Western Area Power Administration (WAPA)

Upper Great Plains Region (WAPA-UGP)

Transmission and Ancillary Services

Rate True-up Calculation

Effective January 1, 2024

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

(Rate Order No. WAPA-188)

WAPA-UGP
Transmission and Ancillary Services List of Workpapers and Schedules

Worksheet Tab Label	Worksheet Tab Description
Summary-TrueUp	Worksheet "Summary-TrueUp" -- Calculation of True-ups
WS1-RateBase	Worksheet 1 -- Calculation of Rate Base
WS2-AllocFactor	Worksheet 2 -- Allocation Factors
WS3-RevCredits	Worksheet 3 -- Revenue Credit detail
WS4-CostData	Worksheet 4 -- Cost Support Data
WS5-BPUz	Worksheet 5 -- SPP Base Plan Upgrades (BPU) - Zonal
WS6-BPUr	Worksheet 6 -- SPP Base Plan Upgrades (BPU) - Regional
WS7-BPUFac	Worksheet 7 -- SPP Base Plan Upgrades (BPU) - Facilities
WS8-TranFac	Worksheet 8 -- Transmission Facilities
WS9-AI-Inc	Worksheet 9 -- WAPA-UGP Facilities Included per SPP Tariff Attachment AI
WS10-AI-Excl	Worksheet 10 -- WAPA-UGP Facilities Excluded per SPP Tariff Attachment AI
WS11-FacChanges	Worksheet 11 -- Facility Changes Detail
WS12-SSCD	Worksheet 12 -- Scheduling, System Control and Dispatch Service (SSCD) ARR
WS13-SSCDFac	Worksheet 13 -- Scheduling, System Conrol and Dispatch Service (SSCD) Facilities
WS14-Reg	Worksheet 14 -- Regulation and Frequency Response ARR
WS15-Res	Worksheet 15 -- Reserves ARR

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) Back to Worksheet Links
Summary-TrueUp
12 Months Ending 09/30/2022 True-up

Western-UGP
True-up Summary

	(1)	(2)	(3)	(4)	(5)	(6)
Line No.	Description	Reference	SPP 2022 Estimate	SPP 2022 Actual	Allocation	Western-UGP Difference Annual
1	Gross Zonal Revenue Requirement-Sch 9	WS1-RateBase C5L1	$ 160,025,370	$ 159,607,649		$ (417,721)
2	Firm Point-to-Point Transmission Service Credit/1	WS3-RevCredits C6L28	$ (6,094,000)	$ (6,972,608)	100%	$ (878,608)
3	Non-Firm Point-to-Point Transmission Service Credit	WS3-RevCredits C6L42	$ (2,725,000)	$ (3,231,131)	100%	$ (506,131)
4	Revenue from Existing Transmission Agreements	WS3-RevCredits C6L56+L70	$ (1,170,700)	$ (1,247,563)	100%	$ (76,863)
5	Scheduling, System Control, and Dispatch Service Credit	WS12-SSCD C2L11	$ (12,798,990)	$ (13,100,841)	100%	$ (301,851)
6	Account No. 454	WS3-RevCredits C6L98	$ (61,359)	$ (4,240)	100%	$ 57,119
7	Z2 Nonfirm Point-to-Point Revenue Credit	WS3-RevCredits C6L14	$ -	$ 13,438	100%	$ 13,438
8	Schedule 11 Point-to-Point Revenue Credit	Summary-ATRR C5L9	$ (68,400)	$ -	100%	$ 68,400
9	Total Revenue Credits	Subtotal	$ (22,918,449)	$ (24,542,945)		$ (1,624,496)
11	Prior Year True Up /2	WS1-RateBase C5L3	$ (721,970)	$ (1,135,858)		$ (413,888)
12	**2022 Net Revenue Requirement-Sch 9**	**Subtotal**	**$ 136,384,951**	**$ 133,928,846**		**$ (2,456,105)**
13	2022 Network Revenue (estimated/received)	WS3-RevCredits C6L112	$ (136,384,951)	$ (136,384,950)		$ (0)
14	**Total Schedule 9 2022 True-up** (to WS1-RateBase, Line 3, 2024 est)		$ -	**$ (2,456,104)**		**$ (2,456,105)**
15						
16	SPP BPU - Gross Zonal Schedule 11 Revenue Requirement	WS5-BPUz C12L15	$ 765,921	$ 761,765		$ (4,156)
17	BPU Zonal Schedule 11 PTP Revenue (estimated/received)	WS3-RevCredits C6L182	$ (68,400)	$ (73,719)		$ (5,319)
18	BPU Zonal Schedule 11 Revenue (estimated/received)	WS3-RevCredits C6L168	$ (697,521)	$ (759,858)		$ (62,337)
19	**Total SPP BPU - Zonal Schedule 11 2022 True-up** (to WS5-BPUz, C14L12, 2024 est)		**$ -**	**$ (71,813)**		**$ (71,813)**
20						
21	SPP BPU - Gross Regional Schedule 11 Revenue Requirement	WS5-BPUr C12L13	$ 117,827	$ 113,140		$ (4,687)
22	BPU Regional Schedule 11 PTP Revenue (estimated/received)	WS3-RevCredits C6L210	$ (8,425)	$ (8,435)		$ (10)
23	BPU Regional Schedule 11 Revenue (estimated/received)	WS3-RevCredits C6L196	$ (109,402)	$ (126,979)		$ (17,577)
24	**Total SPP BPU - Regional Schedule 11 2022 True-up** (to WS6-BPUr, C14L11, 2024 est)		**$ -**	**$ (22,274)**		**$ (22,274)**
25	2022 Actual SSCD Revenue Requirement	WS12-SSCD C2L13	$ 10,273,311	$ 12,285,103		
26	2022 Revenue received for SSCD service	WS3-RevCredits C6L84		$ (11,817,815)		
27	**Total SSCD 2022 True-up** (to WS12-SSCD, Line 13, 2024 est)	Subtotal L25+L26		**$ 467,288**		
28	2022 Actual Regulation & Frequency Response Revenue Requirement	WS14-Reg C2L9	$ 289,081	$ 314,135		
29	2022 Revenue received (estimated/received)	WS3-RevCredits C6L154		$ (289,081)		
30	**Total Regulation & Freq Response 2022 True-up** (to WS14-Reg, Line 2, 2024 est)	Subtotal L28+L29		**$ 25,054**		
31	2022 Actual Reserves Revenue Requirement	WS15-Res C2L11	$ 283,557	$ 319,108		
32	2022 Revenue received (estimated/received)	WS3-RevCredits C6L126+L140		$ (283,557)		
33	**Total Reserves 2022 True-up** (to WS15-Res, Line 11, 2024 est)	Subtotal L31+L32		**$ 35,551**		
34	1/ Short-Term Firm Point-to-Point Transmission Service Credit					
35	2/ Prior Year True-up includes 2021 True-up adjustment for difference in AI excluded/included plant detail					

