS-ED Net Transmission Plant	722,687,844	L3-L14	3,393,677	L3-L14	43,911,109	L3-L14	0	L3-L14	769,992,630
20	PS-ED Net Generation Plant	7,833,874	L4-L15	0	L4-L15	570,214,609	L4-L15	177,217,112	L4-L15	755,265,595
21	PS-ED Net SSCD Plant	11,430,045	L5-L16							11,430,045
22	Regional Net Plant	531,759	L6-L17							531,759
23	Base Plan Upgrade Net Plant	3,580,297	L7-L18							3,580,297
24	1/ WS8-TransFac, C5L510									
25	2/ RMCSR - Pick-Sloan Missouri River Basin Results of Operations (ROOs), Schedule 1									
26	3/ Corps of Engineers (COE) Financial Statements, Electric and Power Multi-Purpose Plant in Service									
27	4/ WS8-TransFac, C9L510									
28	5/ WS8-TransFac, C9L501									
29	6/ WS8-TransFac, C9L508									
30	7/ WS8-TransFac, C7L510									
31	8/ SSCD Plant-in-Service is based on a percentage of Watertown Operations Centers cost, based on FTE									
32	9/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
33	10/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
34	11/ FY Corps of Engineers Financial Statements, Statement of Assets and Liabilities									
35	12/ Combined Financial Statements, Detail by Agency									

WAPA-UGP 2023 Rate Estimate Calculation										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
36	Depreciation Worksheet									
37	PS Depreciation Expense	32,259,162	1/	18,484,301	2/	18,035,038	3/	4,771,233	4/	73,549,733
38	PS-ED Transmission Depreciation 5/	30,600,559	L37*L9	164,598	L37*L9	1,289,538	L37*L9	0	L37*L9	32,054,695
39	PS-ED Generation Depreciation 6/	331,707	L37*L8	0	L37*L8	16,745,500	L37*L8	4,771,233	L37*L8	21,848,440
40	PS-ED SSCD Depreciation 7/	483,979	L37*L10							483,979
41	BPU-Regional Depreciation	22,516	L37*L11							22,516
42	BPU-Zonal Depreciation	151,599	L37*L12							151,599
43	1/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
44	2/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
45	3/ FY Corps of Engineers Statement of Revenues and Expenses									
46	4/ Combined Financial Statements, Detail by Agency									
47	5/ For Western-UGP, Western-RMR, COE, and BOR the portion of depreciation expense allocated to PS-ED transmission is based on the ratio of transmission plant-in-service to total									
48	plant-in-service, calculated on L9 of the Net Plant Investment Worksheet									
49	6/ For Western-UGP, Western-RMR and BOR the portion of depreciation expense allocated to PS-ED generation is based on the ratio of generation plant-in-service to total plant-in-service,									
50	calculated on L8 of the Net Plant Investment Worksheet. COE generation depreciation is COE total depreciation less transmission depreciation									
51	7/ For Western-UGP, the portion of depreciation expense allocated to PS-ED SSCD is based on the ratio of SSCD plant-in-service to total plant in service, calculated on L10 of the Net Plant									
52	Investment Worksheet									

WAPA-UGP 2023 Rate Estimate Calculation										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
53	Cost of Capital Worksheet									
54	Long Term Debt:									
55	FY Balances	877,337,596	1/	342,291,226	1/	694,461,818	1/	223,085,172	1/	2,137,175,812
56	Interest Expenses:									
57	FY Interest	36,018,325	13/	16,380,473	13/	20,732,097	2/	7,945,400	2/	81,076,296
58	Average Interest Rate	4.105%	L57/L55	4.786%	L57/L55	2.985%	L57/L55	3.562%	L57/L55	
59	Transmission Plant Factor	0.9365	3/	0.0046	4/	0.0589	5/	0.0000	6/	
60	Weighted Trans. Composite Rate									4.043%
61	Generation Plant Factor	0.0090	8/	0.0000	9/	0.6806	10/	0.3104	11/	
62	Weighted Gen. Composite Rate									3.174%
63	1/ FY Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedules 21X and 21RX									
64	2/ Interest from Combined Financial Statements, Detail By Agency/Col M L53									
65	3/ C2L3+C2L6+C2L7, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet									
66	4/ C3L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet									
67	5/ C4L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet									
68	6/ C5L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet									
69	7/ (C2L58*C2L59)+(C3L58*C3L59)+(C4L58*C4L59)+(C5L58*C5L59)									
70	8/ C2L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
71	9/ C3L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
72	10/ C4L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
73	11/ C5L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
74	12/ (C2L58*C2L61)+(C3L58*C3L61)+(C4L58*C4L61)+(C5L58*C5L61)									
75	13/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 5									

WAPA-UGP 2023 Rate Estimate Calculation						
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
76	A&G Expenses Worksheet					
77		WESTERN-UGP 1/	WESTERN-RMR 2/	COE 3/	BOR 3/	Total
78	PS Total Est. A&G	15,419,000	13,332,847	0	0	28,751,847
79	PS-ED Est. Transmission A&G 4/	14,626,233	118,726	0	0	14,744,959
80	PS-ED Generation A&G 5/	158,547	0	0	0	158,547
81	PS-ED SSCD A&G 6/	231,329	0	0	0	231,329
82	BPU-Regional A&G	10,762	0	0	0	10,762
83	BPU-Zonal A&G	72,460	0	0	0	72,460
84	1/ Western-UGP A&G Est. Expenses are from the FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Budget					
85	2/ Western RMR A&G Expenses are from the FY RMCSR - Pick-Sloan Missouri River Basin Budget					
86	3/ A&G Expenses for COE and BOR are unavailable. All COE and BOR A&G expenses are included in O&M Expenses					
87	4/ The portion of A&G expenses allocated to PS-ED transmission is based on the ratio of transmission plant-in-service to total plant-in-service, calculated on L9 of the Net Plant Investment Worksheet					
88	Investment Worksheet					
89	5/ The portion of A&G expenses allocated to PS-ED generation is based on the ratio of generation plant-in-service to total plant-in-service, calculated on L8 of the Net Plant Investment Worksheet					
90	Investment Worksheet					
91	6/ The portion of A&G expenses allocated to PS-ED SSCD is based on the ratio of SSCD plant-in-service to total plant-in-service, calculated on L10 of the Net Plant Investment Worksheet					

WAPA-UGP 2023 Rate Estimate Calculation						
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
92	O&M Expenses Worksheet					
93		WESTERN-UGP 1/	WESTERN-RMR 2/	COE 3/	BOR 4/	
94	Total Electric Operating Expense	83,406,000	45,485,837	51,502,422	49,023,545	229,417,804
95	Less:					
96	Other Power Supply Expenses					
97	A&G Expenses	15,419,000				15,419,000
98	Prior Year Adjustments					
99	Annual Reserve Sharing Group Cost	38,360				38,360
100	Plus:					
101	Moveable Property Interest	8,245,648				8,245,648
102	Warehouse Stores Interest					
103	Scheduling, System Control & Dispatch	9,674,816				9,674,816
104	PS Total O&M	76,194,288	46,417,099	51,502,422	49,023,545	222,206,092
105	PS-ED Transmission O&M 5/	72,276,763	413,332	3,682,517	0	76,372,613
106	PS-ED Generation O&M 6/	783,474	0	47,819,905	49,023,545	97,626,923
107	BPU-Regional O&M	53,182				53,182
108	BPU-Zonal O&M	358,069				358,069
109	1/ All Western-UGP O&M Expenses are from the FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Budget					
110	2/ All Western RMR O&M Expenses are from the FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11; except Moveable Property and Warehouse					
111	Stores Interest, which are from Schedule 5					
112	3/ Total Corps O&M Expenses are from the FY Corps of Engineers Financial Statements					
113	4/ Total BOR O&M Expenses are from the Combined Financial Statements					
114	5/ The portion of O&M expenses allocated to PS-ED transmission is based on the ratio of transmission plant-in-service to total plant-in-service, calculated on L9 of the					
115	Net Plant Investment Worksheet					
116	6/ The portion of O&M expenses allocated to PS-ED generation is based on the ratio of generation plant-in-service to total plant-in-service, calculated on L8 of the					
117	Net Plant Investment Worksheet					

WAPA-UGP 2023 Rate Estimate Calculation

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Worksheet 5 - Zonal SPP Upgrade Calculations

12 Months Ending 09/30/2023 ESTIMATE

Line No.	Project Name and # (1)	Type (2)	Project Gross Plant (Zonal Allocation) \$ (3)	Allocation Factor % (4)	Project Accumulated Depreciation (5)	Allocation for Transmission O&M \$ (6)	Allocation for General Plant Depreciation \$ (7)	Allocation for A&G \$ (8)	Cost of Capital (9)	Project Net Plant \$ (10)	Cost of Capital \$ (11)	Project ATRR \$ (12)	Revenue Credit Allocation \$ /1 (13)	True-Up Calculation \$ /2 (14)	Net ATRR \$ (15)
1	Lewis-Richland 115 kV Ckt 1, 72052	TL	51,813	0.706%	\$ 26,533	2,528	1,070	512	4.043%	25,280	1,022	5,132	(515)	(892)	3,725
2	Roberts County 115 kV Substation, 71926	SUB	2,212,759	30.155%	\$ 1,133,128	107,975	45,715	21,850	4.043%	1,079,632	43,645	219,185	(22,013)	(38,100)	159,072
3	Roberts County 115/69 kV Transformer, 71927	SUB	5,073,024	69.134%	\$ 2,597,835	247,546	104,806	50,095	4.043%	2,475,189	100,062	502,508	(50,468)	(87,350)	364,691
4	Williston Substation 115 kV Terminal Upgrades, 61856	SUB	403	0.005%	\$ 206	20	8	4	4.043%	197	8	40	(4)	(7)	29
5															
6															
7															
8															
9															
10															
11															
12	Total		7,337,999	100%	\$ 3,757,702	358,069	151,599	72,460		3,580,297	144,736	726,866	(73,000)	(126,349)	527,517
13	1/ Revenue Credit Allocation Total from W53-Rev Credit C5L21 and allocated based on the ratio of Zonal project plant-in-service to total Zonal plant-in-service, calculated in column 4 of this worksheet														
14	2/ True-up Total from Summary-ATRR C6L15 and allocated based on the ratio of Zonal project plant-in-service to total Zonal plant-in-service, calculated in column 4 of this worksheet														

WAPA-UGP 2023 Rate Estimate Calculation
Worksheet 6 - Base Plan Upgrades-Regional
12 Months Ending 09/30/2023 ESTIMATE

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Line No.	Project Name and # (1)	Type (2)	Project Gross Plant (Regional Allocation) \$ (3)	Allocation Factor % (4)	Project Accumulated Depreciation \$ (5)	Allocation for Transmission O&M \$ (6)	Allocation for General Plant Depreciation \$ (7)	Allocation for A&G \$ (8)	Cost of Capital (9)	Project Net Plant \$ (10)	Cost of Capital \$ (11)	Project ATRR \$ (12)	Revenue Credit Allocation \$ /1 (13)	True-up Calculation \$ /2 (14)	Net ATRR \$ (15)
1	Roberts County 115 kV Substation, 71926	SUB	1,089,866	100.00%	558,108	53,182	22,516	10,762	4.04%	531,759	21,497	107,957	(8,600)	(27,774)	71,583
2															
3															
4															
5															
6															
7															
8															
9															
10															
11	Total		1,089,866	100%	558,108	53,182	22,516	10,762		531,759	21,497	107,957	(8,600)	(27,774)	71,583
12	1/ Revenue Credit Allocation Total from WS3-Rev Credit C5L24 and allocated based on the ratio of Regional project plant-in-service to total Regional plant-in-service, calculated in column 4 of this worksheet														
13	2/ True-up Total from Summary-ATRR C6L16 and allocated based on the ratio of Regional project plant-in-service to total Regional plant-in-service, calculated in column 4 of this worksheet														

WAPA-UGP 2023 Rate Estima		(Back to Worksheet Links)					
Worksheet 7 - SPP Base Plan Upgrades-Facilities							
12 Months Ending 09/30/2023 ESTIMATE							
		(1)	(2)	(3)	(4)	(5)	(6)
FID	2023 SPP ESTIMATE SUMMARY		PRIOR YEAR FACILITY	FY2022-23 ESTIMATE	BASE PLAN	BASE PLAN UPGRADES-	FY2023 EST SPP
	DESCRIPTION		TOTALS (\$)	ADD/REPL/RETIRE (\$)	UPGRADES-REGIONAL	ZONAL	TOTALS (\$)
Line No.							
1	LC-RH	LEWIS - RICHLAND 115 kV Ckt 1, 72052 (SPP set Regional/Zonal Allocation to 33%/67%)	51,813		0	51,813	51,813
2	RCO	ROBERTS COUNTY 115 kV SUBSTATION, 71926 (SPP set Regional/Zonal Allocation to 33%/67%)	3,302,626	-	1,089,866	2,212,759	3,302,626
3	RCO	ROBERTS COUNTY 115/69 kV TRANSFORMER, 71927 (SPP set Regional/Zonal Allocation to 0%/100%)	5,073,024	-	0	5,073,024	5,073,024
4	WN	WILLISTON SUBSTATION 115 kV TERMINAL UPGRADES, 61856	403	-	0	403	403
5		TOTAL	8,427,866	-	1,089,866	7,337,999	8,427,866
6		2023 SPP ESTIMATE DETAIL:					
7	FID	DESCRIPTION	FID COST DETAIL (\$)	REG %	REG TOTAL (\$)	ZONAL %	ZONAL TOTAL (\$)
8	LC-RH	CONDUCTOR	51,813	0%	0	100%	51,813
9		LEWIS - RICHLAND 115 kV Ckt 1, 72052 - SUBTOTAL (SPP directed Regional/Zonal Split of 33%/67%)	51,813		0		51,813
10	RCO	STEEL STRUCTURE	181,965	33%	60,049	67%	121,917
11	RCO	STEEL STRUCTURE	131,277	33%	43,321	67%	87,956
12	RCO	STEEL STRUCTURE	265,373	33%	87,573	67%	177,800
13	RCO	DISCONNECT SWITCH	73,712	33%	24,325	67%	49,387
14	RCO	DISCONNECT SWITCH	141,931	33%	46,837	67%	95,094
15	RCO	DISCONNECT SWITCH	179,996	33%	59,399	67%	120,597
16	RCO	CCVT	39,217	33%	12,942	67%	26,276
17	RCO	CCVT	89,701	33%	29,601	67%	60,100
18	RCO	CIRCUIT BREAKER	22,459	33%	7,412	67%	15,048
19	RCO	CIRCUIT BREAKER	410,893	33%	135,595	67%	275,298
20	RCO	STEEL STRUCTURE	304,124	33%	100,361	67%	203,763
21	RCO	STATION SERVICE, LAND, CONTROL BUILDING	1,461,976	33%	482,452	67%	979,524
22		ROBERTS COUNTY 115 kV SUBSTATION, 71926 - SUBTOTAL	3,302,626		1,089,866		2,212,759
23	RCO	POWER TRANSFORMER	20,893	0%	0	100%	20,893
24	RCO	POWER TRANSFORMER	461,395	0%	0	100%	461,395
25	RCO	POWER TRANSFORMER	481,329	0%	0	100%	481,329
26	RCO	DISCONNECT SWITCH	158,422	0%	0	100%	158,422
27	RCO	DISCONNECT SWITCH	61,693	0%	0	100%	61,693
28	RCO	DISCONNECT SWITCH	161,498	0%	0	100%	161,498
29	RCO	CCVT	13,072	0%	0	100%	13,072
30	RCO	CCVT	28,805	0%	0	100%	28,805
31	RCO	VOLTAGE TRANSFORMER	13,891	0%	0	100%	13,891
32	RCO	VOLTAGE TRANSFORMER	32,368	0%	0	100%	32,368
33	RCO	VOLTAGE TRANSFORMER	14,101	0%	0	100%	14,101
34	RCO	INSTRUMENT TRANSFORMER	13,037	0%	0	100%	13,037
35	RCO	INSTRUMENT TRANSFORMER	35,655	0%	0	100%	35,655
36	RCO	CIRCUIT BREAKER	25,490	0%	0	100%	25,490
37	RCO	CIRCUIT BREAKER	397,859	0%	0	100%	397,859
38	RCO	STEEL STRUCTURE	229,083	0%	0	100%	229,083
39	RCO	POWER TRANSFORMER	138,325	0%	0	100%	138,325
40	RCO	STEEL STRUCTURE	423,875	0%	0	100%	423,875
41	RCO	ARRESTER	13,145	0%	0	100%	13,145
42	RCO	OIL STORAGE TANK	103,408	0%	0	100%	103,408
43	RCO	STATION SERVICE, LAND, CONTROL BUILDING	2,245,681	0%	0	100%	2,245,681
44		ROBERTS COUNTY 115/69 kV TRANSFORMER, 71927 - SUBTOTAL	5,073,024		0		5,073,024
45	WN	RELAY SETTINGS	403	0%	0	100%	403
46		WILLISTON SUBSTATION 115 kV TERMINAL UPGRADES - SUBTOTAL	403		0		403
47		TOTAL SPP UPGRADES	8,427,866	-	1,089,866	-	7,337,999

WAPA-UGP 2023 Rate Estimate Calculation
Worksheet 8 - Transmission Facilities
12 Months Ending 09/30/2023 ESTIMATE

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
						ATTACHMENT			
				EST	ESTIMATED	AI	GENERATION	BASE UPGRADE	
			PRIOR YEAR FACILITY	ADD/REPL/RETIRE	FACILITY TOTAL	ADJUSTMENTS	ADJUSTMENTS	ADJUSTMENTS	FY2023 EST SPP
Line No.	FID	DESCRIPTION	TOTALS (\$)	(\$)	(\$)	(\$)	(\$)	(\$)	TOTALS (\$)
1	TL	AUR BR	AURORA- BROOKINGS 115-KV T/L	343,710	343,710	-	-		343,710
2	TL	AUR FL	AURORA-FLANDREAU 115-KV T/L	96,623	96,623	-	-		96,623
3	TL	BK HET	BAKER-HETTINGER	459,778	459,778	-	-		459,778
4	TL	BU GA	BEULAH-GARRISON	357,312	357,312	-	-		357,312
5	TL	BS GH	BISMARCK-GLENHAM	6,335,247	6,335,247	-	-		6,335,247
6	TL	BS JT 1	BISMARCK-JAMESTOWN NO. 1	9,317,120	9,317,120	-	-		9,317,120
7	TL	BS JT 2	BISMARCK-JAMESTOWN NO. 2	4,229,572	4,229,572	-	-		4,229,572
8	TL	BS MDR	BISMARCK-MEDORA	12,764,457	12,764,457	-	-		12,764,457
9	TL	BR SF	BROOKINGS-SIOUX FALLS	2,564,429	2,564,429	-	-		2,564,429
10	TL	BR WT 1	BROOKINGS-WATERTOWN NO. 1	1,718,240	1,718,240	-	-		1,718,240
11	TL	BR WT 2	BROOKINGS-WATERTOWN NO. 2	3,318,558	3,318,558	-	-		3,318,558
12	TL	BR WHT	BROOKINGS-WHITE 115/230KV	3,135,515	3,135,515	-	-		3,135,515
13	TL	CF EH A	CANYON FERRY-EAST HELENA "A"	-	-	-	-		-
14	TL	CA JT	CARRINGTON-JAMESTOWN	1,259,668	1,259,668	-	-		1,259,668
15	TL	WC BU	CHARLIE CREEK - WATFORD CITY	13,451,446	13,451,446	-	-		13,451,446
16	TL	CCR BEF	CHARLIE CREEK-BELFIELD	14,513,308	14,513,308	-	-		14,513,308
14	TL	CR DC	CIRLCE-DAWSON COUNTY	5,811,567	5,811,567	-	-		5,811,567
15	TL	CONSH2	CONRAD-SHELBY #2	6,735,890	6,735,890	-	-		6,735,890
16	TL	CS MY	CRESTON-MARYVILLE	1,366,481	1,366,481	-	-		1,366,481
17	TL	DC MC	DAWSON COUNTY - MILES CITY	2,605,678	2,605,678	-	-		2,605,678
18	TL	DC GL	DAWSON-GLENDIVE	553,800	553,800	-	-		553,800
19	TL	DC MDR	DAWSON-MEDORA	3,464,064	3,464,064	-	-		3,464,064
20	TL	DC OF	DAWSON-O'FALLON CREEK	918,676	918,676	-	-		918,676
21	TL	DC WN	DAWSON-WILLISTON 2/	1,258,900	1,258,900	-	-	(51,813)	1,207,087
22	TL	DN CS	DENISON-CRESTON	20,977,731	20,977,731	-	-		20,977,731
23	TL	DL CA	DEVILS LAKE-CARRINGTON	9,154,519	9,154,519	-	-		9,154,519
24	TL	DL LA	DEVILS LAKE-LAKOTA	1,872,142	1,872,142	-	-		1,872,142
25	TL	ED FO	EDGELEY-FORMAN	1,981,753	1,981,753	-	-		1,981,753
26	TL	ED GR	EDGELEY-GROTON	771,572	771,572	-	-		771,572
27	TL	ELCMA	ELK CREEK-NEWELL-MAURINE 115-kv T/L	34,388	34,388	-	-		34,388
28	TL	FA GK	FARGO-GRAND FORKS	2,369,098	2,369,098	-	-		2,369,098
29	TL	FA MO	FARGO-MORRIS	8,661,076	8,661,076	-	-		8,661,076
30	TL	FO RCO	FORMAN-ROBERTS COUNTY	183,485	183,485	-	-		183,485
31	TL	FO SU D	FORMAN-SUMMIT (BISMARCK)	922,098	922,098	-	-		922,098
32	TL	FO SU C	FORMAN-SUMMIT (HURON)	4,465,037	4,465,037	-	-		4,465,037
33	TL	FP DC 1	FORT PECK-DAWSON 1	215,947	215,947	-	-		215,947
34	TL	FP DC 2	FORT PECK-DAWSON 2	8,301,710	8,301,710	-	-		8,301,710
35	TL	FP HV	FORT PECK-HAVRE	28,806,330	28,806,330	-	-		28,806,330
36	TL	FP WH	FORT PECK-WHATELY	157,876	157,876	-	-		157,876
37	TL	FP WN	FORT PECK-WILLISTON	15,775,368	15,775,368	-	-		15,775,368
38	TL	FP WP 2	FORT PECK-WOLF POINT #2	7,554,492	7,554,492	-	-		7,554,492
39	TL	FR FT D	FORT RANDALL-FORT THOMPSON 1&2	7,782,247	7,782,247	-	-		7,782,247
40	TL	FR GP	FORT RANDALL-GAVIN'S POINT	2,319,939	2,319,939	-	-		2,319,939

41	TL	FR GY	FORT RANDALL-GREGORY	777,327		777,327	-	-	777,327
42	TL	FR MV	FORT RANDALL-MT VERNON	2,305,555		2,305,555	-	-	2,305,555
43	TL	FR ON	FORT RANDALL-O'NEILL	1,071,882		1,071,882	-	-	1,071,882
44	TL	FR SC D	FORT RANDALL-SIOUX CITY 1&2	11,019,006		11,019,006	-	-	11,019,006
45	TL	FT GI	FORT THOMPSON-GRAND ISLAND	17,840,941		17,840,941	-	-	17,840,941
46	TL	FT HU D	FORT THOMPSON-HURON 230-KV 1&2	7,747,203		7,747,203	-	-	7,747,203
47	TL	FT SF D	FORT THOMPSON-SIOUX FALLS 1&2	10,455,917		10,455,917	-	-	10,455,917
48	TL	GA BS D	GARRISON-BISMARCK 230KV 1&2	10,713,977		10,713,977	-	-	10,713,977
49	TL	GA JT	GARRISON-JAMESTOWN	5,062,688		5,062,688	-	-	5,062,688
50	TL	GA ML	GARRISON-MALLARD	1,948,079		1,948,079	-	-	1,948,079
51	TL	GA WJ	GARRISON-WM. J. NEAL	1,521,174		1,521,174	-	-	1,521,174
52	TL	GP BN	GAVINS POINT-BELDEN	455,727		455,727	-	-	455,727
53	TL	GP SF	GAVINS POINT-SIOUX FALLS	3,361,449		3,361,449	-	-	3,361,449
54	TL	GF MO	GRANITE FALLS- MORRIS	3,279,089		3,279,089	-	-	3,279,089
55	TL	GF MNV	GRANITE FALLS-MINNESOTA VALLEY	156,778		156,778	-	-	156,778
56	TL	GTFCON	GREAT FALLS-CONRAD	12,744,945		12,744,945	-	-	12,744,945
57	TL	GY MS	GREGORY-MISSION	10,110,752		10,110,752	-	-	10,110,752
58	TL	GR HU	GROTON-HURON	1,270,645		1,270,645	-	-	1,270,645
59	TL	GR SU	GROTON-SUMMIT	3,255,847		3,255,847	-	-	3,255,847
60	TL	HV RB	HAVRE-RAINBOW	8,681,332		8,681,332	-	-	8,681,332
61	TL	HV SH2	HAVRE-SHELBY#2	5,561,905		5,561,905	-	-	5,561,905
62	TL	HE DV	HESKETT-DEVAUL	6,016,436		6,016,436	-	-	6,016,436
63	TL	HETNU	HETTINGER-NEW UNDERWOOD	11,263,708		11,263,708	-	-	11,263,708
64	TL	HU MV	HURON-MT VERNON	617,623		617,623	-	-	617,623
65	TL	HU WT D	HURON-WATERTOWN 230KV 1&3	6,319,622		6,319,622	-	-	6,319,622
66	TL	JT ED	JAMESTOWN-EDGELEY	1,189,520		1,189,520	-	-	1,189,520
67	TL	JT FA 1	JAMESTOWN-FARGO NO. 1	4,941,649		4,941,649	-	-	4,941,649
68	TL	JT FA 2	JAMESTOWN-FARGO NO. 2	3,155,850		3,155,850	-	-	3,155,850
69	TL	JT GK	JAMESTOWN-GRAND FORKS	28,856,299		28,856,299	-	-	28,856,299
70	TL	JT VC	UTICA JCT-SIOUX FALLS	1,055,414		1,055,414	-	-	1,055,414
71	TL	KD CCR	KILLDEER-CHARLIE CREEK	-	3,628,323	3,628,323	-	-	3,628,323
	TL	BU KD	KILLDEER-HALLIDAY	-	4,218,694	4,218,694	-	-	4,218,694
72	TL	LAHCF	LAKE HELENA SWITCHYARD - CANYON FERRY 10(	619,324		619,324	-	-	619,324
73	TL	LE DL	LEEDS-DEVILS LAKE	8,987,642		8,987,642	-	-	8,987,642
74	TL	LE RL	LEEDS-ROLLA	6,257,786		6,257,786	-	-	6,257,786
75	TL	LC RH	LEWIS-RICHLAND	-	136,000	136,000	-	-	(136,000)
76	TL	ML RG	MALLARD-RUGBY	1,089,083		1,089,083	-	-	1,089,083
77	TL	MR MS	MARTIN-MISSION	1,816,904		1,816,904	-	-	1,816,904
78	TL	MR PL	MARTIN-PHILIP	1,790,108		1,790,108	-	-	1,790,108
79	TL	MA RC	MAURINE-RAPID CITY	6,346,265		6,346,265	-	-	6,346,265
80	TL	MC BK	MILES CITY-BAKER	11,220,164		11,220,164	-	-	11,220,164
81	TL	MC CU	MILES CITY-CUSTER	3,750,704		3,750,704	-	-	3,750,704
82	TL	NU PL	NEW UNDERWOOD-PHILIP	2,915,316		2,915,316	-	-	2,915,316
83	TL	NU RC 1	NEW UNDERWOOD-RAPID CITY NO. 1	1,132,486		1,132,486	-	-	1,132,486
84	TL	NU RC 2	NEW UNDERWOOD-RAPID CITY NO. 2	309,991		309,991	-	-	309,991
85	TL	NU SG C	NEW UNDERWOOD-STEGALL (HURON)	2,651,860		2,651,860	-	-	2,651,860
86	TL	OA FT N	OAHE-FORT THOMPSON 230KV 1&2	3,973,416		3,973,416	-	-	3,973,416
87	TL	OA FT S	OAHE-FORT THOMPSON 230KV 3&4	5,563,296		5,563,296	-	-	5,563,296
88	TL	OA GH	OAHE-GLENHAM	5,949,648		5,949,648	-	-	5,949,648
89	TL	OA MA	OAHE-MAURINE	1,967,901		1,967,901	-	-	1,967,901
90	TL	OA NU	OAHE-NEW UNDERWOOD	6,683,770		6,683,770	-	-	6,683,770

91	TL	OA PI	OAHE-PIERRE	388,816	388,816	-	-	388,816
92	TL	OF MC	O'FALLON CREEK-MILES CITY	2,488,318	2,488,318	-	-	2,488,318
	TL	ORD GSO	ORDWAY-GROTON SOUTH	2,038,920	2,038,920	-	-	2,038,920
93	TL	PI PL	PIERRE-PHILIP	2,140,436	2,140,436	-	-	2,140,436
94	TL	RC DRY	RAPID CITY-DRY CREEK	9,269,194	9,269,194	-	-	9,269,194
95	TL	ELCRC	RAPID CITY-ELK CREEK 115-kv T/L	52,064	52,064	-	-	52,064
96	TL	RCOSU	ROBERTS COUNTY-SUMMIT	91,742	91,742	-	-	91,742
97	TL	RG LE	RUGBY-LEEDS	2,235,655	2,235,655	-	-	2,235,655
98	TL	SH SH2	SHELBY-SHELBY #2	576,090	576,090	(576,090)	-	(0)
99	TL	SC DN	SIOUX CITY-DENISON	13,411,238	13,411,238	-	-	13,411,238
100	TL	SC SP	SIOUX CITY-SPENCER	1,938,353	1,938,353	-	-	1,938,353
101	TL	SC SF	SIOUX FALLS- SIOUX CITY	3,217,192	3,217,192	-	-	3,217,192
102	TL	SF VFO	SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE	277,897	277,897	-	-	277,897
103	TL	SU WT	SUMMIT-WATERTOWN	6,743,203	6,743,203	-	-	6,743,203
104	TL	TT TI	TIBER TAP-TIBER	1,084,858	1,084,858	-	-	1,084,858
105	TL	UJ SF	UTICA JCT-SIOUX FALLS	3,485,236	3,485,236	-	-	3,485,236
106	TL	VC FO	VALLEY CITY-FORMAN	2,418,957	2,418,957	-	-	2,418,957
107	TL	VR GTF	VERONA GREAT FALLS 161-kv LINE	5,110,115	5,110,115	-	-	5,110,115
108	TL	UJ VFO	VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/	312,931	312,931	-	-	312,931
109	TL	WT GF D	WATERTOWN-GRANITE FALLS 1&2	7,488,154	7,488,154	-	-	7,488,154
110	TL	WT SC	WATERTOWN-SIOUX CITY	26,924,889	26,924,889	-	-	26,924,889
111	TL	WC BU	WATFORD CITY-BEULAH	349,954	349,954	-	-	349,954
112	TL	WN WC	WILLISTON-WATFORD CITY	17,627,868	17,627,868	-	-	17,627,868
113	TL	WP CR	WOLF POINT-CIRCLE	11,035,514	11,035,514	-	-	11,035,514
114	TL	WJ RG	WM. J. NEAL-RUGBY	4,629,316	4,629,316	-	-	4,629,316
115	TL	YT CU	YELLOWTAIL-CUSTER	4,267,284	4,267,284	-	-	4,267,284
116	TL Total			604,275,040	7,983,017	612,258,057	(576,090)	611,494,154
117	SUB	AN	ANITA	6,259	6,259	-	-	6,259
118	SUB	APD	APPELDORN SUBSTATION	5,878,984	5,878,984	-	-	5,878,984
119	SUB	AR	ARMOUR SUBSTATION	2,318,295	2,318,295	(800,024)	-	1,518,271
120	SUB	AHS	ASH SUBSTATION	63,325	63,325	-	-	63,325
121	SUB	AB	ASSINNIBOINE	35,005	35,005	(35,005)	-	(0)
122	SUB	AUR	AURORA SUBSTATION	2,931,082	2,931,082	(124,344)	-	2,806,738
123	SUB	BK	BAKER	279,691	279,691	-	-	279,691
124	SUB	BN	BELDEN SUBSTATION	298,522	298,522	-	-	298,522
125	SUB	BEF	BELFIELD SUBSTATION	13,839,237	13,839,237	(109,224)	-	13,730,013
126	SUB	BE	BERESFORD SUBSTATION	4,733,510	4,733,510	(231,321)	-	4,502,189
127	SUB	BB	BISBEE SUBSTATION	503,976	503,976	(395,070)	-	108,906
128	SUB	BS	BISMARCK SUBSTATION	18,422,050	2,257,000	20,679,050	(200,648)	20,478,402
129	SUB	BI	BISON	12,472	12,472	-	-	12,472
130	SUB	BOL	BOLE SUB	3,076,454	3,076,454	(630,455)	-	2,445,999
131	SUB	BO	BONESTEEL SUBSTATION	3,507,086	3,507,086	(1,226,623)	-	2,280,463
132	SUB	BR	BROOKINGS SUBSTATION	14,007,875	14,007,875	-	-	14,007,875
133	SUB	CB	CAMPBELL COUNTY SWITCHING STATION /1	4,765,826	4,765,826	-	-	4,765,826
134	SUB	CF	CANYON FERRY	83,039	83,039	-	-	83,039
135	SUB	CRP	CARPENTER SUBSTATION	2,477,599	2,477,599	-	-	2,477,599
136	SUB	CA	CARRINGTON SUBSTATION	3,855,406	3,855,406	(1,007,873)	-	2,847,533
137	SUB	CCR	CHARLIE CREEK	1,376,076	1,376,076	-	-	1,376,076
138	SUB	CR	CIRCLE SUBSTATION	8,713,396	8,713,396	(2,022,076)	-	6,691,320
139	SUB	CON	CONRAD SUB	5,414,479	5,414,479	(151,625)	-	5,262,854
140	SUB	CS	CRESTON SUBSTATION	8,480,962	8,480,962	-	-	8,480,962