Summary of incremental changes: Minor updates to increase transparency

(1) Date	(2) Worksheet	(3) Reference Cell(s)	(4) Change From	(5) Change To	(6) Description
9/1/2023	WS4-CostData	L76		Exclude deficit interest	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L16		WS5-BPUz C12L15	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L17		WS3-RevCredits C6L182	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L18		WS3-RevCredits C6L168	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L21		WS5-BPUr C12L13	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L22		WS3-RevCredits C6L210	Update reference note for transparency
9/1/2023	Summary-TrueU	C2L23		WS3-RevCredits C6L196	Update reference note for transparency
9/15/2023	Summary-TrueU	C3L25	$ 10,681,584	$ 10,273,311	Update to correct value
9/15/2023	Summary-TrueU	C3L28	$ 447,694	$ 289,081	Update to correct value
9/15/2023	Summary-TrueU	C3L31	$ 487,465	$ 283,557	Update to correct value
9/15/2023	WS8-TransFac	C4 Header	Prior Year Facility Tot	FY2022 Facility Total	Update header for clarification
9/15/2023	WS11-FacChang	L10-13, 15, 17, 18	Deleted		Deleted rows due to duplication
9/15/2023	WS8-TransFac	C5L150	$ (183,385)	$ -	Corrected to include Denison Breaker 2552
9/15/2023	WS4-CostData	C2L88	$ -	$ 2,233.07	Updated to correct value
9/15/2023	WS4-CostData	C2L90	$ -	$ (36.77)	Updated to correct value
9/15/2023	WS4-CostData	C2L91	$ -	$ (47.81)	Updated to correct value
9/20/2023	WS8-TransFac	C5L186	$ (3,366,859)	$ (1,112,294)	Corrected to match ROOS data
9/15/2023	WS4-CostData	C2L113	$ 38,360	$ 42,587	Updated to correct value
9/15/2023	WS4-CostData	C3L113	$ 38,360	$ 42,587	Updated to correct value
9/15/2023	Summary-TrueU	C4L11	$ (721,970)	$ (1,135,858)	Updated to include PY adjustment for Shelby, Denison, Rugby facilities
9/15/2023	Summary-TrueU	L35		Footnote	Provided footnote for prior year adjustment

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) [(Back to Worksheet Links)]

Worksheet 1 - Schedule 9 Revenue Requirement - Non-Levelized

Utilizing Financial Statement Results of Operations (ROOs)

12 Months Ending 09/30/2022 True-up

Line No.	(1)	REFERENCE (2)	COMPANY TOTAL ($) (3)		ALLOCATOR (4)	TRANSMISSION ALLOCATED AMOUNT ($) (5)
1	GROSS REVENUE REQUIREMENT	(L69)				159,607,649
2	REVENUE CREDITS	(Note R)				(24,542,945)
3	PRIOR PERIOD TRUE-UP					(1,135,858)
4	NET REVENUE REQUIREMENT	(L1 + L2 + L3)				133,928,846
	RATE BASE:					(Col 3 times Col 4)
	GROSS PLANT IN SERVICE	(Note A)				
5	Production	WS4-CostData L4 C2+C3+C4	1,270,431,946	NA		
6	Transmission	WS4-CostData L3 C2+C3+C4	1,565,234,980	TP	1.00	1,565,234,980
7	Distribution	WS4-CostData C2 L2-L3-L4	64,926,478	NA		
8	General & Intangible	Bal Sheet - Other Assets - SGL 175002	0	W/S	1.00	0
9	Common		0	CE	0.00	0
10	TOTAL GROSS PLANT	(sum L5 : 9)	2,900,593,404	GP=	53.96%	1,565,234,980
	ACCUMULATED DEPRECIATION					
11	Production	WS4-CostData L15 C2+C3+C4	640,062,384	NA		
12	Transmission	WS4-CostData L14 C2+C3+C4	797,723,390	TP	1.0	797,723,390
13	Distribution	WS4-CostData C2 L13-L14-L15	33,107,651	NA		
14	General & Intangible	Bal Sheet - Other Assets - SGL 175902	0	W/S	1.0	0
15	Common		0	CE	0.0	0
16	TOTAL ACCUM. DEPRECIATION	(sum L11 : 15)	1,470,893,426			797,723,390
	NET PLANT IN SERVICE					
17	Production	(L5 - L11)	630,369,562			
18	Transmission	(L6 - L12)	767,511,589			767,511,589
19	Distribution	(L7 - L13)	31,818,827			
20	General & Intangible	(L8 - L14)	0			0
21	Common	(L9 - L15)	0			0
22	TOTAL NET PLANT	(sum L17 : 21)	1,429,699,979	NP=	53.68%	767,511,589
	ADJUSTMENTS TO RATE BASE	(Note B)				
23	Account No. 281	(enter negative)	0		0.00000	0
24	Account No. 282	(enter negative)	0	NP	0.54	0
25	Account No. 283	(enter negative)	0	NP	0.54	0
26	Account No. 190		0	NP	0.54	0
27	Account No. 255	(enter negative)	0	NP	0.54	0
28	TOTAL ADJUSTMENTS	(sum L23 : 27)	0			0
29	LAND HELD FOR FUTURE USE	(Note C)	0	TP	1.00	0
	WORKING CAPITAL	(Note D)				
30	CWC	calculated	26,399,105			0
31	Materials & Supplies	Bal Sheet - Other Assets - SGL 151191 (Note C)	0	TE	0.00	0
32	Prepayments	Bal Sheet Other Assets	0	GP	0.54	0
33	TOTAL WORKING CAPITAL	(sum L30 : 32)	26,399,105			0
34	RATE BASE	(sum L 22, 28, 29, 33)	1,456,099,083			767,511,589
	O&M					
	Transmission	ROOs Schedule 11 (Note E)				
35	Western-UGP	WS4-CostData L118 C2	72,730,934	PTP/UGP	0.95	69,003,857
36	Western-RMR	WS4-CostData L118 C3	49,829,685	PTP/RMR	0.01	419,468
37	COE	WS4-CostData L118 C4	48,796,322	PTP/COE	0.07	3,235,606
38	Less Account 565	(Note E)		NA	1.00	0
	A&G	ROOs Schedule 11 (Note F)				
39	Western-UGP	WS4-CostData L92 C2	25,144,686	PTP/UGP	0.95	23,856,154
40	Western-RMR	WS4-CostData L92 C3	14,691,211	PTP/RMR	0.01	123,671
41	Less FERC Annual Fees		0	W/S	1.00	0
42	Less EPRI & Reg. Comm. Exp. & Non-safety Ad	(Note G)	0	W/S	1.00	0
43	Plus Transmission Related Reg. Comm. Exp	(Note G)	0	TE	0.00	0
44	Common		0	CE	0.00	0
45	Transmission Lease Payments		0	NA	1.00	0
46	TOTAL O&M	(sum L 35, 36, 37, 39, 40, 43, 44 less 38, 41, 42)	211,192,838			96,638,756
	DEPRECIATION EXPENSE					
47	Transmission	ROOs Schedule 4				
48	Western-UGP	WS4-CostData L38 C2	32,862,314	PTP/UGP	0.95	31,178,294
49	Western-RMR	WS4-CostData L38 C3	18,423,416	PTP/RMR	0.01	155,089
50	COE	WS4-CostData L38 C4	19,477,688	PTP/COE	0.07	1,291,534
51	General		0	W/S	1.00	0
52	Common		0	CE	0.00	0
53	TOTAL DEPRECIATION	(sum L47 : 52)	70,763,418			32,624,917
	TAXES OTHER THAN INCOME TAXES	(Note H)				
	LABOR RELATED					
54	Payroll		0	W/S	1.00	0
55	Highway and vehicle		0	W/S	1.00	0
	PLANT RELATED					
56	Property		0	GP	0.54	0
57	Gross Receipts		0		0.00	0
58	Other		0	GP	0.54	0
59	Payments in lieu of taxes		0	GP	0.54	0
60	TOTAL OTHER TAXES	(sum L 54 : 59)	0			0
	INCOME TAXES	(Note I)		NA		
61	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		0.0%			
62	CIT=(T/1-T) * (1-(WCLTD/R)) =		0.0%			
	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)		0.0			
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	0.54	0
67	Total Income Taxes	(L65 + L66)	0			0
68	RETURN [Rate Base * Rate of Return]	(L34 * L102)	57,567,647	NA		30,343,976
69	REV. REQUIREMENT	(sum L46, 53 ,60, 67, 68)	339,523,902			159,607,649

SUPPORTING CALCULATIONS AND NOTES

	TRANSMISSION PLANT INCLUDED IN UMZ RATES							
70	Total transmission plant	(L6, C3)					1,565,234,980	
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)					1,565,234,980	
74	Percentage of transmission plant included in UMZ Rates	(L73 / L70)				TP=	1.00	
	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	
78	Percentage of transmission expenses after adjustment (line 8 divided by line 6)	(L77/ L75)					0.0%	
79	Percentage of transmission plant included in UMZ Rates	(L74)				TP=	1.00	
80	Percentage of transmission expenses included in UMZ Rates	(L79 * L78)				TE=	0.0%	
	WAGES & SALARY ALLOCATOR (W&S)							
				TP	Allocation			
81	Production		0	0.00	0			
82	Transmission		23,856,154	1.00	23,856,154			
83	Distribution		0	0.00	0		W&S Allocator	
84	Other		0	0.00	0		($ / Allocation)	
85	Total	(sum L81 to L84)	23,856,154		23,856,154	=	1.00	
	PERCENTAGE OF TOTAL PLANT ALLOCATOR PTP	(Note M)						
86	Transmission Plant in Service Western-UGP		1,468,694,512					
87	Total Plant in Service Western-UGP		1,548,022,490					
88	UGP Percentage of Transmission Plant to Total Plant	(L86 / L87)			PTP/UGP	=	0.95	
89	Transmission Plant in Service Western-RMR		7,340,383					
90	Total Plant in Service Western-RMR		871,983,915					
91	RMR Percentage of Transmission Plant to Total Plant	(L89 / L90)			PTP/RMR	=	0.01	
92	Transmission Plant in Service COE		89,200,085					
93	Total Plant in Service COE		1,345,230,531					
94	COE Percentage of Transmission Plant to Total Plant	(L92 / L93)			PTP/COE	=	0.07	
	COMMON PLANT ALLOCATOR (CE)	(Note N)						CE
					% Electric		Labor Ratio =	0.00000
95	Electric		0		(L95 / L98)		(L85)	
96	Gas		0		0.00000	*	1.00	
97	Water		0					
98	Total	(sum L95 to L97)	0					
	RETURN (R)							
99	Long Term Interest ROOs Schedule 5		36,104,994					
					Cost			=WCLTD
				%	(Note O)		Weighted	
		HFD Sch's 21RX & 21X Col 8 L						
100	Long Term Debt	23,25,26,29,30	913,229,082	100%	0.04		0.04 =R	
101	Proprietary Capital		0	0%	0.12		0.00	
102	Total (sum lines 31-32)	(sum L100 to L101)	913,229,082	100%			0.04	
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)					4,240	
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 565), 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 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 facilites and GSUs) which are not recovered under this Revenue Requirement Template.

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

(Back to Worksheet Links)

Worksheet 3 - Allocation of Pick-Sloan Missouri Basin Program, Eastern Division Annual Costs

12 Months Ending 09/30/2022 True-up

Line No.	DESCRIPTION (1)	TRANSMISSION (2)	GENERATION (3)	COE GENERATION (4)	BASE PLAN UPGRADES-REGIONAL (5)	BASE PLAN UPGRADES-ZONAL (6)	REFERENCE (7)
1	**A. Operation and Maintenance Expense**						
2	O&M Expense	$72,658,931	$92,527,589	$45,560,716	$51,205	$344,762	WS4-CostData (O&M Expenses Worksheet)
3	Transmission of Electricity by Others	$0	$0	$0	$0	$0	
4	Total O&M Expense	$72,658,931	$92,527,589	$45,560,716	$51,205	$344,762	L2 + L3
5	Net Plant Investment	$767,511,589	$811,786,133	$623,311,750	$534,116	$3,596,168	WS4-CostData (Net Plant Investment Worksheet)
6	O&M as % of Net Plant Investment	9.47%	11.40%	7.31%	9.59%	9.59%	L4/L5
7	**B. A&G Expense**						
8	A&G Expense	$23,979,825	$233,925	$0	$17,703	$119,192	WS4-CostData (A&G Expenses Worksheet)
9	Net Plant Investment	$767,511,589	$811,786,133	$623,311,750	$534,116	$3,596,168	L5
10	A&G as % of Net Plant Investment	3.12%	0.03%	0.00%	3.31%	3.31%	L8/L9
11	**C. Depreciation Expense**						
12	Depreciation Expense	$32,624,917	$24,860,610	$18,186,154	$23,136	$155,775	WS4-CostData (Depreciation Expense Worksheet)
13	Net Plant Investment	$767,511,589	$811,786,133	$623,311,750	$534,116	$3,596,168	L5
14	Depreciation as a % of Net Plant Investment	4.25%	3.06%	2.92%	4.33%	4.33%	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	3.95%	3.64%	3.64%	3.95%	3.95%	WS4-CostData (Cost of Capital Worksheet)
21	**G. Fixed Charge Rate**						
22	Operation and Maintenance Expense	9.47%	11.40%	7.31%	9.59%	9.59%	L6
23	A&G Expense	3.12%	0.03%	0.00%	3.31%	3.31%	L10
24	Depreciation Expense	4.25%	3.06%	2.92%	4.33%	4.33%	L14
25	Taxes Other than Income Taxes	0.00%	0.00%	0.00%	0.00%	0.00%	
26	Allocation of General Plant to Transmission	0.00%	0.00%	0.00%	0.00%	0.00%	
27	Cost of Capital	3.95%	3.64%	3.64%	3.95%	3.95%	L20
28	Total	20.79%	18.13%	13.87%	21.18%	21.18%	
29	**H. Revenue Requirement**						
30	Fixed Charge Rate	20.79%	18.13%	13.87%	21.18%	21.18%	L28
31	Net Plant Investment	$767,511,589	$811,786,133	$623,311,750	$534,116	$3,596,168	L5
32	Annual Western-UGPR Cost	$159,577,590	$147,164,867	$86,430,601	$113,140	$761,765	L30 * L31

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)
Worksheet 3 - Revenue Credit Calculation
12 Months Ending 09/30/2022 True-up