141	SUB	CRO	CROSSOVER SUB	12,707,819		12,707,819	-	-	12,707,819
142	SUB	CQE	CULBERTSON EAST SWITCHING STATION	2,390,851		2,390,851	-	-	2,390,851
143	SUB	CU	CUSTER SUBSTATION	4,672,136		4,672,136	(346,142)	-	4,325,994
144	SUB	CT	CUSTER TRAIL SUBSTATION	1,567,242		1,567,242	(1,567,242)	-	-
145	SUB	DC	DAWSON COUNTY SUBSTATION	10,478,271		10,478,271	(2,305)	-	10,475,966
146	SUB	DNT	DENBIGH TAP	848,872		848,872	(109,673)	-	739,199
147	SUB	DN	DENISON SUBSTATION	16,248,618		16,248,618	(183,385)	-	16,065,233
148	SUB	DV	DEVAUL SUBSTATION	1,657,438		1,657,438	(1,657,438)	-	0
149	SUB	DL	DEVILS LAKE SUBSTATION	2,918,979	8,875,000	11,793,979	(97,895)	-	11,696,084
150	SUB	DK	DICKINSON	23,704		23,704	-	-	23,704
151	SUB	EJ	E. J. MANNING	49,112		49,112	-	-	49,112
152	SUB	EA	EAGLE	88,696		88,696	-	-	88,696
153	SUB	EB	EAGLE BUTTE SUBSTATION	2,149,404		2,149,404	(1,211,250)	-	938,154
154	SUB	ED	EDGELEY SUBSTATION	6,779,995		6,779,995	(1,197,122)	-	5,582,873
155	SUB	ELC	ELK CREEK SUBSTATION	2,099,907		2,099,907	(17,147)	-	2,082,760
156	SUB	EL	ELLEDALE SUBSTATION	579		579	(579)	-	0
157	SUB	ELI	ELLIOTT SWITCHING STATION	3,507,129		3,507,129	(41,652)	-	3,465,477
158	SUB	END	ENDERLIN TAP STATION	749,768		749,768	(494,847)	-	254,921
159	SUB	EXI	EXIRA SWITCHING STATION	5,619,901		5,619,901	(164,229)	-	5,455,672
160	SUB	FWV	FAIRVIEW WEST SWITCHING STATION	4,296,873		4,296,873	-	-	4,296,873
161	SUB	FH	FAITH SUBSTATION	1,235,034		1,235,034	(541,181)	-	693,853
162	SUB	FA	FARGO SUBSTATION	27,550,947		27,550,947	-	-	27,550,947
163	SUB	FL	FLANDREAU SUBSTATION	4,285,185		4,285,185	(40,435)	-	4,244,750
164	SUB	FO	FORMAN SUBSTATION	7,486,471		7,486,471	(1,067,613)	-	6,418,858
165	SUB	FR	FORT RANDALL	253,710		253,710	-	-	253,710
166	SUB	FT2	FORT THOMPSON #2	13,508,341		13,508,341	-	-	13,508,341
167	SUB	FT	FORT THOMPSON SUBSTATION	17,189,676	2,102,514	19,292,190	(163,144)	-	19,129,046
168	SUB	GL	GLENDIVE SUBSTATION	1,725,310		1,725,310	-	-	1,725,310
169	SUB	GK	GRAND FORKS SUBSTATION	10,573,330	2,444,000	13,017,330	-	-	13,017,330
170	SUB	GI	GRAND ISLAND SUBSTATION	17,413,353		17,413,353	-	-	17,413,353
171	SUB	GRP	GRAND PRAIRIE SUBSTATION /1	294,370		294,370	-	-	294,370
172	SUB	GF	GRANITE FALLS SUBSTATION	23,902,751		23,902,751	(1,922,930)	-	21,979,821
173	SUB	GTF	GREAT FALLS SUB	8,470,404		8,470,404	-	-	8,470,404
174	SUB	GY	GREGORY SUBSTATION	1,517,925	6,673,108	8,191,033	(43,752)	-	8,147,281
175	SUB	GR	GROTON SUBSTATION	6,180,011		6,180,011	(326,877)	-	5,853,134
176	SUB	GSO	GROTON SOUTH SUBSTATION	8,552,324		8,552,324	-	-	8,552,324
177	SUB	HA	HARLEM	98,534		98,534	-	-	98,534
178	SUB	HV	HAVRE SUBSTATION	11,995,179		11,995,179	(62,475)	-	11,932,704
179	SUB	HBN	HEBRON SUBSTATION	6,841,034		6,841,034	(59,777)	-	6,781,257
180	SUB	HET	HETTINGER	10,832		10,832	-	-	10,832
181	SUB	HLK	HILKEN SUBSTATION	3,894,020		3,894,020	(143,716)	-	3,750,304
182	SUB	HU	HURON SUBSTATION	12,131,266		12,131,266	(787,192)	-	11,344,074
183	SUB	JT	JAMESTOWN SUBSTATION	26,426,324		26,426,324	(1,112,294)	-	25,314,030
184	SUB	KD	KILLDEER SUBSTATION	7,092,854		7,092,854	(1,180,480)	-	5,912,374
185	SUB	LA	LAKOTA SUBSTATION	3,844,383		3,844,383	(1,591,198)	-	2,253,185
186	SUB	LE	LEEDS SUBSTATION	3,946,797		3,946,797	(158,722)	-	3,788,075
187	SUB	LET	LETCHER SUBSTATION	11,108,748		11,108,748	-	-	11,108,748
188	SUB	ML	MALLARD	29,969		29,969	-	-	29,969
189	SUB	MT	MALTA	340,848		340,848	-	-	340,848
190	SUB	MDN	MANDAN SUBSTATION	19,476		19,476	-	-	19,476
191	SUB	MR	MARTIN SUBSTATION	6,422,146		6,422,146	(836,290)	-	5,585,856

192	SUB	MA	MAURINE SUBSTATION	7,567,611	1,714,400	9,282,011	(343,742)	-	8,938,269
193	SUB	MD	MIDLAND SUBSTATION	854,585		854,585	(154,097)	-	700,488
194	SUB	MC2	MILES CITY SUB #2	7,923,376		7,923,376	-	-	7,923,376
195	SUB	MC3	MILES CITY SUB #3	1,895,702		1,895,702	-	-	1,895,702
196	SUB	MC	MILES CITY SUBSTATION	1,202,099		1,202,099	-	-	1,202,099
197	SUB	MGV	MINGUSVILLE	5,351,152		5,351,152	-	-	5,351,152
198	SUB	MS	MISSION SUBSTATION	3,473,710		3,473,710	(586,992)	-	2,886,718
199	SUB	MO	MORRIS SUBSTATION	7,911,354		7,911,354	(1,095,435)	-	6,815,919
200	SUB	MV	MT VERNON SUBSTATION	5,268,801		5,268,801	(183,841)	-	5,084,960
201	SUB	NA	NASHUA SUB	72,368		72,368	(72,368)	-	(0)
202	SUB	NEL	NELSON SUBSTATION	1,944,817		1,944,817	(33,744)	-	1,911,073
203	SUB	NU	NEW UNDERWOOD SUBSTATION	18,333,139		18,333,139	-	-	18,333,139
204	SUB	NL	NEWELL SUBSTATION	4,116,914		4,116,914	(287,497)	-	3,829,417
205	SUB	OF	O'FALLON CREEK SUBSTATION	3,310,298		3,310,298	(71,356)	-	3,238,942
206	SUB	ON	O'NEILL SUB (NPP)	180,660		180,660	-	-	180,660
207	SUB	PET	PENN TAP	890,607		890,607	(108,485)	-	782,122
208	SUB	PL	PHILIP SUBSTATION	1,985,540		1,985,540	(209,290)	-	1,776,250
209	SUB	PI	PIERRE SUBSTATION	4,310,496		4,310,496	(699,890)	-	3,610,606
210	SUB	PLL	PLEASANT LAKE TAP	992,415		992,415	(160,601)	-	831,814
211	SUB	RB	RAINBOW SUBSTATION	250,629		250,629	(250,629)	-	(0)
212	SUB	RC	RAPID CITY SUBSTATION	5,739,051		5,739,051	(556,793)	-	5,182,258
213	SUB	RH	RICHLAND SUBSTATION	1,733,528		1,733,528	(1,733,528)	-	(0)
214	SUB	RCO	ROBERTS COUNTY SUBSTATION 2/	8,375,651		8,375,651	-	(8,375,651)	(0)
215	SUB	RL	ROLLA SUBSTATION	623,513		623,513	-	-	623,513
216	SUB	RY	RUDYARD SUBSTATION	3,362,493		3,362,493	(1,380,449)	-	1,982,044
217	SUB	RG	RUGBY SUBSTATION	8,722,196		8,722,196	(570,712)	-	8,151,484
218	SUB	SA	SAVAGE SUB	74,403		74,403	-	-	74,403
219	SUB	SH	SHELBY SUBSTATION	4,139,843		4,139,843	(4,139,843)	-	0
220	SUB	SH2	SHELBY SUBSTATION #2	5,830,673		5,830,673	(169,696)	-	5,660,977
221	SUB	SL	SHIRLEY TAP	22,102		22,102	-	-	22,102
222	SUB	SC2	SIOUX CITY #2	13,009,887	3,667,271	16,677,158	-	-	16,677,158
223	SUB	SC	SIOUX CITY SUBSTATION	16,447,709		16,447,709	-	-	16,447,709
224	SUB	SF	SIOUX FALLS SUBSTATION	14,960,183		14,960,183	(516,513)	-	14,443,670
225	SUB	SP	SPENCER	8,022,741		8,022,741	(254,683)	-	7,768,058
226	SUB	SNY	STANLEY	49,735		49,735	-	-	49,735
227	SUB	SB	SULLY BUTTES	93,606		93,606	-	-	93,606
228	SUB	SUH	SULPHUR	-		-	-	-	-
229	SUB	SU	SUMMIT SUBSTATION	2,893,947		2,893,947	(347,173)	-	2,546,774
230	SUB	TR	TERRY TAP	638,489		638,489	(103,121)	-	535,368
231	SUB	TT	TIBER TAP	166,306		166,306	-	-	166,306
232	SUB	TN	TOWNER SUBSTATION	5,204,626		5,204,626	-	-	5,204,626
233	SUB	TY	TYNDALL SUBSTATION	937,621		937,621	(125,594)	-	812,027
234	SUB	UJ	UTICA JCT.	12,816,177		12,816,177	-	-	12,816,177
235	SUB	VH	V. T. HANLON	12,228,700		12,228,700	-	-	12,228,700
236	SUB	VC	VALLEY CITY SUBSTATION	6,889,506		6,889,506	(176,541)	-	6,712,965
237	SUB	VR	VERONA	53,806		53,806	-	-	53,806
238	SUB	VE	VETAL TAP	232,375		232,375	-	-	232,375
239	SUB	VFO	VIRGIL FODNESS SUBSTATION	3,220,641		3,220,641	-	-	3,220,641
240	SUB	WL	WALL SUBSTATION	1,588,964		1,588,964	(654,299)	-	934,665
241	SUB	WNB	WANBLEE TAP	-		-	-	-	-
242	SUB	WDD	WARD SUBSTATION	3,453,847		3,453,847	(45,362)	-	3,408,485

243	SUB	WB	WASHBURN SUBSTATION	2,072,261		2,072,261	(942,415)	-	1,129,846
244	SUB	WT2	WATERTOWN #2	3,223,563		3,223,563	-	-	3,223,563
245	SUB	WTS	WATERTOWN STATIC VAR SYSTEM	11,778,775		11,778,775	-	-	11,778,775
246	SUB	WT	WATERTOWN SUBSTATION	16,840,052		16,840,052	-	-	16,840,052
247	SUB	WC	WATFORD CITY SUB	7,600,294		7,600,294	(108,365)	-	7,491,929
248	SUB	WSG	WESSINGTON SPRINGS SUBSTATION	5,141,440		5,141,440	(181,849)	-	4,959,591
249	SUB	WH2	WHATELY (NORTHERN)	40,860		40,860	-	-	40,860
250	SUB	WH	WHATELY SUBSTATION	109,910		109,910	(54,083)	-	55,827
251	SUB	WHT	WHITE 345/115 SUB	11,146,432		11,146,432	-	-	11,146,432
252	SUB	WV	WICKSVILLE SUBSTATION	831,304		831,304	(250,593)	-	580,711
253	SUB	WN2	WILLISTON 2 SUBSTATION	15,594,604		15,594,604	-	-	15,594,604
254	SUB	WN	WILLISTON SUBSTATION	8,198,987		8,198,987	(97,320)	-	(403) 8,101,264
255	SUB	WI	WINNER SUBSTATION	3,296,956		3,296,956	(101,869)	-	3,195,087
256	SUB	WJ	WM. J. NEAL	183,222		183,222	-	-	183,222
257	SUB	WP	WOLF POINT SUBSTATION	7,282,270		7,282,270	(1,346,899)	-	5,935,371
258	SUB	WO	WOONSOCKET SUBSTATION	2,775,992		2,775,992	(1,579,680)	-	1,196,312
259	SUB	YJ	YANKTON JCT.	76,396		76,396	-	-	76,396
260	SUB	YA	YANKTON SUBSTATION	2,935		2,935	-	-	2,935
261	SUB Total			743,842,299	27,733,293	771,575,592	(43,758,619)	-	(8,376,054) 719,440,919
262	O&M	ARC	ARMOUR O&M SER. CEN.	3,488,667		3,488,667	-	-	3,488,667
263	O&M	BSM	BISMARCK O&M SER. CEN.	9,921,042		9,921,042	-	-	9,921,042
264	O&M	DCF	DAWSON SER. CEN.	6,853,289		6,853,289	-	-	6,853,289
265	O&M	DLM	DEVILS LAKE O&M SER. CEN.	3,852,064		3,852,064	-	-	3,852,064
266	O&M	FAO	FARGO LINE MAINTENANCE FACILITY	2,203,121		2,203,121	-	-	2,203,121
267	O&M	FAM	FARGO O&M SER. CEN.	584,445		584,445	-	-	584,445
268	O&M	FPM	FORT PECK SER. CEN.	8,407,259		8,407,259	-	-	8,407,259
269	O&M	FTM	FORT THOMPSON O&M S. C.	2,209,623		2,209,623	-	-	2,209,623
270	O&M	HVM	HAVRE SERVICE CENTER	493,999		493,999	-	-	493,999
271	O&M	HUM	HURON O&M SER. CEN.	2,778,274		2,778,274	-	-	2,778,274
272	O&M	JTM	JAMESTOWN O&M SER. CEN.	3,874,657		3,874,657	-	-	3,874,657
273	O&M	MCM	MILES CITY MTCE FAC.	1,025,254		1,025,254	-	-	1,025,254
274	O&M	NUM	NEW UNDERWOOD SER. CEN.	96,884		96,884	-	-	96,884
275	O&M	PLM	PHILIP O&M SER. CENT.	1,679,382		1,679,382	-	-	1,679,382
276	O&M	PIM	PIERRE O&M SER. CEN.	1,051,383		1,051,383	-	-	1,051,383
277	O&M	RCM	RAPID CITY GARAGE & STOR.	2,221,967		2,221,967	-	-	2,221,967
		RCN	RAPID CITY NORTH O&M SER. CEN.	1,285,819		1,285,819	-	-	
278	O&M	SCM	SIOUX CITY O&M SER. CEN.	7,115,527		7,115,527	-	-	7,115,527
279	O&M	SFC	SIOUX FALLS O&M SER. CEN.	239,920	3,607,000	3,846,920	-	-	3,846,920
280	O&M	WTM	WATERTOWN MAINT. CEN.	7,452,151		7,452,151	-	-	7,452,151
281	O&M Total			66,834,727	3,607,000	70,441,727	-	-	69,155,908
282	OPS	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,126,606		6,126,606	-	-	6,126,606
283	OPS	WTO	WATERTOWN OPERATIONS CENT	1,578,314		1,578,314	-	(287,460)	1,290,854
284	OPS	WTO F	WATERTOWN OPER CTR (BFPS)	12,065,340	7,053,192	19,118,532	-	(1,672,347)	17,446,185
285	OPS Total			19,770,259	7,053,192	26,823,451	-	(1,959,807)	24,863,644
286	MOB	MOBW2	MOB 115KV SWITCH TRAILER	69,741		69,741	-	-	69,741
287	MOB	MOBT13	MOB TRANSF 111KV 15MVA	-		-	-	-	-
288	MOB	MOBT2	MOB TRANSF 115KV 10MVA	218,493		218,493	-	-	218,493
289	MOB	MOBT12	MOB TRANSF 115KV 25MVA	814,665		814,665	-	-	814,665
290	MOB	MOBT4	MOB TRANSF 115KV 40MVA	526,201		526,201	-	-	526,201
291	MOB	MOBT6	MOB TRANSF 230KV 1-33MVA	170,278		170,278	-	-	170,278
292	MOB	MOBB2	MOBILE BY PASS KIT (BISMARCK)	35,071		35,071	-	-	35,071

293	MOB	MOBB1	MOBILE BY PASS KIT (HURON)	163,695	163,695	-	-	163,695
294	MOB	MOBC4	MOBILE CAPACITOR BANK	19,075	19,075	-	-	19,075
295	MOB	MOBS6	MOBILE SUB 110KV	127,144	127,144	-	-	127,144
296	MOB	MOBS9	MOBILE SUB 115KV 20MVA	404,166	404,166	-	-	404,166
297	MOB	MOBS10	MOBILE SUB 115/41.8KV 20MVA	1,474,766	1,474,766	(1,474,766)	-	0
298	MOB	MOBS7	MOBILE SUB 41.8 KV	192,498	192,498	(192,498)	-	-
299	MOB	MOBS5	MOBILE SUB 69KV	71,118	71,118	-	-	71,118
300	MOB	MOBR2	MOB SH.REACTOR	179,328	179,328	-	-	179,328
301	MOB	MOBS11	MOBILE 69/13.2 SUBSTATION	-	-	(1,221,207)	-	(1,221,207)
302	MOB Total		MOBILE EQUIPMENT	4,466,239	-	4,466,239	(2,888,471)	1,577,768
303	GEN	BG FT L	BIG BEND-FORT THOMPSON (LOW VOLTAGE)	81,944	81,944	-	(81,944)	-
304	GEN	FP	FORT PECK POWERPLANT (COE)	64,611	64,611	-	(64,611)	0
305	GEN	FT BG 1	FORT THOMPSON-BIG BEND NO. 1	922,164	922,164	-	-	922,164
306	GEN	FT BG 2	FORT THOMPSON-BIG BEND NO. 2	690,735	690,735	-	-	690,735
307	GEN Total		TRANSMISSION-RELATED GEN. FACILITIES	1,759,454	-	1,759,454	(146,555)	1,612,899
308	COM	ATC	ATLANTIC COMMUNICATION SITE	68,567	68,567	-	(21,907)	46,660
309	COM	BK2	BAKER RELAY	278,673	278,673	-	(89,036)	189,637
310	COM	BTY	BANTRY	409,860	409,860	-	(130,950)	278,909
311	COM	BAE	BARRETT	99,835	99,835	-	(31,897)	67,937
312	COM	BMW	BATTLE MT. MICROWAVE	352,404	352,404	-	(112,593)	239,811
313	COM	BPR	BELLE PRAIRIE	257,179	257,179	-	(82,169)	175,010
314	COM	BET	BENEDICT	196,601	196,601	-	(62,814)	133,787
315	COM	BU	BEULAH	10,679	10,679	-	(3,412)	7,267
316	COM	BG	BIG BEND	113,362	113,362	-	(36,219)	77,143
317	COM	BJR	BIJOU REPEATER	517,974	517,974	-	(165,493)	352,482
318	COM	BAO	BILLINGS AREA OFFICE	158,946	158,946	-	(136,495)	22,451
319	COM	BSR	BISMARCK REPEATER	426,667	426,667	-	(136,320)	290,347
320	COM	BIR	BISON REPEATER	232,618	232,618	-	(74,321)	158,296
321	COM	BON	BOLE NORTH REPEATER	149,228	149,228	-	(47,678)	101,550
322	COM	BRI	BRINSMADE	122,277	122,277	-	(39,068)	83,210
323	COM	BSL	BRISTOL	19,704	19,704	-	(6,296)	13,409
324	COM	BRV	BRUNSVILLE REPEATER	92,595	92,595	-	(29,584)	63,011
325	COM	BFF	BUFFALO	107,342	107,342	-	(34,296)	73,046
326	COM	CAH	CAHOON	199,392	199,392	-	(63,706)	135,686
327	COM	CAZ	CARRINGTON REPEATER	703,661	703,661	-	(224,820)	478,841
328	COM	CHK	CHARTER OAK REPEATER	37,034	37,034	-	(11,832)	25,201
329	COM	CHI F	CHINOOK (BEFP)	284,048	284,048	-	(90,753)	193,295
330	COM	CHR	CHINOOK REPEATER	17,797	17,797	-	(5,686)	12,111
331	COM	CKR	CLARK MW REPEATER	771,076	771,076	-	(246,359)	524,717
332	COM	CLV	CLEVELAND REPEATER, N.D.	66,872	66,872	-	(21,366)	45,507
333	COM	CMR	COLEMAN REPEATER	105,281	105,281	-	(33,637)	71,644
334	COM	CME	COLOME REPEATER	301,355	301,355	-	(96,283)	205,072
335	COM	CBR	CONRAD BUTTE REPEATER	967,089	967,089	-	(308,985)	658,104
336	COM	CNN	COTTON	1,399	1,399	-	(447)	952
337	COM	CSR	CRESTON REPEATER	21,340	21,340	-	(6,818)	14,522
338	COM	CLR	CROW LAKE REPEATER	251,029	251,029	-	(80,204)	170,825
339	COM	CBT	CROWN BUTTE	52,565	52,565	-	(16,795)	35,770
340	COM	CRR	CULBERTSON RADIO RELAY SITE	1,926	1,926	-	(615)	1,311
341	COM	CQR	CULBERSTON REPEATER	31,102	31,102	-	(9,937)	21,165
342	COM	CUL	CUSTER LOOKOUT	84,854	84,854	-	(27,111)	57,743
343	COM	DAL	DALTON (WES)	63,660	63,660	-	(20,339)	43,321

344	COM	DLC	DEVILS LAKE FIBER REGEN	257,505	257,505	-	(82,273)	175,232
345	COM	DLZ	DEVILS LAKE REPEATER	530,315	530,315	-	(169,436)	360,879
346	COM	DOD	DODSON REPEATER	882,795	882,795	-	(282,053)	600,742
347	COM	DO	DOGDEN BUTTE	399,032	399,032	-	(127,491)	271,541
348	COM	DRS	DRISCOLL	79,113	79,113	-	(25,277)	53,837
349	COM	DU	DUPREE REPEATER	1,821	1,821	-	(582)	1,239
350	COM	DUT	DUTTON REPEATER (BEFP)	161,993	161,993	-	(51,757)	110,237
351	COM	ERB	EAST RAINY BUTTE	151,425	151,425	-	(48,380)	103,045
352	COM	ECK	ECKELSON	240,324	240,324	-	(76,783)	163,540
353	COM	EKR	ELKTON	211,379	211,379	-	(67,536)	143,844
354	COM	ELZ	ELLEDALE REPEATER	814,135	814,135	-	(260,116)	554,019
355	COM	EWA	ELLSWORTH AIR BASE	200,661	200,661	-	(64,111)	136,550
356	COM	ERH	ERHARD	99,569	99,569	-	(31,812)	67,757
357	COM	EX	EXIRA REPEATER	2,527	2,527	-	(807)	1,720
358	COM	FB	F. L. BLAIR	101,254	101,254	-	(32,351)	68,904
359	COM	FAP	FAIRPOINT REPEATER	206,550	206,550	-	(65,993)	140,557
360	COM	FNR	FALLON REPEATER	211,743	211,743	-	(67,652)	144,091
361	COM	FAC	FARGO MICROWAVE	109,866	109,866	-	(35,102)	74,764
362	COM	FCS	FERGUS FALLS COMMUNICATIONS SITE	519,190	519,190	-	(165,881)	353,309
363	COM	FLW	FLOWING WELLS	68,763	68,763	-	(21,970)	46,793
364	COM	FBS	FORBES COMMUNICATION SITE	70,575	70,575	-	(22,549)	48,026
365	COM	FTH	FORSYTH	132,263	132,263	-	(42,258)	90,005
366	COM	FP1	FORT PECK RELAY (WES)	97,512	97,512	-	(31,155)	66,357
367	COM	FPC	FORT PECK COMMUNICATIONS BUILDING	423,028	423,028	-	(135,158)	287,871
368	COM	FPR	FORT PECK REPEATER	105,589	105,589	-	(33,736)	71,853
369	COM	FPI	FORT PIERRE POLE YARD	785,698	785,698	-	(251,031)	534,668
370	COM	FTR	FORT THOMPSON REPEATER	99,223	99,223	-	(31,702)	67,521
371	COM	FTP	FORT THOMPSON REPEATER (EAST RIVER)	301,614	301,614	-	(96,366)	205,248
372	COM	FCR	FOX CREEK MICROWAVE	423,094	423,094	-	(135,179)	287,915
373	COM	FRY	FRYBURG SUB & MICROWAVE	61,204	61,204	-	(19,555)	41,649
374	COM	GA	GARRISON	303,954	303,954	-	(97,113)	206,841
375	COM	GRR	GARY REPEATER	80,799	80,799	-	(25,815)	54,983
376	COM	GP	GAVIN'S POINT	148,752	148,752	-	(47,526)	101,226
377	COM	GPR	GAVINS POINT REPEATER	325,520	325,520	-	(104,004)	221,516
378	COM	GET	GETTYSBURG REPEATER	378,095	378,095	-	(120,801)	257,294
379	COM	GH	GLENHAM	272,857	272,857	-	(87,178)	185,679
380	COM	GKM	GRAND FORKS MINNKOTA (MPC)	23,847	23,847	-	(7,619)	16,228
381	COM	GWN	GWINNER COMMUNICATIONS SITE	736,184	736,184	-	(235,211)	500,974
382	COM	HSB	HAILSTONE BUTTE	78,926	78,926	-	(25,217)	53,709
383	COM	HOY	HALLOWAY REPEATER	109,706	109,706	-	(35,051)	74,655
384	COM	HRT	HARLEM REPEATER	882,588	882,588	-	(281,987)	600,601
385	COM	HTH	HATHAWAY	68,891	68,891	-	(22,011)	46,880
386	COM	HMW	HERMOSA MICROWAVE	302,701	302,701	-	(96,713)	205,988
387	COM	HLR	HIGHLAND REPEATER	-	-	-	-	-
388	COM	HMR	HIGHMORE REPEATER	157,601	157,601	-	(50,354)	107,248
389	COM	HIW	HIGHWOOD	22,896	22,896	-	(7,315)	15,581
390	COM	HI	HINSDALE	201,837	201,837	-	(64,487)	137,350
391	COM	HIR	HINSDALE REPEATER	85,068	85,068	-	(27,179)	57,889
392	COM	HOE	HOPEWELL REPEATER	189,111	189,111	-	(60,421)	128,690
393	COM	HNT	HUNTER MICROWAVE	210,227	210,227	-	(67,168)	143,060
394	COM	HUD	HURON DISTRICT OFFICE	800,964	800,964	-	(255,908)	545,056