Line No.	ACCOUNT (1)	MONTH (2)	REFERENCE (3)	COMPANY TOTAL (4)	ALLOCATOR	ALLOCATION (5)	TRANSMISSION ALLOCATED AMOUNT (6)
1	Z2 Sch 7/8/11	Jan-22	Z2	1,963	NA	100%	1,963
2	Z2 Sch 7/8/11	Feb-22	Z2	1,827	NA	100%	1,827
3	Z2 Sch 7/8/11	Mar-22	Z2	1,837	NA	100%	1,837
4	Z2 Sch 7/8/11	Apr-22	Z2	1,859	NA	100%	1,859
5	Z2 Sch 7/8/11	May-22	Z2	1,703	NA	100%	1,703
6	Z2 Sch 7/8/11	Jun-22	Z2	698	NA	100%	698
7	Z2 Sch 7/8/11	Jul-22	Z2	701	NA	100%	701
8	Z2 Sch 7/8/11	Aug-22	Z2	699	NA	100%	699
9	Z2 Sch 7/8/11	Sep-22	Z2	694	NA	100%	694
10	Z2 Sch 7/8/11	Oct-22	Z2	694	NA	100%	694
11	Z2 Sch 7/8/11	Nov-22	Z2	692	NA	100%	692
12	Z2 Sch 7/8/11	Dec-22	Z2	71	NA	100%	71
13	Z2 Sch 7/8/11	Adjustments	Z2	-		100%	0
14		Subtotal		13,438			13,438
15	Schedule 7	Jan-22	FIRM PTP	(582,217)	TP	100%	(582,217)
16	Schedule 7	Feb-22	FIRM PTP	(699,543)	TP	100%	(699,543)
17	Schedule 7	Mar-22	FIRM PTP	(531,109)	TP	100%	(531,109)
18	Schedule 7	Apr-22	FIRM PTP	(557,409)	TP	100%	(557,409)
19	Schedule 7	May-22	FIRM PTP	(395,842)	TP	100%	(395,842)
20	Schedule 7	Jun-22	FIRM PTP	(588,012)	TP	100%	(588,012)
21	Schedule 7	Jul-22	FIRM PTP	(561,524)	TP	100%	(561,524)
22	Schedule 7	Aug-22	FIRM PTP	(727,530)	TP	100%	(727,530)
23	Schedule 7	Sep-22	FIRM PTP	(668,088)	TP	100%	(668,088)
24	Schedule 7	Oct-22	FIRM PTP	(514,765)	TP	100%	(514,765)
25	Schedule 7	Nov-22	FIRM PTP	(566,043)	TP	100%	(566,043)
26	Schedule 7	Dec-22	FIRM PTP	(580,526)	TP	100%	(580,526)
27	Schedule 7	Adjustments	FIRM PTP	-		100%	0
28		Subtotal		(6,972,608)			(6,972,608)
29	Schedule 8	Jan-22	NONFIRM PTP	(238,537)	TP	100%	(238,537)
30	Schedule 8	Feb-22	NONFIRM PTP	(296,738)	TP	100%	(296,738)
31	Schedule 8	Mar-22	NONFIRM PTP	(249,792)	TP	100%	(249,792)
32	Schedule 8	Apr-22	NONFIRM PTP	(260,478)	TP	100%	(260,478)
33	Schedule 8	May-22	NONFIRM PTP	(201,116)	TP	100%	(201,116)
34	Schedule 8	Jun-22	NONFIRM PTP	(363,686)	TP	100%	(363,686)
35	Schedule 8	Jul-22	NONFIRM PTP	(337,676)	TP	100%	(337,676)
36	Schedule 8	Aug-22	NONFIRM PTP	(283,268)	TP	100%	(283,268)
37	Schedule 8	Sep-22	NONFIRM PTP	(259,895)	TP	100%	(259,895)
38	Schedule 8	Oct-22	NONFIRM PTP	(161,260)	TP	100%	(161,260)
39	Schedule 8	Nov-22	NONFIRM PTP	(251,316)	TP	100%	(251,316)
40	Schedule 8	Dec-22	NONFIRM PTP	(327,369)	TP	100%	(327,369)
41	Schedule 8	Adjustments	NONFIRM PTP	-	TP	100%	0
42		Subtotal		(3,231,131)			(3,231,131)
43	Sch 7/8/11	Jan-22	MISO SEAMS	(102,558)	TP	100%	(102,558)
44	Sch 7/8/11	Feb-22	MISO SEAMS	(80,652)	TP	100%	(80,652)
45	Sch 7/8/11	Mar-22	MISO SEAMS	(100,207)	TP	100%	(100,207)
46	Sch 7/8/11	Apr-22	MISO SEAMS	(100,207)	TP	100%	(100,207)
47	Sch 7/8/11	May-22	MISO SEAMS	(102,212)	TP	100%	(102,212)
48	Sch 7/8/11	Jun-22	MISO SEAMS	(102,212)	TP	100%	(102,212)
49	Sch 7/8/11	Jul-22	MISO SEAMS	(102,212)	TP	100%	(102,212)
50	Sch 7/8/11	Aug-22	MISO SEAMS	(130,764)	TP	100%	(130,764)
51	Sch 7/8/11	Sep-22	MISO SEAMS	(130,764)	TP	100%	(130,764)
52	Sch 7/8/11	Oct-22	MISO SEAMS	(99,861)	TP	100%	(99,861)
53	Sch 7/8/11	Nov-22	MISO SEAMS	(96,988)	TP	100%	(96,988)
54	Sch 7/8/11	Dec-22	MISO SEAMS	(98,926)	TP	100%	(98,926)
55	Sch 7/8/11	Adjustments	MISO SEAMS	-	TP	100%	0
56		Subtotal		(1,247,563)			(1,247,563)
57	Sch 11	Jan-22	ZONAL PTP ADJUSTMENTS	-	BP		0
58	Sch 11	Feb-22	ZONAL PTP ADJUSTMENTS	-	BP		0
59	Sch 11	Mar-22	ZONAL PTP ADJUSTMENTS	-	BP		0
60	Sch 11	Apr-22	ZONAL PTP ADJUSTMENTS	-	BP		0
61	Sch 11	May-22	ZONAL PTP ADJUSTMENTS	-	BP		0
62	Sch 11	Jun-22	ZONAL PTP ADJUSTMENTS	-	BP		0
63	Sch 11	Jul-22	ZONAL PTP ADJUSTMENTS	-	BP		0
64	Sch 11	Aug-22	ZONAL PTP ADJUSTMENTS	-	BP		0
65	Sch 11	Sep-22	ZONAL PTP ADJUSTMENTS	-	BP		0
66	Sch 11	Oct-22	ZONAL PTP ADJUSTMENTS	-	BP		0
67	Sch 11	Nov-22	ZONAL PTP ADJUSTMENTS	-	BP		0
68	Sch 11	Dec-22	ZONAL PTP ADJUSTMENTS	-	BP		0
69	Sch 11	Adjustments	ZONAL PTP ADJUSTMENTS	-	BP		0
70		Subtotal		-			0
71	7088	Feb-22	SSCD	(1,100,286)	NA	100%	(1,100,286)
72	7088	Mar-22	SSCD	(1,074,609)	NA	100%	(1,074,609)
73	7088	Apr-22	SSCD	(1,012,710)	NA	100%	(1,012,710)

74	7088	May-22	SSCD	(866,068)	NA	100%	(866,068)
75	7088	Jun-22	SSCD	(843,936)	NA	100%	(843,936)
76	7088	Jul-22	SSCD	(964,721)	NA	100%	(964,721)
77	7088	Aug-22	SSCD	(990,314)	NA	100%	(990,314)
78	7088	Sep-22	SSCD	(1,007,035)	NA	100%	(1,007,035)
79	7088	Oct-22	SSCD	(970,382)	NA	100%	(970,382)
80	7088	Nov-22	SSCD	(896,994)	NA	100%	(896,994)
81	7088	Dec-22	SSCD	(997,311)	NA	100%	(997,311)
82	7088	Jan-21	SSCD	(1,093,451)	NA	100%	(1,093,451)
83	7088	Adjustments	SSCD	-	NA	100%	0
84		Subtotal		(11,817,815)			(11,817,815)
85	45420	Jan-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
86	45420	Feb-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
87	45420	Mar-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
88	45420	Apr-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
89	45420	May-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
90	45420	Jun-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
91	45420	Jul-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
92	45420	Aug-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
93	45420	Sep-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
94	45420	Oct-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
95	45420	Nov-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
96	45420	Dec-22	RENT FROM ELECTRIC PROPERTY	(353)	TP	100%	(353)
97	45420	Adjustments	RENT FROM ELECTRIC PROPERTY	-	TP	100%	-
98		Subtotal		(4,240)			(4,240)
99	45643	Feb-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
100	45643	Mar-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
101	45643	Apr-22	REVENUE FROM TRANS.	(11,365,412)	TP	100%	(11,365,412)
102	45643	May-22	REVENUE FROM TRANS.	(11,365,412)	TP	100%	(11,365,412)
103	45643	Jun-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
104	45643	Jul-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
105	45643	Aug-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
106	45643	Sep-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
107	45643	Oct-22	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
108	45643	Nov-22	REVENUE FROM TRANS.	(11,365,412)	TP	100%	(11,365,412)
109	45643	Dec-22	REVENUE FROM TRANS.	(11,365,412)	TP	100%	(11,365,412)
110	45643	Jan-21	REVENUE FROM TRANS.	(11,365,413)	TP	100%	(11,365,413)
111	45643	Adjustments	REVENUE FROM TRANS.	-	TP	100%	0
112		Subtotal		(136,384,950)			(136,384,950)
113	7080	Feb-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
114	7080	Mar-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
115	7080	Apr-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
116	7080	May-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
117	7080	Jun-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
118	7080	Jul-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
119	7080	Aug-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
120	7080	Sep-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
121	7080	Oct-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
122	7080	Nov-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
123	7080	Dec-22	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
124	7080	Jan-21	RESRV-SUPPLEMENTAL	(11,815)	NA	100%	(11,815)
125	7080	Adjustments	RESRV-SUPPLEMENTAL	-	NA	100%	0
126		Subtotal		(141,779)			(141,779)
127	7089	Feb-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
128	7089	Mar-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
129	7089	Apr-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
130	7089	May-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
131	7089	Jun-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
132	7089	Jul-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
133	7089	Aug-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
134	7089	Sep-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
135	7089	Oct-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
136	7089	Nov-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
137	7089	Dec-22	RESRV-SPIN	(11,815)	NA	100%	(11,815)
138	7089	Jan-21	RESRV-SPIN	(11,815)	NA	100%	(11,815)
139	7089	Adjustments	RESRV-SPIN	-	NA	100%	0
140		Subtotal		(141,779)			(141,779)
141	7091	Feb-22	REGULATION	(24,090)	NA	100%	(24,090)
142	7091	Mar-22	REGULATION	(24,090)	NA	100%	(24,090)
143	7091	Apr-22	REGULATION	(24,090)	NA	100%	(24,090)
144	7091	May-22	REGULATION	(24,090)	NA	100%	(24,090)
145	7091	Jun-22	REGULATION	(24,090)	NA	100%	(24,090)
146	7091	Jul-22	REGULATION	(24,090)	NA	100%	(24,090)
147	7091	Aug-22	REGULATION	(24,090)	NA	100%	(24,090)
148	7091	Sep-22	REGULATION	(24,090)	NA	100%	(24,090)
149	7091	Oct-22	REGULATION	(24,090)	NA	100%	(24,090)
150	7091	Nov-22	REGULATION	(24,090)	NA	100%	(24,090)
151	7091	Dec-22	REGULATION	(24,090)	NA	100%	(24,090)