395	COM	HYS	HYSHAM	90,227	90,227	-	(28,827)	61,399
396	COM	JTR	JAMESTOWN REPEATER	46,981	46,981	-	(15,011)	31,971
397	COM	JCK	JONES CREEK	267,395	267,395	-	(85,433)	181,962
398	COM	KCK	KELLY CREEK	206,813	206,813	-	(66,077)	140,736
399	COM	KDZ	KILLDEER REPEATER	543,500	543,500	-	(173,648)	369,852
400	COM	KNE	KNEE HILL MW	1,096,762	1,096,762	-	(350,415)	746,346
401	COM	LAC	LAC QUI PARLE	759,357	759,357	-	(242,615)	516,743
402	COM	LKR	LAKE ANDES REPEATER	735,971	735,971	-	(235,143)	500,828
403	COM	LEF	LEFOR	48,470	48,470	-	(15,486)	32,984
404	COM	LI	LINDSAY RIDGE	64,370	64,370	-	(20,566)	43,804
405	COM	LCS	LINTON COMMUNICATIONS SITE	330,604	330,604	-	(105,628)	224,976
406	COM	LMO	LITTLE MISSOURI SUBSTATION	54,516	54,516	-	(17,418)	37,098
407	COM	LDP	LODGEPOLE REPEATER	-	-	-	-	-
408	COM	MRP	MALTA REPEATER	794,469	794,469	-	(253,833)	540,636
409	COM	MNM	MANDAN MICROWAVE SITE	69,988	69,988	-	(22,361)	47,627
410	COM	MPR	MAPLE RIVER	172,792	172,792	-	(55,207)	117,585
411	COM	MRR	MARTIN REPEATER	291,094	291,094	-	(93,005)	198,089
412	COM	MAV	MAYVILLE	187,939	187,939	-	(60,046)	127,892
413	COM	MLR	MIDLAND REPEATER	547,170	547,170	-	(174,821)	372,349
414	COM	MOX	MOE REPEATER	15,012	15,012	-	(4,796)	10,215
415	COM	MH	MOORHEAD	125,057	125,057	-	(39,956)	85,101
416	COM	MSR	MORRIS REPEATER & MICROWAVE	161,994	161,994	-	(51,757)	110,237
417	COM	NWC	NEWCASTLE REPEATER	216,330	216,330	-	(69,117)	147,213
418	COM	OA	OAHE	732,482	732,482	-	(234,028)	498,454
419	COM	OK	O'KREEK REPEATER	393,396	393,396	-	(125,690)	267,706
420	COM	OR	ORCHARD REPEATER	587,442	587,442	-	(187,688)	399,754
421	COM	OTO	OTO MICROWAVE	16,445	16,445	-	(5,254)	11,191
422	COM	OTW	OTTUMWA ROAD REPEATER SITE	7,685	7,685	-	(2,455)	5,229
423	COM	PGE	PAGE N.D.	1,646	1,646	-	(526)	1,120
424	COM	PAH	PAHOJA SUB	124,997	124,997	-	(39,937)	85,060
425	COM	PEK	PEAK	92,751	92,751	-	(29,634)	63,117
426	COM	PLJ	PHILIP JCT. REPEATER	398,649	398,649	-	(127,368)	271,281
427	COM	PKT	PICKERT MINNKOTA (MPC)	17,849	17,849	-	(5,703)	12,147
428	COM	PIR	PINE RIDGE	190,891	190,891	-	(60,990)	129,901
429	COM	PO	POPLAR (MDU)	437,221	437,221	-	(139,692)	297,529
430	COM	PRR	PRIMGHAR REPEATER	37,178	37,178	-	(11,878)	25,299
431	COM	PUR	PUKWANNA REPEATER	4,772	4,772	-	(1,525)	3,247
432	COM	RCR	RAPID CITY REPEATER	419,355	419,355	-	(133,984)	285,371
433	COM	RE	RICHARDSON COULEE	161,748	161,748	-	(51,679)	110,070
434	COM	RER	RICHARDSON COULEE REPEATER	166,315	166,315	-	(53,138)	113,177
435	COM	RHM	RICHLAND MW REPEATER (BEPS)	293,595	293,595	-	(93,803)	199,791
436	COM	RRR	ROCKY RIDGE REPEATER	201,973	201,973	-	(64,530)	137,443
437	COM	ROG	ROLLAG	83,270	83,270	-	(26,605)	56,665
438	COM	RGZ	RUGBY REPEATER	750,288	750,288	-	(239,717)	510,571
439	COM	RI	RUTLAND	1,122,799	1,122,799	-	(358,734)	764,064
440	COM	SAO	SACO	1,237	1,237	-	(395)	842
441	COM	SNB	SENTINEL BUTTE	92,148	92,148	-	(29,441)	62,707
442	COM	SRE	SHEEP COULEE REPEATER	1,030,179	1,030,179	-	(329,142)	701,037
443	COM	SCQ	SIOUX CITY REPEATER	443,199	443,199	-	(141,602)	301,597
444	COM	SFR	SIOUX FALLS REPEATER	329,860	329,860	-	(105,390)	224,469
445	COM	SI	SIOUX PASS	1,366	1,366	-	(436)	930

446	COM	SNA	SNAKE BUTTE REPEATER	541,759	541,759	-	(173,092)	368,667
447	COM	SPN	SPALDING REPEATER	534,311	534,311	-	(170,712)	363,599
448	COM	SM	SPIRIT MOUND	295,982	295,982	-	(94,566)	201,416
449	COM	STR	STRASBERG	1,853	1,853	-	(592)	1,261
450	COM	SMR	SUMMIT REPEATER	50,053	50,053	-	(15,992)	34,061
451	COM	TCS	TAPPEN COMMUNICATIONS SITE	478,072	478,072	-	(152,744)	325,328
452	COM	TA	TAPPEN REPEATER	461,151	461,151	-	(147,338)	313,813
453	COM	TEN	TENNANT COMMUNICATIONS SITE	8,782	8,782	-	(2,806)	5,976
454	COM	TOR	TORONTO REPEATER	106,096	106,096	-	(33,898)	72,198
455	COM	TFR	TRIPP REPEATER	216,887	216,887	-	(69,295)	147,592
456	COM	TU	TURKEY RIDGE REPEATER	628,990	628,990	-	(200,962)	428,028
457	COM	TYE	TYLER REPEATER	1,505,797	1,505,797	-	(481,102)	1,024,695
458	COM	VIC	VICTOR (EREC)	228,059	228,059	-	(72,865)	155,194
459	COM	VIA	VIDA	102,031	102,031	-	(32,599)	69,432
460	COM	WLR	WALL REPEATER	543,452	543,452	-	(173,633)	369,819
461	COM	WTR	WATERTOWN REPEATER	729,389	729,389	-	(233,040)	496,349
462	COM	WS	WAYSIDE	17,781	17,781	-	(5,681)	12,100
463	COM	WSR	WESSINGTON SPGS. REPEATER	714,396	714,396	-	(228,249)	486,146
464	COM	WEF	WESTFIELD	25,198	25,198	-	(8,051)	17,147
465	COM	WSW	WHITE SWAN	91,987	91,987	-	(29,390)	62,597
466	COM	WK C	WHITLOCK (BCPS)	165,594	165,594	-	(52,907)	112,687
467	COM	WRP	WILLISTON REPEATER	19,230	19,230	-	(6,144)	13,086
468	COM	WOB	WOLBACH REPEATER	28,280	28,280	-	(9,035)	19,244
469	COM	YT P	YELLOWTAIL SWITCHYARD (BEPS)	223,367	223,367	-	(71,366)	152,001
470	COM Total		COMMUNICATION FACILITIES	43,392,317	-	43,392,317	(13,949,557)	29,442,760
471	MCCS	MC4	MILES CITY CONVERTER STATION - BEPS	19,890,752	19,890,752	-	-	19,890,752
472	MCCS	MC4	MILES CITY CONVERTER STATION - BEFP	3,706,303	3,706,303	-	-	3,706,303
473	MCCS Total		MILES CITY CONVERTER STATION	23,597,054	-	23,597,054	-	23,597,054
474	DIST	BFTBP	BUFORD TRENTON TAP - BUFORD TRENTON P.P.	650,001	650,001	(650,001)	-	(0)
475	DIST	BP	BUFORD TRENTON PUMP SUB	184,827	184,827	(184,827)	-	0
476	DIST	FN	FALLON PUMPING PLANT SUBS	223,594	223,594	(223,594)	-	0
477	DIST	FE	FALLON RELIFT PUMPING PLA	171,257	171,257	(171,257)	-	(0)
478	DIST	FN GG	FALLON-GLENDIVE PUMP #4	25,506	25,506	(25,506)	-	(0)
479	DIST	FP WP	FORT PECK-WOLF POINT	391,368	391,368	(391,368)	-	0
480	DIST	FG	FRAZER PUMP SUB	253,597	253,597	(253,597)	-	0
481	DIST	GA SK	GARRISON-SNAKE CREEK	1,079,092	1,079,092	(1,079,092)	-	(0)
482	DIST	GG	GLENDIVE P.P. #1 SUB.	425,706	425,706	(425,706)	-	0
483	DIST	IN	INTAKE SUBSTATION	108,040	108,040	(108,040)	-	0
484	DIST	IN INP	INTAKE-INTAKE PUMP	6,494	6,494	(6,494)	-	-
485	DIST	SV	SAVAGE PUMPING PLANT SUBS	102,283	102,283	(102,283)	-	(0)
486	DIST	SY	SHIRLEY PUMP SUBSTATION	1,237,730	1,237,730	(1,237,730)	-	0
487	DIST	SK	SNAKE CREEK PUMP SUBSTATION	920,941	920,941	(920,941)	-	0
488	DIST	TE	TERRY PUMPING PLANT SWITCH	474,404	474,404	(474,404)	-	(0)
489	DIST	TI	TIBER DAM SUBSTATION	682,990	682,990	(682,990)	-	-
490	DIST	VA	WIOTA SUBSTATION	216,163	216,163	(216,163)	-	(0)
491	DIST Total		DISTRIBUTION FACILITIES	7,153,993	-	7,153,993	(7,153,993)	0
492	RMR	NU SG	NEW UNDERWOOD-STEGALL	287,835.39	287,835	-	-	287,835
493	RMR	SG	STEGALL SUBSTATION	12,414,412.95	12,414,413	(12,111,804)	-	302,609
494	RMR	SG	STEGALL SUBSTATION	220,814.25	220,814	(220,814)	-	-
495	RMR	SG WY	STEGALL-WAYSIDE	2,978,205.36	2,978,205	-	-	2,978,205
496	RMR	WY	WAYSIDE	237,295.95	237,296	-	-	237,296

497	RMR	YT PY	YELLOWTAIL SWITCHYARD-YELLOWTAIL (PPL)	121,494.90		121,495	(91,121)		30,374
498	RMR	PY	YELLOWTAIL (PPL)	692,334.71		692,335	(519,251)		173,084
499	RMR	YT P	YELLOWTAIL SWITCHYARD	13,270,517.00		13,270,517	(9,952,888)		3,317,629
500	RMR	YT	YELLOWTAIL SWITCHYARD (YT)	33,085.00		33,085	(24,814)		8,271
501	RMR Total		ROCKY MOUNTAIN REGION FACILITIES	30,255,996	-	30,255,996	(22,920,692)	-	7,335,303
502	COE		BIG BEND	2,370,873		2,370,873	(1,772,523)		598,349
503	COE		FORT PECK	10,414,780	615,000	11,029,780	(933,623)		10,096,157
504	COE		FORT RANDALL	22,128,751		22,128,751	(2,565,236)		19,563,515
505	COE		GARRISON	55,617,211		55,617,211	(14,054,772)		41,562,439
506	COE		GAVINS POINT	9,678,524		9,678,524	(7,097,567)		2,580,958
507	COE		OAHE	20,980,792		20,980,792	(1,699,636)		19,281,156
508	COE Total		CORPS OF ENGINEERS FACILITIES	121,190,931	615,000	121,805,931	(28,123,357)	-	93,682,575
509	Grand Total		TOTAL FACILITIES	1,666,538,308	46,991,502	1,713,529,810	(105,421,221)	(16,055,919)	(8,563,867)
510			SUBTOTAL WESTERN-UGP ONLY	1,515,091,381	46,376,502	1,561,467,883	(54,377,172)	16,055,919	8,563,867
511	1/ Plant balance does not include customer liability for network upgrades. Investment is only brought into plant balance as WAPA incurs expense (e.g. if transmission credits are provided to customer)								1,481,185,106
512	2/ Plant balance does not include facilities included in Zonal and Regional Worksheet, WS7-BPUFac								
513			DISTRIBUTION FACILITIES				82,500,529		1,578,436,331

Attachment AI Criteria										
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Line No.	FID	Facility	Specific Plant Included	1	1(b)	2	3	4	5	6
Substations										Further Description
1	APD	Appeldorn	230-kV breakers 482, 586, 682 and assoc. switches and switch 487	x						
2			station service KW4A, KW30A and switches	x						
3	AR	Armour	115-kV switches 16x, 26x, 76x	x						
4			12.47-kV switches 172x, KW1A	x						maintenance building SS
5			station service KZ1A, KX2A and switches	x						
6			115/69 kV transformer KY1A		x					Three East River members are served through KY1A (Charles Mix, Douglas and Southeastern)
7			69 kV breaker 1052 and assoc switches		x					Two East River members are served through 1052 (Douglas and Southeastern)
8	AHT	Ash Tap	115-kV switches 1161, 1261, 1361	x						
9	AUR	Aurora	115-kV breakers 266, 464, 562, 662 and assoc. switches	x						
10			capacitor PY4A	x						
11			station service KY2A and KW2A	x						
12	BN	Belden (NPPD)	115-kV breaker 1106 and assoc. switches	x						
13	BEF	Belfield	230-kV breakers 1282, 1382, 1582 and assoc. switches	x						
14			345/230-kV transformer KU1A	x						
15			345-kV breakers 292, 396, 492 and assoc. switches	x						
16			station service KW1B and assoc. switches	x						
17			reactor KW2A, 13.8 breaker 3224 and assoc. switches	x						
18	BEF	Beresford	115-kV breakers 262, 362, 462, 566, 764, 864 and assoc. switches	x						
19			capacitors PY7A, PY8A	x						
20			station service KZ1A and switch 1451	x						
21			115/69kV transformer KY1A		x					Two East River members are served through KY1A (Clay-Union and Southeastern)
22			69kV breaker 1652 and assoc. switches		x					Two East River members are served through 1652 (Clay-Union and Southeastern)
23	BB	Bisbee	69-kV switches 247, 347	x						
24	BS	Bismarck	230-kV breakers 182, 282, 382, 482, 582, 682, 782, 882, 986, 9182, 9282 and assoc. switches	x						
25			230/115-kV transformers KV3A, KV8A	x						
26			115-kV breakers 3062, 3162, 3362, 3562 and assoc. switches	x						
27			station service KW4A, KW4E, KW4F and assoc. switches	x						
28			12.47-kV breaker 1422, switches 142x, 152x, 1221, 1829	x						maintenance buildings ss
29	BOL	Bole	230-kV switches 182, 282, 481, 482	x						
30			station service KW21A, switch 2123	x						
31			230/69-kV transformer KV1A	x						
32			69-kV switches 1351, 1355	x						
33			69-kV breaker 1152 and assoc. switches		x					Sun River Electric Cooperative and NorthWestern MT
34	BO	Bonesteel	115-kV breakers 664, 764 and assoc. switches	x						
35			capacitors PY6A, PY7A	x						
36			115-kV switches 46x, 26x	x						
37			station service KW1A, switch 1521	x						
38	BR	Brookings	115-kV breakers 1162, 1266, 1462, 1466, 1562, 1662, 1666, 1762, 1766 and assoc. switches	x						
39			capacitors PY21A and PY20A, breakers 2164, 2064	x						
40			station service KW1A, KW21A and assoc. switches	x						
41			115/69kV transformer KY1A		x					One East River member and two municipal customers served through KY1A (Sioux Valley Energy, City of White, and City of Volga)
42			69 kV breaker 952, 1052 and assoc. switches		x					One East River member and two municipal customers served through 1052 (Sioux Valley Energy, City of White, and City of Volga)
43	CBC	Campbell County	230-kV breakers 182, 282, 382 and assoc. switches	x						
44	CD	Cando Tap	69-kV switches 1751, 1753	x						
45	CF	Canyon Ferry	100-kV breakers 162, 262, 266, 362, 366 and assoc. switches	x						
46	CRP	Carpenter	230-kV breakers 182, 382, 486 and assoc. switches	x	x					Two East River members (Coddington Clark and Kingsbury)
47			station service KW1A, KW3A and assoc. switches	x						
48	CA	Carrington	115-kV breakers 262, 362 and assoc. switches, switch 161	x						
49			capacitor PX3A	x						
50			station service KW9A and assoc. switches	x						
51	CCR	Charlie Creek	345-kV breakers 4096, 4192 and assoc switches	x						
52	CR	Circle	115-kV breakers 1462, 1562, 1666, 1764, 1864 and assoc. switches	x						
53			capacitors PY17A, PY18A	x						
54			reactor KY17A	x						
55			station service KX9A, switches 94x	x						
56	CON	Conrad	230-kV breakers 182, 382, 482 and assoc. switches	x						
57			230/115-kV transformer KV1A	x						
58			reactor KW31A, breaker 3124, switch 3123	x						
59			115-kV breaker 1162, 1362, 1452, and assoc. switches / switches 1263, 1265	x						
60			station service KW30A, switch 3023	x						
61	CS	Creston	161 kV breakers 162, 262, 362, 466, 562, 662, 762, 964, 8161, 8262 and assoc. switches	x						
62			161/69-kV transformer KY3A	x						
63			capacitors PZ21A and PY9A	x						
64			69-kV breakers 2252, 2352, 2456 and assoc. switches	x						
65			station service KW3A, KW6A, Breakers 323, 623 and assoc. switches	x						
66	CRO	Crossover	230-kV breakers 582, 586, 786, 882 and assoc. switches			x				to NWMT
67			230-kV switches 981, 983, 985, 987, 989, 990	x						
68			phase shifter KV8A	x						
69	COE	Culbertson East	115-kV switches 16x, 26x, 36x	x	x					two customers (Oreg Generation and Basin Generation)
70	CU	Custer	230-kV breakers 182, 382, 482 and assoc. switches	x						
71			station service KW2A and assoc. switches	x						
72			reactor KW1B and assoc. switches	x						
73			230/69/12.47-kV transformer KV1A	x						
74			reactor KZ2A, 69-kV breaker 2152 and assoc. switches	x						
75	DC	Dawson County	115-kV breakers 162, 262, 362, 462, 662, 762, 862 and assoc. switches	x						
76			230-kV breakers 2282, 2382, 2482, 2582, 2682 and assoc switches	x						
77			230/115-kV transformer KU5A	x						
78			capacitors PY7A, PY8A	x						
79			reactor KY8A	x						
80			station service KZ2B, KW2B and assoc. switches	x						
81			reactors KZ1A, KZ2A, KZ3A, breakers 3122, 3222, 3322 and assoc. switches	x						
82	DN	Denison	161-kV breakers 1362, 1566, 1662 and assoc. switches / switches 1461, 1465	x						
83			230-kV breakers 186, 282, 382, 386 and assoc. switches	x						
84			230/161-kV transformer KV1A	x						
85			reactor KW30A and assoc. switches	x						
86			230/69-kV transformers KV2A and KV3A	x						
87			69-kV breakers 2156, 2254, 2352, 2452, 2652, 2754, 2952, 5152 and assoc. switches	x						
88			capacitors PZ27A, PZ22A	x						