152	7091	Jan-21	REGULATION	(24,090)	NA	100%	(24,090)
153	7091	Adjustments	REGULATION	-	NA	100%	0
154		Subtotal		(289,081)			(289,081)
155	Sch 11	Feb-22	BPU-ZONAL REVENUE	(63,322)	NA	100%	(63,322)
156	Sch 11	Mar-22	BPU-ZONAL REVENUE	(63,322)	NA	100%	(63,322)
157	Sch 11	Apr-22	BPU-ZONAL REVENUE	(63,322)	NA	100%	(63,322)
158	Sch 11	May-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
159	Sch 11	Jun-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
160	Sch 11	Jul-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
161	Sch 11	Aug-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
162	Sch 11	Sep-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
163	Sch 11	Oct-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
164	Sch 11	Nov-22	BPU-ZONAL REVENUE	(63,322)	NA	100%	(63,322)
165	Sch 11	Dec-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
166	Sch 11	Dec-22	BPU-ZONAL REVENUE	(63,321)	NA	100%	(63,321)
167	Sch 11	Adjustments	BPU-ZONAL REVENUE	-	NA	100%	0
168		Subtotal		(759,858)			(759,858)
169	Sch 11	Feb-22	BPU-ZONAL PTP	(5,774)	NA	100%	(5,774)
170	Sch 11	Mar-22	BPU-ZONAL PTP	(7,818)	NA	100%	(7,818)
171	Sch 11	Apr-22	BPU-ZONAL PTP	(5,849)	NA	100%	(5,849)
172	Sch 11	May-22	BPU-ZONAL PTP	(6,229)	NA	100%	(6,229)
173	Sch 11	Jun-22	BPU-ZONAL PTP	(4,605)	NA	100%	(4,605)
174	Sch 11	Jul-22	BPU-ZONAL PTP	(7,214)	NA	100%	(7,214)
175	Sch 11	Aug-22	BPU-ZONAL PTP	(6,738)	NA	100%	(6,738)
176	Sch 11	Sep-22	BPU-ZONAL PTP	(6,837)	NA	100%	(6,837)
177	Sch 11	Oct-22	BPU-ZONAL PTP	(6,317)	NA	100%	(6,317)
178	Sch 11	Nov-22	BPU-ZONAL PTP	(4,760)	NA	100%	(4,760)
179	Sch 11	Dec-22	BPU-ZONAL PTP	(5,627)	NA	100%	(5,627)
180	Sch 11	Jan-21	BPU-ZONAL PTP	(5,952)	NA	100%	(5,952)
181	Sch 11	Adjustments	BPU-ZONAL PTP	-	NA	100%	0
182		Subtotal		(73,719)			(73,719)
183	Sch 11	Feb-22	BPU-REGIONAL REVENUE	(11,074)	NA	100%	(11,074)
184	Sch 11	Mar-22	BPU-REGIONAL REVENUE	(10,958)	NA	100%	(10,958)
185	Sch 11	Apr-22	BPU-REGIONAL REVENUE	(10,742)	NA	100%	(10,742)
186	Sch 11	May-22	BPU-REGIONAL REVENUE	(8,756)	NA	100%	(8,756)
187	Sch 11	Jun-22	BPU-REGIONAL REVENUE	(10,893)	NA	100%	(10,893)
188	Sch 11	Jul-22	BPU-REGIONAL REVENUE	(10,970)	NA	100%	(10,970)
189	Sch 11	Aug-22	BPU-REGIONAL REVENUE	(10,575)	NA	100%	(10,575)
190	Sch 11	Sep-22	BPU-REGIONAL REVENUE	(10,740)	NA	100%	(10,740)
191	Sch 11	Oct-22	BPU-REGIONAL REVENUE	(10,578)	NA	100%	(10,578)
192	Sch 11	Nov-22	BPU-REGIONAL REVENUE	(10,663)	NA	100%	(10,663)
193	Sch 11	Dec-22	BPU-REGIONAL REVENUE	(10,453)	NA	100%	(10,453)
194	Sch 11	Jan-21	BPU-REGIONAL REVENUE	(10,577)	NA	100%	(10,577)
195	Sch 11	Adjustments	BPU-REGIONAL REVENUE	-	NA	100%	0
196		Subtotal		(126,979)			(126,979)
197	Sch 11	Feb-22	BPU-REGIONAL PTP	(718)	NA	100%	(718)
198	Sch 11	Mar-22	BPU-REGIONAL PTP	(744)	NA	100%	(744)
199	Sch 11	Apr-22	BPU-REGIONAL PTP	(691)	NA	100%	(691)
200	Sch 11	May-22	BPU-REGIONAL PTP	(764)	NA	100%	(764)
201	Sch 11	Jun-22	BPU-REGIONAL PTP	(545)	NA	100%	(545)
202	Sch 11	Jul-22	BPU-REGIONAL PTP	(834)	NA	100%	(834)
203	Sch 11	Aug-22	BPU-REGIONAL PTP	(780)	NA	100%	(780)
204	Sch 11	Sep-22	BPU-REGIONAL PTP	(781)	NA	100%	(781)
205	Sch 11	Oct-22	BPU-REGIONAL PTP	(760)	NA	100%	(760)
206	Sch 11	Nov-22	BPU-REGIONAL PTP	(546)	NA	100%	(546)
207	Sch 11	Dec-22	BPU-REGIONAL PTP	(594)	NA	100%	(594)
208	Sch 11	Jan-21	BPU-REGIONAL PTP	(678)	NA	100%	(678)
209	Sch 11	Adjustments	BPU-REGIONAL PTP	-	NA	100%	0
210		Subtotal		(8,435)			(8,435)

211 NOTES: Includes twelve months of revenue credits from January-December or February-January depending on when WAPA began receiving revenue credits from SPP. Revenue credit sh
212 or adjusted as necessary to include all revenue credits received. Reference to FERC Code or Object Class indicates Financial Account source. Other reference indicates SPP Invoi
213 Z2 Schedule 7/8/11 clawbacks
214 Schedule 7 - Firm PTP Transmission revenues
215 Schedule 8 - Non-Firm PTP Transmission revenues
216 Schedule 7/8/11 - MISO's SPP PTP transmission service revenues
217 Schedule 11 - Zonal PTP adjustment revenues
218 7088 - Scheduling, System Control and Dispatch Services revenues
219 45420 - Other Rental revenues
220 45643 - Firm Network Transmission revenues
221 7080 - Supplemental Reserves revenues
222 7089 - Spinning Reserves revenues
223 7091 - Regulation Service revenues
224 Schedule 11 Base Plan Upgrade, Zonal and Regional revenues

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)
Worksheet 4 - Cost Support Data
12 Months Ending 09/30/2022 True-up

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	1,548,022,490	1/	871,983,915	2/	1,345,230,531	3/	565,922,078	12/	4,331,159,014
3	PS-ED Transmission Plant-in-Service	1,468,694,512	4/	7,340,383	5/	89,200,085	6/	0		1,565,234,980
4	PS-ED Generation Plant-in-Service	14,401,500	7/	0		1,256,030,446	L2-L3	565,922,078	L2-L3	1,836,354,024
5	PS-ED SSCD Plant-in-Service	17,251,263	8/							17,251,263
6	BPU-Regional Plant-in-Service	1,089,866	13/							1,089,866
7	BPU-Zonal Plant-in-Service	7,338,000	13/							7,338,000
8	Generation Plant to Total Plant	0.00930	L4/L2	0.00000	L4/L2	0.93369	L4/L2	1.00000	L4/L2	
9	Transmission Plant to Total Plant	0.94876	L3/L2	0.00842	L3/L2	0.06631	L3/L2	0.00000	L3/L2	
10	SSCD Plant to Total Plant	0.01114	L5/L2							
11	BPU-Regional Plant to Total Plant	0.00070	L6/L2							
12	BPU-Zonal Plant to Total Plant	0.00474	L7/L2							
13	PS Accumulated Depreciation	789,375,761	9/	459,121,572	10/	677,652,767	11/	384,505,507	12/	2,310,655,607
14	PS-ED Trans. Accumulated Depreciation	748,924,422	L9*L13	3,864,897	L9*L13	44,934,071	L9*L13	0	L9*L13	797,723,390
15	PS-ED Gen. Accumulated Depreciation	7,343,689	L8*L13	0	L6*L9	632,718,696	L13-L14	384,505,507	L8*L13	1,024,567,891
16	PS-ED SSCD Accumulated Depreciation	8,796,855	L10*L13							8,796,855
17	BPU-Regional Accumulated Depreciation	555,750	L11*L13							555,750
18	BPU-Zonal Accumulated Depreciation	3,741,831	L12*L13							3,741,831
19	PS-ED Net Transmission Plant	719,770,090	L3-L14	3,475,486	L3-L14	44,266,014	L3-L14	0	L3-L14	767,511,589
20	PS-ED Net Generation Plant	7,057,811	L4-L15	0	L4-L15	623,311,750	L4-L15	181,416,571	L4-L15	811,786,133
21	PS-ED Net SSCD Plant	8,454,409	L5-L16							8,454,409
22	BPU-Regional Net Plant	534,116	L6-L17							534,116
23	BPU-Zonal Net Plant	3,596,168	L7-L18							3,596,168
24	1/ WS8-TransFac, C4L508									
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, C8L519									
28	5/ WS8-TransFac, C8L505									
29	6/ WS8-TransFac, C8L512									
30	7/ WS8-TransFac, C6L514									
31	8/ SSCD Plant-in-Service is based on a percentage of Watertown Operations Centers cost, based on FTE									
32	9/ UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
33	10/ RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
34	11/ Corps of Engineers Financial Statements, Statement of Assets and Liabilities									
35	12/ Combined Financial Statements, Combining Schedules of Revenues and Expenses Data by Agency									
36	13/ WS7-BPUFac									

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
37	**Depreciation Worksheet**									
38	PS Depreciation Expense	32,862,314	1/	18,423,416	2/	19,477,688	3/	6,368,733	4/	77,132,151
39	PS-ED Transmission Depreciation 5/	31,178,294		155,089		1,291,534		0		32,624,917
40	PS-ED Generation Depreciation 6/	305,723		0		18,186,154		6,368,733		24,860,610
41	PS-ED SSCD Depreciation 7/	366,220								366,220
42	BPU-Regional Depreciation	23,136								23,136
43	BPU-Zonal Depreciation	155,775								155,775
44	1/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
45	2/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
46	3/ FY Corps of Engineers Statement of Revenues and Expenses									
47	4/ Combined Financial Statements, Detail by Agency									
48	5/ For UGPR, 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 plant-in-service,									
49	calculated on L9 of the Net Plant Investment Worksheet									
50	6/ For UGPR, 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, calculated									
51	on L8 of the Net Plant Investment Worksheet. COE generation depreciation is COE total depreciation less transmission depreciation									
52	7/ For UGPR, 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									
53	Investment Worksheet									

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)	
54	**Cost of Capital Worksheet**										
55	**Long Term Debt:**										
56	FY Balances	909,534,006	1/	383,865,578	1/	709,902,522	1/	229,003,928	1/	2,232,306,034	
57	**Interest Expenses:**										
58	FY Interest	36,333,083	13/	16,248,964	13/	22,576,411	2/	10,646,248	2/	85,804,706	
59	Average Interest Rate	3.995%	L58/L56	4.233%	L58/L56	3.180%	L58/L56	4.649%	L58/L56		
60	Transmission Plant Factor	0.9387	3/	0.0047	4/	0.0567	5/	0.0000	6/		
61	Weighted Trans. Composite Rate									3.94963639590%	7/
62	Generation Plant Factor	0.0078	8/	0.0000	9/	0.6840	10/	0.3082	11/		
63	Weighted Gen. Composite Rate									3.639%	12/
64	1/ Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedules 21X and 21RX										
65	2/ Interest from Combined Financial Statements, Detail By Agency/Col M L53										
66	3/ C2L3+C2L6+L7, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet										
67	4/ C3L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet										
68	5/ C4L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet										
69	6/ C5L3, Net Plant Investment Worksheet/C6L3+C6L6+C6L7, Net Plant Investment Worksheet										
70	7/ (C2L59*C2L60)+(C3L59*C3L60)+(C4L59*C4L60)+(C5L59*C5L60)										
71	8/ C2L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet										
72	9/ C3L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet										
73	10/ C4L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet										
74	11/ C5L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet										
75	12/ (C2L59*C2L62)+(C3L59*C3L62)+(C4L59*C4L62)+(C5L59*C5L62)										
76	13/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 5-excludes deficit interest										

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

Line No.	(1)	WESTERN-UGP (2)	WESTERN RMR (3)	COE (4)	BOR (5)	TOTAL (6)
77	**A&G Expenses Worksheet**					
78	**Object Class**	**WESTERN UGPR 1/**	**WESTERN RMR 2/**	**COE 3/**	**BOR 3/**	**Total**
79	1411	14,131,804	9,375,146	0	0	23,506,950
80	1412	7,638,994	4,101,925	0	0	11,740,919
81	1415	222,142	124,773	0	0	346,915
82	1416	106,031	(67,413)	0	0	38,619
83	1421	1,721,120	1,140,756	0	0	2,861,876
84	1422	1,278,687	329	0	0	1,279,016
85	1425	27,523	15,794	0	0	43,317
86	1426	16,236	(100)	0	0	16,135
87	1431	0	0	0	0	0
88	1432	2,233	0	0	0	2,233
89	1441	0	0	0	0	0
90	1442	(37)	0	0	0	(37)
91	1444	(48)	0	0	0	(48)
92	**PS Total A&G**	25,144,686	14,691,211	0	0	39,835,897
93	**PS-ED Transmission A&G 4/**	23,856,154	123,671	0	0	23,979,825
94	**PS-ED Generation A&G 5/**	233,925	0	0	0	233,925
95	**PS-ED SSCD A&G 6/**	280,214	0	0	0	280,214
96	**BPU-Regional A&G**	17,703				17,703
97	**BPU-Zonal A&G**	119,192				119,192