[illegible]

183			station service KW1A and switch 221	x							
184	GY	Gregory	115-kV breakers 1162, 1166, 1366, 1566 and assoc. switches	x							
185	GR	Groton	station service KY13A1 and switch 1323	x							
186			115-kV breakers 162, 262, 462, 562, 862, 966 and assoc. switches	x	x						Two East River members served through KY1A (Lake Region, Northern)
			115/69-kV transformer KY1A	x							
187			station service KZ1A and KW2A	x							
188			115/69-kV transformer KY2A	x							NWPS line is networked and included
189	GSO	Groton South	69-kV breakers 1152 and 1352 and assoc. switches	x							East River 2 customers
			115-kV breakers 1162, 1262, 1266, 1362, 1462, 1466, 1562, 1662, 1666, 2062, 2066 and assoc. switches	x							
190			station service KW4A	x							
191	HV	Havre	161-kV breakers 162, 262, 362 and assoc. switches	x							
192			115-kV breaker 1362, 1462, 1562, 1662 and assoc. switches	x	x						Hill County Coop and Tiber LLC
193			161/115-kV transformer KZ1A	x							
194			12.47-kv breaker 522 and assoc switches	x							
195			reactor KW1A	x							
196			station service KW1E, KW2A, switches 921, 221, 223	x							
197	HBN	Hebron	230-kV breakers 586, 682, 882, 986 and assoc switches	x							
198	HLK	Hilken	230-kV breakers 186, 386, 482 and assoc. switches	x							
199	HU	Huron	230-kV breakers 582, 586, 682, 782, 786, 882 and assoc. switches, switches 181, 281	x							
200			230/115-kV transformers KV1A, KV1B	x							
201			reactors KW1A, KW3A, breakers 132, 332 and assoc. switches	x							
202			station service KW1C, KW1D and assoc. switches	x							
203			115-kV breakers 1062, 1162, 1362, 1962 and assoc. switches, switches 126x, 1761	x							
204	JT	Jamestown	230-kV breakers 3182, 3282, 3382, 3482, 3582, 3682, 3782, 3882, 3982, 9182 and assoc switches	x							
205			115-kV breakers 162, 262, 362, 462, 562, 762, 1864, 1964, 2064 and assoc switches	x							not 662 - to OTP N.O.
206			capacitors PY20A, PY19A	x							
207			reactors KY20A, KY19A, KY7A	x							
208			230/115-kV transformers KU3A, KU6A	x							
209			reactor KW21A, breaker 2122 and assoc. switches	x							
210			station service KWA, KWB switches 222x, 232x	x							
211			station service KW4B, wches 242x, 252x 302x	x							
212			reactor KW26A, breaker 2622 and assoc. switches	x							
213	KD	Killdeer	115-kV breakers 162, 166, 366, 462 and assoc. switches	x							
214			Capacitor PY2A, 115-kV breaker 264 and assoc. switches	x							
215			station service KY1A, switch 3163, KX3A and assoc. switches	x							
216	LA	Lakota	115-kV breaker 162 and assoc switches	x							
217			station service KW1A, switches 825, 921	x							
218	LE	Leeds	115-kV breakers 262, 362, 462, 562 and assoc. switches	x							
219			capacitor P24A, breaker 744 and assoc. switches	x							
220			115/69-kV transformer KY1A, switches 161, 162	x							
221			69-kV breakers 444, 544 and assoc switches / switch 143	x							
222			station service KW3B and switch 1021	x							
223	LET	Letcher	230-kV breakers 382, 582, 686 and assoc. switches	x							NWPS line to Mitchell is Networked
224			230/115-kV transformer KV3A	x							
225			115-kV breakers 1266, 1362, 1562 and assoc. switches	x							
226			station service KW3B and assoc switches	x							
227	MR	Martin	115-kV breakers 2262, 2466, 2362, 2562 and assoc. switches	x							
228			station service KW18A and switches 1821, 1823	x							
229	MA	Maurine	230-kV breakers 182, 282, 582 and assoc. switches	x							
230			230/115-kV transformer KV1A	x							
231			115-kV breakers 1362, 1462, 1562, 1662, 1964, 2064 and assoc switches	x							
232			capacitors PY19A, PY20A	x							
233			reactors KY19A, KY20A	x							
234			reactor KW32A, breaker 3224 and assoc switches	x							
235			station service KW30A, KW31A and assoc switches	x							
236	MD	Midland	115-kV switches 16x and 26x / switch 361	x							
237			station service KW20A, switches 2031, 2011, 3011	x							
238	MC	Miles City	57-kV breaker 152 and assoc. switches	x	x	x					2 customers (MDU, Kinsey Irrigation)
239	MC2	Miles City 2	230-kV breakers 382, 386, 482, 582 and assoc. switches and switch 783	x							
240			230/115-kV transformer KV1A	x							
241			115-kV breakers 1262, 1362, 1462, 1662 and assoc. switches, switches 1161 and 1165	x							
242			reactor KW7A, breaker 724 and assoc switches	x							
			capacitor KPYSA, breaker 1562 and assoc. switches	x							
243			station service K2, K1 and assoc switches	x							
244			13.8-kV SS to Miles City DC Converter Station	x							
245	MC3	Miles City 3	All Facilities and Equipment	x							
246	MGV	Mingusville	230-kV breakers 182, 282, 382 and assoc. switches, and line disconnects	x							
247			station service transformer KV10A and station service equipment	x							
248	MS	Mission	115-kV breakers 162, 262, 462 and assoc. switches, switches 863, 865	x							
249			reactors KY30A, KY31A, KY7A	x							
250			capacitors PY30A, PY31A	x							
251			115-kV breakers 764, 3064, 3164 and assoc. switches	x							
252			station service KX2A, KX1A and switches 243x, 253x	x							
253	MO	Morris	230-kV breakers 182, 382, 482, 582 and assoc switches	x							
254			230/115-kV transformer KV1A	x							
255			115-kV breakers 1162, 1462, 1562, 1762 and assoc switches	x							
256			station service KW1B and switches 512x	x							
257	MV	Mount Vernon	115-kV breakers 162, 262, 662 and assoc switches	x							
258			station service KZ1A and assoc switches	x							
259			115/69 kV transformer KY1A	x	x						One East River member and one municipal customer served through KY1A and East River 1952 (Central and City of Plankinton)
260	NEL	Nelson Tap	115-kV switches 176x, 196x	x							
261	NU	New Underwood	230-kV breakers 282, 382, 384, 484, 582, 682, 782, 882, 986, 9182, 9282 and assoc switches	x							
262			reactor KV3A, KV4A	x							
263			230/115-kV transformers KV2A, KV1A	x							
264			115-kV breakers 1262, 1362, 1462, 1562, 1662, 1866, 8162, 8262 and assoc switches	x							
265			13.8-kV breaker 4522, 4022, 4122, 4222 and assoc switches	x							
266			reactor KW45A, KW40A, KW41A, KW42A	x							
267			station service KW1A, KW1B and assoc switches	x							
268	NL	Newell	115-kV breakers 1162, 1362 and assoc switches and switch 1262	x							
269			115/69-kV transformer KY1A	x	x						2 customers: Butte Electric and West River
270			Station Service KW1A and assoc equipment	x							
271	OF	O'Fallon Creek	115-kV breakers 162, 262, 362 and assoc switches	x							
272			115/69-kV transformer KY1A	x	x						2 customers: Buffalo Rapids Irrigation and Tongue River Electric
273			69kV breaker 452 and assoc switches	x	x						2 customers: Buffalo Rapids Irrigation and Tongue River Electric
274			Station Service KW1B	x							

[illegible]

[illegible]

[illegible]

540	JAMESTOWN O&M SER. CEN.				x				
541	MILES CITY MTCE FAC.				x				
542	MILES CITY MTCE FAC.				x				
543	NEW UNDERWOOD SER. CEN.				x				
544	PHILIP O&M SER. CENT.				x				
545	PIERRE O&M SER. CEN.				x				
546	RAPID CITY GARAGE & STOR.				x				
547	SIOUX CITY O&M SER. CEN.				x				
548	SIOUX FALLS O&M SER. CEN.				x				
549	WATERTOWN MAINT. CEN.				x				
550									
551	Operation Centers								
552	WATERTOWN ALTERNATE OPERATIONS CENTER				x				
553	WATERTOWN OPERATIONS CENT				x				
554	WATERTOWN OPER CTR (BFPS)				x				
555									
556	Mobile Equipment								
557	MOB 115KV SWITCH TRAILER		x						
558	MOB 115KV SWITCH TRAILER		x						
559	MOB TRANSF 111KV 15MVA		x						
560	MOB TRANSF 115KV 10MVA		x						
561	MOB TRANSF 115KV 10MVA		x						
562	MOB TRANSF 115KV 25MVA		x						
563	MOB TRANSF 115KV 40MVA		x						
564	MOB TRANSF 230KV 1-33MVA		x						
565	MOBILE BY PASS KIT (BISMARCK)		x						
566	MOBILE BY PASS KIT (HURON)		x						
567	MOBILE CAPACITOR BANK		x						
568	MOBILE SUB 110KV		x						
569	MOBILE SUB 115KV 20MVA		x						
570	MOBILE SUB 41.8 KV		x						
571	MOBILE SUB 69KV		x						
572	MOB SH.REACTOR		x						
573									
574	Transmission-Related Generation Facilities								
575	FORT THOMPSON-BIG BEND NO. 1		x						
576	FORT THOMPSON-BIG BEND NO. 2		x						
577									
578	Communication Facilities								
579	ANITA	SCADA			x				
580	AB ASSINIBOINE	meters for NWMT NITS from Havre			x				
581	BAKER	microwave, RTU			x				
582	ATLANTIC COMMUNICATION SITE				x				
583	BAKER RELAY				x				
584	BANTRY				x				
585	BARRETT				x				
586	BATTLE MT. MICROWAVE				x				
587	BELLE PRAIRIE				x				
588	BENEDICT				x				
589	BEULAH				x				
590	BIG BEND				x				
591	BIJOU REPEATER				x				
592	BISMARCK REPEATER				x				
593	BI Bison	microwave alarm system			x				
594	BISON REPEATER				x				
595	BOLE NORTH REPEATER				x				
596	BRINSMADE				x				
597	BRISTOL				x				
598	BRUNSVILLE REPEATER				x				
599	BUFFALO				x				
600	CAHOON				x				
601	CARRINGTON REPEATER				x				
602	CHARTER OAK REPEATER				x				
603	CHINOOK (BEFP)				x				
604	CHINOOK REPEATER				x				
605	CLARK MW REPEATER				x				
606	CLEVELAND REPEATER, N.D.				x				
607	COLEMAN REPEATER				x				
608	COLOME REPEATER				x				
609	CONRAD BUTTE REPEATER				x				
610	COTTON	meters for Central MT (Basin NITS)			x				
611	CRESTON REPEATER				x				
612	CROW LAKE REPEATER				x				
613	CROWN BUTTE				x				
614	CULBERTSON RADIO RELAY SITE				x				
615	CUSTER LOOKOUT				x				
616	DALTON (WES)				x				
617	DEVILS LAKE FIBER REGEN				x				
618	DEVILS LAKE REPEATER				x				
619	DICKINSON	communications equipment			x				
620	DODSON REPEATER				x				
621	DOGDEN BUTTE				x				
622	DRISCOLL				x				
623	DUPREE REPEATER				x				
624	DUTTON REPEATER (BEFP)				x				
625	EAGLE	microwave, RTU, SCADA			x				
626	EAST RAINY BUTTE				x				
627	ECKELSON				x				
628	E. J. MANNING	fiber, microwave, SCADA			x				
629	ELKTON				x				
630	ELLENDALE REPEATER				x				
631	ELLSWORTH AIR BASE				x				
632	ERHARD				x				
633	EXIRA REPEATER				x				
634	F. L. BLAIR				x				

[illegible]

One-Line Diagrams showing these included facilities are available upon request.

The diagrams include CEI material and therefore require execution of a Non-Disclosure Agreement with Western Area Power Administration - Upper Great Plains Region.

Criteria 1: Non-Radial above 60-kV / (b) Two or More Eligible Customers

Criteria 2: Interconnect Zones / Surrounding Entities

Criteria 3: Control and Protection

Criteria 4: High Side of Transformer

Criteria 5: DC Interconnection

Criteria 6: 7 Factor Test

* Based upon Attachment AI of SPP's Tariff and consistent with criteria set forth in the "Zone 19 (Upper Missouri Zone) - Attachment AI Guidance Document", dated 06/14/2016, as prepared by the Attachment AI Working Group in FERC docket ER15-1775-000.

Line No.	(1) FID	(2) Facility	(3) Specific Plant NOT Included	(4) Further Description
1		Substations		
2				
3	AR	Armour	34.5-kV breaker 542 and assoc. switches	NWPS
4			115/34.5-kV transformer KY2A	
5			115-kV interrupter 462 and assoc. switches	
6	AUR	Aurora	115-kV breaker 162, 362 and assoc. switches	
7	BEF	Belfield	230-kV breaker 1482 and assoc switches	
8	BE	Beresford	69-kV breaker 1552 and assoc. switches	East River
9			115-kV breaker and assoc. switches	
10			12.47-kV switch 821, 823, 829	City of Beresford
11	BG	Big Bend	230-kV interrupters 1081, 2081, 2081, 4081 and assoc switches	
12	BB	Bisbee	69/12.5-kV transformer KZ1A and switch 145	
13			12.5-kV breaker 124 and assoc. switches	CPEC
14	BS	Bismarck	115-kV breaker 3462 and assoc. switches	Capitol Electric
15			12.5-kV switches 1527, 1529	USBR
16	BOL	Bole	69-kV breaker 1452 and 1252 and assoc. switches	NWMT
17	BO	Bonesteel	115-kV breaker 362 and assoc. switches	
18			115/12.47-kV transformer KY1A	
19			12.47-kV breaker 1422 and assoc. switches	Rosebud Electric
20	BR	Brookings	115-kV breakers 1262, 1362 and assoc. switches	City of Brookings
21	BFT	Buford Trenton Tap	All Not Included	
22	BP	Buford Trenton Pumping	All Not Included	
23	CA	Carrington	115-kV interrupter 162	protection for non-included transformer (transformer not owned by Western)
24			41.8-kV breakers 142, 242, 342, 442, 542, 642, 842 and assoc. switches	Otter Tail and CPE
25	CR	Circle	115-kV breaker 1162 and assoc. switches	Keystone
26			115-kV breaker 1262, 1362 and assoc. switches	McCone
27			115/34.5-kV transformer KY12A	
28			34.5-kV breaker 142 and assoc. switches	McCone
29	CON	Conrad	115-kV breaker 1062 and assoc. switches	Sun River
30	CU	Custer	69-kV breakers 2252, 2352 and assoc. switches	Yellowstone Valley and Mid-Yellowstone
31	CT	Custer Trail	All Not Included	
32	DC	Dawson County	115-kV switch 1061	protection for non-included transformer (transformer not owned by Western)
33	DNT	Denbigh Tap	Switches 1460, 1461	
34	DN	Denison	69-kV breaker 2552 and assoc. switches	City of Denison
35	DV	Devaul	All Not Included	
36	DL	Devils Lake	41.8-kV breaker 1442 and assoc. switches	Otter Tail normally open-emergency tie
37			12.5-kV breaker 1122 and assoc. switches	Minnkota
38	EB	Eagle Butte	115/69-kV transformer KY1A and 115-kV interrupter 762	
39			69-kV breaker 1752 and assoc. switches	Moreau Grand
40	ED	Edgeley	115/41.8-kV transformer KY2A	
41			115-kV breaker 362	
42			41.8-kV breaker 2342 and assoc. switches	Otter Tail
43			69-kV breaker 1252 and assoc. switches	
44	ELC	Elk Creek	115-kV ground switch 1160	
45	ELI	Elliot	115-kV interrupter 2063 and assoc. switches, 115-kV switch 369	
46	END	Enderlin Tap	Interrupter 1862 and assoc. switches	
47	EXI	Exira	Switches 169, 369, 569	Generator Lead
48	FH	Faith	115/12.47-kV tranformer KY1A and 115-kV interrupter 362	
49			12.47-kV breaker 1022 and assoc. switches	City of Faith
50	FN	Fallon Pumping	All Not Included	
51	FE	Fallon Relift	All Not Included	
52	FL	Flandreau	12.47-kV switches 3121, 3122, 3123, 3129, 3223	City of Flandreau
53	FO	Forman	69-kV breaker 452 and assoc. switches	
54			69/41.8-kV transformer KZ3A and 69-kV switches 353, 355	
55			115-kV breaker 1662 and assoc. switches	
56			41.8-kV breaker 2142 and assoc. switches	Otter Tail
57			41.8/12.5-kV transformer KX6A and switch 1443	
58			12.5-kV breaker 2222 and assoc. switches	Dakota Valley
59	FR	Fort Randall	115-kV breaker 962 and assoc. switches	
60	FT	Fort Thompson	69-kV breaker 4452 and assoc. switches	West Central
61	FG	Frazer Pumping	All Not Included	
62	GA	Garrison	115-kV breakers 462, 562 and assoc switches	generator leads
63	GP	Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	generator leads
64	GGT	Glendive Pumping No. 1 Tap	All Not Included	
65	GG	Glendive Pumping No. 1	All Not Included	
66	GF	Granite Falls	69-kV breakers 4352, 4452, 4552, 4652 and assoc. switches	GRE normally open and Minn. Valley
67			115/69-kV transformer KY2A	
68			115-kV breaker 2862, 3262 and assoc. switches	
69	GY	Gregory	115-kV Disconnect Switch 1523	protection for non-included transformer (transformer not owned by Western)
70	GR	Groton	69-kV breaker 1552 and assoc. switches	East River
71	HV	Havre	12.5-kV breaker 822 and assoc. switches	Hill County
72	HBN	Hebron	230-kV switches 989 and 589	
73	HLK	Hilken	take-off structure to Baldwin Wind	generator lead
74	HU	Huron	115-kV switches 1261, 1265	
75			115/69-kV transformer KY1A	
76			69-kV breakers 1952, 2052 and assoc. switches	East River
77	IN	Intake	All Not Included	
78	INP	Intake Pumping	All Not Included	
79	JT	Jamestown	115/41.8-kV transformers KY1A and KY2A	
80			115-kV breaker 662 and assoc. switches	
81			41.8-kV breaker 1142 and assoc. switches	Otter Tail, Normally Open - emergency tie
82			12.47-kV breaker 1522, 1722 and assoc. switches	
83	KD	Killdeer	115/41.8-kV transformer KY4A and switch 469	
84			41.8-kV breaker 442, 642 and switches 343, 345	MDU and Upper Mo.
85	LA	Lakota	12.5-kV breaker 1022 and assoc. switches	City of Lakota
86			69-kV breaker 152 and assoc. switches	
87			115/69-kV transformer KY1A, switches 362, 363	
88	LE	Leeds	69/12.5-kV transformer KZ3A and switch 645	
89			12.5-kV breaker 624 and assoc. switches	CPEC
90	MR	Martin	115/34.5-kV tranformer KY1A and breaker 1962 and assoc. switches	
91			115 kV breaker 1962 and assoc switches	
92	MA	Maurine	115/69-kV transformer KY1A and breaker 1262 and assoc. switches	
93			115-kV breaker 1762	
94			69-kV breaker 2252 and assoc. switches	Grand Electric
95	MD	Midland	Capacity Rights in 115/69 kV Transformer KY1A	
96	MS	Mission	115/24.9-kV transformer KY1A and interrupter 362	Cherry-Todd
97	MO	Morris	41.8-kV breakers 3132, 3232, 3332 and assoc switches	
98			115/41.8-kV transformer KY3A	
99			115-kV breaker 1362 and assoc switches	
100	MV	Mount Vernon	69-kV breaker 1852 and assoc. switches	East River
101	NAT	Nashua Tap	All Not Included	
102	NEL	Nelson Tap	Switch 1861	
103	NL	Newell	69-kV breakers 2252, 2452 and assoc. switches	Rushmore
104	NU	New Underwood	13.8 kV interrupter 4423 and assoc. switch	
105			115-kV bay for solar project	

106	OA	Oahe	230-kV breakers 2882, 2482, 2486, 2082, 1162 and assoc. switches	generator lead
107			115-kV breaker 1162 and assoc. switches	generator lead
108	OF	O'Fallon Creek	12.47-kV breaker 522 and assoc. switches and equipment	MDU
109	PET	Penn Tap	Switches 1860, 1861	
110	PL	Philip	115/69-kV transformer KY1A and switches 1963	
111			69-kV breaker 2152 and assoc. switches	West Central
112	PI	Pierre	115/12.47-kV transformer KY1A and 115-kV interrupter 762	
113			12.47-kV breakers 2212, 2312, 2412 and assoc. switches	City of Pierre
114	PLL	Pleasant Lake Tap	Switched 760, 761	
115	RC	Rapid City	115/12.47-kV transformer KY1A	
116	RH	Richland	All Not Included	
117	RY	Rudyard	115/69/12.5-kV transformer KY1A and interrupter 362	
118			69-kV breaker 752 and assoc. switches	Hill County
119			12.5-kV breaker 422 and assoc. switches	Hill County
120	RG	Rugby	115/41.8-kV transformer KY1A and breaker 1162 and assoc. switches	
121			41.8-kV breaker 2142 and assoc. switches	Otter Tail
122	SV	Savage Pumping	All Not Included	
123	SH2	Shelby	All Not Included	
124	SH2	Shelby 2	115-kV breaker 1162 and assoc. switches	to Shelby
125	SY	Shirley Pumping	All Not Included	
126	SF	Sioux Falls	115-kV breaker 862 and assoc. switches	East River
127			69-kV breaker 1552 and assoc. switches	East River
128	SP	Spencer	69-kV breaker 1642 and assoc. switches	City of Spencer
129	SU	Summit	41.8-kV breakers 2142, 2242 and assoc. switches	
130			115/41.8-kV transformer KY1B	
131			115-kV interrupter 862 and switch 861	
132	TE	Terry Pumping	All Not Included	
133	TR	Terry Tap	115/34.5-kV transformer KY1A and switch 363	
134			34.5-kV breaker 342 and assoc. switches	Buffalo Rapids and MDU
135	TI	Tiber	115/12.5-kV transformer KY1A and breaker 1262	
136			12.5-kV breaker 122 and assoc. switches	USBR
137	TY	Tyndall	69-kV breaker 452 and assoc. switches	East River
138			115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
139	VC	Valley City	69-kV breakers 344, 1144 and assoc. switches	City of Valley City
140	WL	Wall	115/12.47-kV transformer KY1B and interrupters 461 and 562	
141			12.47-kV breaker 622 and assoc. switches	West River
142	WNB	Wanblee	Interrupter 462 and assoc. switches	
143	WDD	Ward	230-kV switch 889	
144	WB	Washburn	230/41.8-kV transformer KU1A and breaker 282	
145			41.8-kV breaker 342 and assoc. switches	Otter Tail - emergency tie
146			41.8 kV breaker 242 and assoc switches	MPC and CPEC Blue Flint
147	WC	Watford City	115-kV interrupter 162	protection for non-included transformer (transformer not owned by Western)
148	WSG	Wessington Springs	230-kV switch 989	generator outlet
149	WH	Whately	69/12.5-kV transformer KYA and switches 253, 257	
150			12.5-kV breaker 224 and assoc. switches	Norval
151	WV	Wicksville	115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
152			24.9-kV breaker 1032 and assoc. switches	West River
153	WN	Williston	60-kV breaker 3552 and assoc. switches	MDU non-credited line
154	WN2	Williston 2	115-kV breaker 2562 and assoc. switches	
155	WI	Winner	12.47-kV breakers 2222, 2422, 2523 and assoc. switches	City of Winner and Rosebud Electric
156	VAT	Wiota	All Not Included	
157	VAT	Wiota Tap	All Not Included	
158	WP	Wolf Point	115/34.5-kV transformer KY1A and switches 1963, 1965	
159			34.5-kV breakers 2142, 2242, 2342, 2442 and assoc. switches	MDU and Norval
160			12.5-kV breakers 3222, 3322, 3422 and assoc. switches	Norval and McCone
161	WO	Woonsocket	34.5-kV breakers 442 and 542 and assoc. switches	NWPS and City of Wessington Springs
162			115/69-kV transformer KY1B and 115-kV breaker 862	
163			Mobile Transformer 115/34.5-kV	
164			115-kV interrupters 362 and 862 and assoc. switches, switch M263, M261	
165		Transmission Lines		
166		SHELBY-SHELBY2	115-kV	
167		Corps Switchyard Facilities		
168		Big Bend	230-kV interrupters 1081, 2081, 3081, 4081 and assoc switches	
169		Fort Peck	230-kV interrupters 481, 581 and assoc switches	
170			115-kV switches 861, 961	
171		Fort Randall	115-kV switch 960	
172			230-kV switches 1180, 1280, 1380	
173		Garrison	230-kV breakers 182, 282, 382 and assoc switches	
174			115-kV breakers 462, 561, 1762 and assoc switches	
175			13.8-kV breaker 2722 and assoc switches	
176		Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	
177		Oahe	115-kV breaker 1162 and assoc. switches	
178			230-kV breakers 2082, 2882 and assoc. switches	
* Based upon Attachment AI of SPP's Tariff and consistent with criteria set forth in the "Zone 19 (Upper Missouri Zone) - Attachment AI Guidance Document", dated 06/14/2016, as prepared by the Attachment AI Working Group in FERC docket ER15-1775-000.				

WAPA-UGP 2023 Rate Estimate Calculation

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Worksheet 11 - Facility Changes

12 Months Ending 09/30/2023 ESTIMATE

Line No. (1)

(2)

1	Lewis - Richland 115 kV Ckt 1, 72052	Reconductor 0.1 miles of 115-kV Transmission Line to increase rating due to 2018 ITP. NTC ID 210497. This project will be regionally shared.
2	Flandreau	Customer Funded. New 69-kV Breaker 2252 and assoc. switches.
3	Brookings	Customer Funded. New 69-kV Breaker 952 and assoc. switches.
4	Huron	Take over ownership of 230-kV Breaker 682 and assoc. switches. Was already in the Zone
5	Devils Lake	Rebuilt Substation. Addition of two 115-kV breakers/switches and 115-kV cap bank and removal of 41.8-kV cap bank.
6	Miles City 2	115 kV Line Bay for MDU (customer funded) and Cap Bank Addition (20% customer funded)
7	Killdeer -Charlie Creek	Line Rebuild. Not a new line but was part of Watford City-Beulah line

WAPA-UGP 2023 Rate Estimate Calculation

[\(Back to Worksheet Links\)](#)

Worksheet 12 - Scheduling, System Control, and Dispatch Service

12 Months Ending 09/30/2023 ESTIMATE

Line No.	(1) DESCRIPTION	(2) SSCD	(3) REFERENCE
1	A. Operation and Maintenance Expense (\$)	9,674,816	WS4-CostData (O&M Expenses Worksheet)
2	B. A&G Expense (\$)	231,329	WS4-CostData (A&G Expenses Worksheet)
3	C. Depreciation Expense (\$)	483,979	WS4-CostData (Depreciation Expense Worksheet)
4	D. Taxes Other than Income Taxes for Transmission (\$)	-	Not Applicable
5	E. Allocation of General Plant (\$)	-	No General Plant identified at this time, all plant is identified as either generation or transmission related
6	F. Cost of Capital		
7	Weighted Transmission Composite Interest Rate	4.043%	WS4-CostData (C6 L60)
8	Net Plant Investment (\$)	11,430,045	WS4-CostData (C2 L21)
9	Cost of Capital (\$)	462,069	L7*L8
10	H. Revenue Requirement		
11	Annual Western-UGPR Cost (\$)	10,852,193	L1+L2+L3+L9
12	Estimated SSCD Revenue from non-Transmission facilities (\$)	567,214	L11*L16
13	Prior Year True-Up (\$)	(397,257)	Prior year true-up
14	Revenue Requirement for SSCD for Transmission facilities (\$)	9,887,722	L11-L12+L13
15			
16	Ratio for Line 12	5.23%	WS8-TranFac (L513 C6/C9)