98 1/ Western-UGP A&G Expenses are from the UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 11A
99 2/ Western RMR A&G Expenses are from the RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11A
100 3/ A&G Expenses for COE and BOR are unavailable. All COE and BOR A&G expenses are included in O&M Expenses
101 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
102 Investment Worksheet
103 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
104 Investment Worksheet
105 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 2022 Rate True-up Calculation (Rev 1)

Line No.	(1)	WESTERN-UGP (2)	WESTERN RMR (3)	COE (4)	BOR (5)	TOTAL (6)
106	**O&M Expenses Worksheet**					
107		**WESTERN-UGP 1/**	**WESTERN-RMR 2/**	**COE 3/**	**BOR 4/**	**Total**
108	**Total Electric Operating Expense**	284,774,853	194,997,488	48,796,322	46,290,246	574,858,909
109	**Less:**					
110	**Other Power Supply Expenses**	187,844,675	131,000,218			318,844,893
111	**A&G Expenses**	25,144,686	14,691,211			39,835,897
112	**Prior Year Adjustments**	137,450	0			137,450
113	**Annual Reserve Sharing Group Cost**	42,587	42,587			85,174
114	**Plus:**					
115	**Moveable Property Interest**	970,418	437,783			1,408,201
116	**Warehouse Stores Interest**	155,060	85,843			240,903
117	**Scheduling, System Control & Dispatch**	12,120,489				12,120,489
118	**PS Total O&M**	72,730,934	49,829,685	48,796,322	46,290,246	217,604,600
119	**PS-ED Transmission O&M 5/**	69,003,857	419,468	3,235,606	0	72,658,931
120	**PS-ED Generation O&M 6/**	676,627	0	45,560,716	46,290,246	92,527,589
121	**BPU-Regional O&M**	51,205				51,205
122	**BPU-Zonal O&M**	344,762				344,762

123 1/ All Western-UGP O&M Expenses are from the UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 11; except
124 Moveable Property and Warehouse Stores Interest, which are from Schedule 5
125 2/ All Western RMR O&M Expenses are from the RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11; except Moveable Property and Warehouse
126 Stores Interest, which are from Schedule 5
127 3/ Total Corps O&M Expenses are from the Corps of Engineers Financial Statements
128 4/ Total BOR O&M Expenses are from the Combined Financial Statements
129 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
130 Net Plant Investment Worksheet
131 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
132 Net Plant Investment Worksheet

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

(Back to Worksheet Links)

Worksheet 5 - Zonal SPP Upgrade Calculations

12 Months Ending 09/30/2022 True-up

Line No.	Project Name and #	Type	Project Gross Plant (Zonal Allocation) $	Allocation Factor %	Project Accumulated Depreciation $	Allocation for Transmission O&M $	Allocation for General Plant Depreciation $	Allocation for A&G $	Cost of Capital	Project Net Plant $	Cost of Capital $	Gross ATRR $	Revenue Credit Allocation $ /1	Net ATRR $
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	LEWIS-RICHLAND 115 kV Ckt 1, 72052, /1	TL	51,813	0.71%	26,421	2,434	1,100	842	3.95%	25,392	1,003	5,379	(521)	4,858
2	ROBERTS COUNTY 115 kV SUBSTATION, 71926	SUB	2,212,759	30.15%	1,128,342	103,962	46,974	35,942	3.95%	1,084,417	42,831	229,709	(22,230)	207,479
3	ROBERTS COUNTY 115/69 kV TRANSFORMER, 71927	SUB	5,073,024	69.13%	2,586,863	238,347	107,693	82,402	3.95%	2,486,161	98,194	526,636	(50,965)	475,671
4	WILLISTON SUBSTATION 115 kV TERMINAL UPGRADES, 61856. 1/	SUB	403	0.01%	205	19	9	7	3.95%	198	8	42	(4)	38
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15	**Total**		**7,338,000**	**100%**	**3,741,831**	**344,762**	**155,775**	**119,192**		**3,596,168**	**142,036**	**761,765**	**(73,719)**	**688,045**
16	1/ Revenue Credit Allocation Total from WS3-Rev Credit C6L182 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 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)

Worksheet 6 - Base Plan Upgrades-Regional

12 Months Ending 09/30/2022 True-up

Line No.	Project Name and #	Type	Project Gross Plant (Regional Allocation) $	Allocation Factor %	Project Accumulated Depreciation $	Allocation for Transmission O&M $	Allocation for General Plant Depreciation $	Allocation for A&G $	Cost of Capital	Project Net Plant $	Cost of Capital $	Gross ATRR $	Revenue Credit Allocation $ /1	Net ATRR $
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Roberts County 115 kV Substation, 71926	SUB	1,089,866	100.00%	555,750	51,205	23,136	17,703	3.95%	534,116	21,096	113,140	(8,435)	104,705
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13	**Total**		**1,089,866**	**100%**	**555,750**	**51,205**	**23,136**	**17,703**		**534,116**	**21,096**	**113,140**	**(8,435)**	**104,705**

1/ Revenue Credit Allocation Total from WS3-Rev Credit C6L210 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 2022 Rate True-up Calculation (Rev 1