WAPA-UGP 2023 Rate Estimate Calculation Worksheet 13 - SSCD Facilities 12 Months Ending 09/30/2023 ESTIMATE		(Back to Worksheet Links)						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		2023 SPP ESTIMATE SUMMARY						
Line No.	FID	DESCRIPTION	FACILITY TOTALS (\$)	FY2022-23 ESTIMATE ADD/REPL/RETIRE (\$)	ATTACHMENT AI ADJUSTMENTS (\$)	GENERATION ADJUSTMENTS (\$)	FY2023 EST SPP TOTALS (\$)	
1	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,126,606	-	0	0	6,126,606	
2	WTO	WATERTOWN OPERATIONS CENTER	1,578,314	-	0	(287,460)	1,290,853	
3	WTO F	WATERTOWN OPERATIONS CENTER (BFPS)	19,118,532	7,053,192	0	(1,672,347)	17,446,185	
4		Subtotal	26,823,451	7,053,192	0	(1,959,807)	24,863,644	
5		2023 SPP ESTIMATE DETAIL:						
6	FID	DESCRIPTION	ADDITIONAL:	FID COST DETAIL (\$)	SSCD %	SSCD TOTAL (\$)	TRANS %	TRANS TOTAL (\$)
7	WAO	IDC	IDC	299	100%	299	100%	299
8	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	9,790	100%	9,790	100%	9,790
9	WAO	LAND AT KCR	LAND & LAND RIGHTS	1,539	100%	1,539	100%	1,539
10	WAO	MICROWAVE TOWER	ANTENNA TOWER	295,486	100%	295,486	100%	295,486
11	WAO	IDC	IDC	57,816	100%	57,816	100%	57,816
12	WAO	IDC	PLANT NOT CLASSIFIED	5,246	100%	5,246	100%	5,246
13	WAO	ANTENNA	PLANT NOT CLASSIFIED	17,480	100%	17,480	100%	17,480
14	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	122,582	100%	122,582	100%	122,582
15	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	12,407	100%	12,407	100%	12,407
16	WAO	SCADA COMMUNICATION EQUIPMENT	SEQUENTIAL EVENT RECORDING SYST	20,217	100%	20,217	100%	20,217
17	WAO	INTEREST DURING CONSTRUCTION	IDC	2,475	100%	2,475	100%	2,475
18	WAO	PLANT COMM SYSTEM	PLANT COMM SYSTEM	43,699	100%	43,699	100%	43,699
19	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	54,138	100%	54,138	100%	54,138
20	WAO	BUILDINGS	SERVICE BUILDINGS	531,049	100%	531,049	100%	531,049
21	WAO	BUILDINGS	ROOFING	90,309	100%	90,309	100%	90,309
22	WAO	OTHER STRUCTURES AND IMPROVEMENTS	OIL STORAGE TANK	54,257	100%	54,257	100%	54,257
23	WAO	OTHER STRUCTURES AND IMPROVEMENTS	HEATING	475,746	100%	475,746	100%	475,746
24	WAO	STATION EQUIPMENT	AUXILIARY POWER SYSTEM	95,962	100%	95,962	100%	95,962
25	WAO	SCADA COMMUNICATION EQUIPMENT	REMOTE TERMINAL UNIT	12,679	100%	12,679	100%	12,679
26	WAO	SCADA COMMUNICATION EQUIPMENT	SCADA	1,022,154	100%	1,022,154	100%	1,022,154
27	WAO	SCADA COMMUNICATION EQUIPMENT	UNINTERRUPTABLE POWER SUPPLY	122,476	100%	122,476	100%	122,476
28	WAO	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	733,679	100%	733,679	100%	733,679
29	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY	35,292	100%	35,292	100%	35,292
30	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY CHARGER	13,959	100%	13,959	100%	13,959
31	WAO	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	53,112	100%	53,112	100%	53,112
32	WAO	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	184,307	100%	184,307	100%	184,307
33	WAO	FIBER OPTIC EQUIPMENT	ADD DROP MULTIPLEXER	97,180	100%	97,180	100%	97,180
34	WAO	FIBER OPTIC EQUIPMENT	CABLE TYPE OPGW	28,885	100%	28,885	100%	28,885
35	WAO	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	41,066	100%	41,066	100%	41,066
36	WAO	BUILDINGS	SERVICE BUILDINGS	1,320,913	100%	1,320,913	100%	1,320,913
37	WAO	IDC	IDC	454,813	100%	454,813	100%	454,813
38	WAO	PLANT COMM SYSTEM	PLANT COMM SYSTEM	40,642	100%	40,642	100%	40,642
39	WAO	IDC	IDC	577	100%	577	100%	577
40	WAO	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	72,048	100%	72,048	100%	72,048
41	WAO	IDC	IDC	2,326	100%	2,326	100%	2,326
42		TOTAL		6,126,606		6,126,606		6,126,606
43	WTO	AIR CONDITIONER	AIR CONDITIONER	146,013	66.2%	96,661	80.5%	117,541
44	WTO	IDC	IDC	10,941	66.2%	7,243	80.5%	8,808
45	WTO	ROOFING	ROOFING	676,147	66.2%	447,609	80.5%	544,298
46	WTO	GATE	GATE	67,521	66.2%	44,699	80.5%	54,354
47	WTO	FENCES	FENCES	573,532	66.2%	379,678	80.5%	461,693
48		TOTAL		1,474,154		975,890		1,186,694
49	WTO	FIBER OPTICS EQUIPMENT	PLANT COMM SYSTEM	54,317	100%	54,317	100%	54,317
50	WTO	IDC	IDC	20,639	100%	20,639	100%	20,639
51	WTO	REMOTE TERMINAL UNIT	REMOTE TERMINAL UNIT	16,161	100%	16,161	100%	16,161
52	WTO	IDC	IDC	2,878	100%	2,878	100%	2,878
53	WTO	SCADA COMMUNICATION EQUIPMENT	SCADA	8,953	100%	8,953	100%	8,953
54	WTO	IDC	IDC	1,212	100%	1,212	100%	1,212
55		TOTAL		104,159		104,159		104,159

56	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 2 OF 2)	TERMINATION EQUIPMENT	134,174	100%	134,174	100%	134,174
57	WTO F	ADD DROP MULTIPLEXER (PART 2 OF 2)	ADD DROP MULTIPLEXER	59,005	100%	59,005	100%	59,005
58	WTO F	POWER SYSTEM DISPATCH CONSOLES	SCADA	119,667	100%	119,667	100%	119,667
59	WTO F	REMOTE TERMINAL UNIT	REMOTE TERMINAL UNIT	39,790	100%	39,790	100%	39,790
60	WTO F	IDC	IDC	1,601	100%	1,601	100%	1,601
61	WTO F	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	53,165	100%	53,165	100%	53,165
62	WTO F	FIBER OPTIC EQUIPMENT	ADD DROP MULTIPLEXER	307,465	100%	307,465	100%	307,465
63	WTO F	FIBER OPTIC EQUIPMENT	TERMINATION EQUIPMENT	12,820	100%	12,820	100%	12,820
64	WTO F	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	415,983	100%	415,983	100%	415,983
65	WTO F	IDC	IDC	146,435	100%	146,435	100%	146,435
66	WTO F	IDC	IDC	2,533	100%	2,533	100%	2,533
67	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	31,658	100%	31,658	100%	31,658
68	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	85,009	100%	85,009	100%	85,009
69	WTO F	FIBER OPTICS EQUIPMENT	ADD DROP MULTIPLEXER	108,685	100%	108,685	100%	108,685
70	WTO F	FIBER OPTICS EQUIPMENT	CHANNEL BANK EQUIPMENT	1,934	100%	1,934	100%	1,934
71	WTO F	FIBER OPTICS EQUIPMENT	FIBER OPTICS EQUIPMENT	38,123	100%	38,123	100%	38,123
72	WTO F	IDC	IDC	23,486	100%	23,486	100%	23,486
73	WTO F	MULTIPLEXER EXPANDED CAPABILITY ASSET 166934 - PROJECT WTO 0025C (PART 2)	ADD DROP MULTIPLEXER	25,032	100%	25,032	100%	25,032
74	WTO F	IDC - ASSET 166934 MULTIPLEXER EXPANSION (PART 2)	IDC	514	100%	514	100%	514
75	WTO F	IDC	IDC	18,650	100%	18,650	100%	18,650
76	WTO F	ADD DROP MULTIPLEXER (PART 1 OF 2)	TERMINATION EQUIPMENT	2,850	100%	2,850	100%	2,850
77	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 1 OF 2)	TERMINATION EQUIPMENT	6,625	100%	6,625	100%	6,625
78	WTO F	SCADA COMMUNICATION EQUIPMENT	SCADA	(8,953)	100%	(8,953)	100%	(8,953)
79	WTO F	IDC	IDC	(1,212)	100%	(1,212)	100%	(1,212)
80	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	226,333	100%	226,333	100%	226,333
81	WTO F	IDC	IDC	13,471	100%	13,471	100%	13,471
82	WTO F	TELEPHONE SYSTEM - 40 CHANNEL RECORDER & CRASH KIT	TELEPHONE SYSTEM	70,115	100%	70,115	100%	70,115
83	WTO F	INTEREST DURING CONSTRUCTION	IDC	1,421	100%	1,421	100%	1,421
84	WTO F	VOICE RECORDER SYSTEM	TELEPHONE SYSTEM	61,005	100%	61,005	100%	61,005
85	WTO F	SCADA SYSTEM HISTORIAN SOFTWARE	SCADA	202,050	100%	202,050	100%	202,050
86	WTO F	IDC	IDC	6,761	100%	6,761	100%	6,761
87	WTO F	SCADA	UNINTERRUPTABLE POWER SUPPLY	121,027	100%	121,027	100%	121,027
88	WTO F	IDC	IDC	2,484	100%	2,484	100%	2,484
89	WTO F	AUX PWR SYS - BACKUP GENERATOR	AUXILIARY POWER SYSTEM	454,504	100%	454,504	100%	454,504
90	WTO F	IDC	IDC	12,877	100%	12,877	100%	12,877
91	WTO F	(5) DIGITAL VOICE RECORDERS - WTO F	SCADA	20,217	100%	20,217	100%	20,217
92	WTO F	IDC	IDC	1,979	100%	1,979	100%	1,979
93	WTO F	BATTERY BANK FOR UPS	BATTERY	36,320	100%	36,320	100%	36,320
94	WTO F	IDC	IDC	631	100%	631	100%	631
95	WTO F	DIGITAL TRANS & REC EQUIP	SCADA	23,847	100%	23,847	100%	23,847
96	WTO F	FREQUENCY CONTROL ADDITIONS	LOAD AND FREQUENCY CONTROL EQ	57,731	100%	57,731	100%	57,731
97	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	144,190	100%	144,190	100%	144,190
98	WTO F	PLANT COMM SYSTEM	PLANT COMM SYSTEM	167,020	100%	167,020	100%	167,020
99	WTO F	IDC	IDC	2,373	100%	2,373	100%	2,373
100	WTO F	ADD DROP MULTIPLEXER	ADD DROP MULTIPLEXER	267,249	100%	267,249	100%	267,249
101	WTO F	IDC	IDC	16,354	100%	16,354	100%	16,354
102	WTO F	TELEPHONE SYSTEM	TELEPHONE SYSTEM	559,892	100%	559,892	100%	559,892
103	WTO F	IDC	IDC	33,280	100%	33,280	100%	33,280
104	WTO F	SCADA	SCADA	1,215,754	100%	1,215,754	100%	1,215,754
105	WTO F	IDC	IDC	15,473	100%	15,473	100%	15,473
106	WTO F	COMMON SCADA/EMS-UGP	SCADA - ESTIMATE ADDS	5,183,000	100%	5,183,000	100%	5,183,000
107		TOTAL		10,542,396		10,542,396		10,542,396
108	WTO F	WATERTOWN OPERATIONS BUILDING	CONTROL BUILDING	636,802	66.2%	421,563	80.5%	512,626
109	WTO F	FIBER OPTICS EQUIPMENT	FIBER OPTICS EQUIPMENT	109,693	66.2%	72,617	80.5%	88,303
110	WTO F	IDC	IDC	3,495	66.2%	2,314	80.5%	2,814
111	WTO F	RESURFACE PARKING LOT AT WATERTOWN OPS OFFICE	OFFICE BUILDING	152,204	66.2%	100,759	80.5%	122,524
112	WTO F	WALLS	WALLS	276,284	66.2%	182,900	80.5%	222,408
113	WTO F	IDC	IDC	2,835	66.2%	1,877	80.5%	2,282
114	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	SYNC UNIT	20,893	66.2%	13,831	80.5%	16,819
115	WTO F	IDC	IDC	405,078	66.2%	268,162	80.5%	326,088
116	WTO F	VEHICLE/STORAGE BUILDING	GARAGE	651,816	66.2%	431,502	80.5%	524,712
117	WTO F	IDC	IDC	39,508	66.2%	26,154	80.5%	31,804
118	WTO F	SIDEWALKS	SIDEWALKS	153,428	66.2%	101,569	80.5%	123,509
119	WTO F	IDC	IDC	2,052	66.2%	1,358	80.5%	1,652
120	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	146,115	66.2%	96,728	80.5%	117,622
121	WTO F	IDC - REPLACEMENTS	IDC	1,845	66.2%	1,221	80.5%	1,485
122	WTO F	IDC - ADDITIONS	IDC	3,845	66.2%	2,545	80.5%	3,095

123	WTO F	PSOO-WATER SYSTEM	METER EQUIPMENT	219,050	66.2%	145,011	80.5%	176,335
124	WTO F	IDC	IDC	285,734	66.2%	189,156	80.5%	230,016
125	WTO F	PWR SYS OPERATIONS OFFICE BUILDING (PART 1 OF 2)	STORAGE BUILDING	1,929,776	66.2%	1,277,512	80.5%	1,553,470
126	WTO F	WATERTOWN OPS BLDG EXPANSION (PSOO)	STORAGE BUILDING	303,096	66.2%	200,650	80.5%	243,992
127	WTO F	WATERTOWN OPS BLDG EXPANSION	STORAGE BUILDING	1,362,395	66.2%	901,905	80.5%	1,096,728
128	WTO F	WATERTOWN OPS STATION SERVICE UNIT REPLACEMENT	BUILDING - ESTIMATE ADDS	1,870,192	66.2%	1,238,067	80.5%	1,505,505
129		TOTAL		8,576,136		5,677,402		6,903,790

WAPA-UGP 2023 Rate Estimate Calculation

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Worksheet 14 - Rate for Regulation and Frequency Response

12 Months Ending 09/30/2023 ESTIMATE

Line No.	(1) DESCRIPTION	(2) REGULATION and FREQUENCY RESPONSE	(3) REFERENCE
1	Western Regulation Revenue Requirement (\$)	297,280	L19 C2
2	Over Collection - 2021 Regulation Revenue Rqmt (\$)	(145,942)	Prior year true-up
3	Total Regulation Revenue Rqmt with True-up (\$)	151,338	L1 + L2
Regulation and Frequency Response (Western's Costs)			
4	Fixed Charge Rate	14.497%	WS2-AllocFactor C5 L30
5	Corps Generation Net Plant Costs (\$)	570,214,609	WS2-AllocFactor C5 L31
6	Annual Corps Generation Cost (\$)	82,665,493	L1*L2
7	Plant Capacity (kW)	2,464,000	(1)
8	Cost/kW (\$/kW)	33.55	L3/L4
9	Capacity Used for Regulation (kW)	8,861	(2)
10	Regulation Revenue Requirement (\$) - Capacity	297,280	L8*L9
18	Regulation Revenue Requirement (\$) - Purchases	-	(3)
19	Total Regulation Revenue Requirement (\$)	297,280	
(1)	WAPA Annual Report plant capacity		
(2)	WAUW capacity used for regulation		
(3)	Cost of purchases required to regulate for Intermittent Resources		

WAPA-UGP 2023 Rate Estimate Calculation

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Worksheet 15 - Rate for Reserves

12 Months Ending 09/30/2023 ESTIMATE

Line No.	(1) DESCRIPTION	(2) RESERVES	(3) REFERENCE
1	Fixed Charge Rate	14.497%	WS2-AllocFactor C5 L30
2	Corps Generation Net Plant Costs (\$)	570,214,609	WS2-AllocFactor C5 L31
3	Annual Corps Generation Cost (\$)	82,665,493	L1*L2
4	Plant Capacity (kW)	2,464,000	(1)
5	Cost/kW (\$/kW-Yr)	33.55	L3/L4
6	Monthly Charge (\$/kW-mo)	2.80	L5/12 months
7	Western's Maximum Load in WAUW Control Area (kW)	188,000	(2)
8	Maximum Generation in WAUW Control Area (kW)	91,000	(3)
9	Capacity used for Reserves (kW) -- 3% Load + 3% Gen	8,370	L7*3% + L8*3% (4)
10	Annual Reserves Revenue Requirement	280,808	L9*L5
11	Over Collection - 2021 WAUW Reserves Revenue Rqmt (\$)	(164,074)	Prior year true-up
12	Annual Reserve Sharing Group Cost (\$)	38,360	(5)
13	Total Regulation Reserves Rqmt with True-up (\$)	155,094	L10+L11+L12
(1)	WAPA Annual Report plant capacity		
(2)	Control Area metering data		
(3)	WAUW maximum generation data		
(4)	Western Power Pool Reserve Sharing System		
(5)	Annual cost associated with Western-UGP's current reserve sharing group membership		