Worksheet 7 - SPP Base Plan Upgrades-Facilities

12 Months Ending 09/30/2022 True-up

(Back to Worksheet Links)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		2022 SPP TRUE-UP SUMMARY			**BASE PLAN**		
Line No.	**FID**	**DESCRIPTION**	**PRIOR YEAR FACILITY TOTALS ($)**		**UPGRADES-REGIONAL**	**BASE PLAN UPGRADES-ZONAL**	**FY2022 SPP TOTALS ($)**
1	LC-RH	LEWIS-RICHLAND 115 kV Ckt 1, 72052, /1	51,813		0	51,813	51,813
2	RCO	ROBERTS COUNTY 115 kV SUBSTATION, 71926	3,302,626		1,089,866	2,212,759	3,302,626
3	RCO	ROBERTS COUNTY 115/69 kV TRANSFORMER, 71927	5,073,024		0	5,073,024	5,073,024
4	WN	WILLISTON SUBSTATION 115 kV TERMINAL UPGRADES, 61856. 1/	403		0	403	403
5			8,427,867		1,089,866	7,338,000	8,427,866
		2022 SPP TRUE-UP DETAIL:					
6	**FID**	**DESCRIPTION**	**FID COST DETAIL ($)**	**REG %**	**REG TOTAL ($)**	**ZONAL %**	**ZONAL TOTAL ($)**
7	LC-RH	CONDUCTOR	51,813	0.00%	0	100.00%	51,813
8		**LEWIS-RICHLAND 115 kV Ckt 1, 72052 - SUBTOTAL**	51,813		-		51,813
9	RCO	STEEL STRUCTURE	181,965	33.00%	60,049	67.00%	121,917
10	RCO	STEEL STRUCTURE	131,277	33.00%	43,321	67.00%	87,956
11	RCO	STEEL STRUCTURE	265,373	33.00%	87,573	67.00%	177,800
12	RCO	DISCONNECT SWITCH	73,712	33.00%	24,325	67.00%	49,387
13	RCO	DISCONNECT SWITCH	141,931	33.00%	46,837	67.00%	95,094
14	RCO	DISCONNECT SWITCH	179,996	33.00%	59,399	67.00%	120,597
15	RCO	CCVT	39,217	33.00%	12,942	67.00%	26,276
16	RCO	CCVT	89,701	33.00%	29,601	67.00%	60,100
17	RCO	CIRCUIT BREAKER	22,459	33.00%	7,412	67.00%	15,048
18	RCO	CIRCUIT BREAKER	410,893	33.00%	135,595	67.00%	275,298
19	RCO	STEEL STRUCTURE	304,124	33.00%	100,361	67.00%	203,763
20	RCO	STATION SERVICE, LAND, CONTROL BUILDING	1,461,976	33.00%	482,452	67.00%	979,524
21		**ROBERTS COUNTY 115 kV SUBSTATION, 71926 - SUBTOTAL**	3,302,626		1,089,866		2,212,759
22	RCO	POWER TRANSFORMER	20,893	0.00%	0	100.00%	20,893
23	RCO	POWER TRANSFORMER	461,395	0.00%	0	100.00%	461,395
24	RCO	POWER TRANSFORMER	481,329	0.00%	0	100.00%	481,329
25	RCO	DISCONNECT SWITCH	158,422	0.00%	0	100.00%	158,422
26	RCO	DISCONNECT SWITCH	61,693	0.00%	0	100.00%	61,693
27	RCO	DISCONNECT SWITCH	161,498	0.00%	0	100.00%	161,498
28	RCO	CCVT	13,072	0.00%	0	100.00%	13,072
29	RCO	CCVT	28,805	0.00%	0	100.00%	28,805
30	RCO	VOLTAGE TRANSFORMER	13,891	0.00%	0	100.00%	13,891
31	RCO	VOLTAGE TRANSFORMER	32,368	0.00%	0	100.00%	32,368
32	RCO	VOLTAGE TRANSFORMER	14,101	0.00%	0	100.00%	14,101
33	RCO	INSTRUMENT TRANSFORMER	13,037	0.00%	0	100.00%	13,037
34	RCO	INSTRUMENT TRANSFORMER	35,655	0.00%	0	100.00%	35,655
35	RCO	CIRCUIT BREAKER	25,490	0.00%	0	100.00%	25,490
36	RCO	CIRCUIT BREAKER	397,859	0.00%	0	100.00%	397,859
37	RCO	STEEL STRUCTURE	229,083	0.00%	0	100.00%	229,083
38	RCO	POWER TRANSFORMER	138,325	0.00%	0	100.00%	138,325
39	RCO	STEEL STRUCTURE	423,875	0.00%	0	100.00%	423,875
40	RCO	ARRESTER	13,145	0.00%	0	100.00%	13,145
41	RCO	OIL STORAGE TANK	103,408	0.00%	0	100.00%	103,408
42	RCO	STATION SERVICE, LAND, CONTROL BUILDING	2,245,681	0.00%	0	100.00%	2,245,681
43		**ROBERTS COUNTY 115/69 kV TRANSFORMER, 71927 - SUBTOTAL**	5,073,024	-	-		5,073,024
44	WN	RELAYS	403	0.00%	0	100.00%	403
45		**WILLISTON SUBSTATION 115 kV TERMINAL UPGRADES, 61856 - SUBTOTAL**	403		0		403
46		TOTAL	8,427,866		1,089,866		7,338,000
47	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.						
48	The remainder of the Revenue Requirement is the Zonal Revenue Requirement Amount.						

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)
Worksheet 8 - Transmission Facilities
12 Months Ending 09/30/2022 True-up

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Line No.		**FID**	**DESCRIPTION**	**FY2022 FACILITY TOTALS ($)**	**ATTACHMENT AI ADJUSTMENTS ($)**	**GENERATION ADJUSTMENTS ($)**	**OTHER ADJUSTMENTS ($)**	**FY2022 ACT SPP TOTALS ($)**
1	TL	AUR BR	AURORA- BROOKINGS 115-KV T/L	343,710	-	-		343,710
2	TL	AUR FL	AURORA-FLANDREAU 115-KV T/L	96,623	-	-		96,623
3	TL	BK HET	BAKER-HETTINGER	459,778	-	-		459,778
4	TL	BU GA	BEULAH-GARRISON	357,312	-	-		357,312
5	TL	BS GH	BISMARCK-GLENHAM	6,362,300	-	-		6,362,300
6	TL	BS JT 1	BISMARCK-JAMESTOWN NO. 1	9,317,120	-	-		9,317,120
7	TL	BS JT 2	BISMARCK-JAMESTOWN NO. 2	4,229,572	-	-		4,229,572
8	TL	BS MDR	BISMARCK-MEDORA	12,795,412	-	-		12,795,412
9	TL	BR SF	BROOKINGS-SIOUX FALLS	2,564,429	-	-		2,564,429
10	TL	BR WT 1	BROOKINGS-WATERTOWN NO. 1	1,718,240	-	-		1,718,240
11	TL	BR WT 2	BROOKINGS-WATERTOWN NO. 2	3,318,558	-	-		3,318,558
12	TL	BR WHT	BROOKINGS-WHITE 115/230KV	3,135,515	-	-		3,135,515
13	TL	CA JT	CARRINGTON-JAMESTOWN	1,259,668	-	-		1,259,668
14	TL	WC BU	CHARLIE CREEK - WATFORD CITY	13,451,446	-	-		13,451,446
15	TL	CCRBEF	CHARLIE CREEK-BELFIELD	14,513,308	-	-		14,513,308
16	TL	CR DC	CIRCLE-DAWSON COUNTY	5,768,275	-	-		5,768,275
17	TL	CONSH2	CONRAD-SHELBY #2	6,735,890	-	-		6,735,890
18	TL	CS MY	CRESTON-MARYVILLE	1,366,481	-	-		1,366,481
19	TL	DC MC	DAWSON COUNTY - MILES CITY	2,605,678	-	-		2,605,678
20	TL	DC GL	DAWSON-GLENDIVE	553,800	-	-		553,800
21	TL	DC MDR	DAWSON-MEDORA	3,464,064	-	-		3,464,064
22	TL	DC OF	DAWSON-O'FALLON CREEK	918,676	-	-		918,676
23	TL	DC WN	DAWSON-WILLISTON /2	1,258,900	-	-	(51,813)	1,207,087
24	TL	DN CS	DENISON-CRESTON	20,977,731	-	-		20,977,731
25	TL	DL CA	DEVILS LAKE-CARRINGTON	9,154,519	-	-		9,154,519
26	TL	DL LA	DEVILS LAKE-LAKOTA	1,872,142	-	-		1,872,142
27	TL	ED FO	EDGELEY-FORMAN	1,981,753	-	-		1,981,753
28	TL	ED GR	EDGELEY-GROTON	771,572	-	-		771,572
29	TL	ELCMA	ELK CREEK-NEWELL-MAURINE 115-kV T/L	34,388	-	-		34,388
30	TL	FA GK	FARGO-GRAND FORKS	2,369,098	-	-		2,369,098
31	TL	FA MO	FARGO-MORRIS	8,661,076	-	-		8,661,076
32	TL	FO RCO	FORMAN-ROBERTS COUNTY	183,485	-	-		183,485
33	TL	FO SU D	FORMAN-SUMMIT (BISMARCK)	922,098	-	-		922,098
34	TL	FO SU C	FORMAN-SUMMIT (HURON)	4,465,037	-	-		4,465,037
35	TL	FP DC 1	FORT PECK-DAWSON 1	200,790	-	-		200,790
36	TL	FP DC 2	FORT PECK-DAWSON 2	8,301,710	-	-		8,301,710
37	TL	FP HV	FORT PECK-HAVRE	28,806,330	-	-		28,806,330
38	TL	FP WH	FORT PECK-WHATELY	157,876	-	-		157,876
39	TL	FP WN	FORT PECK-WILLISTON	17,813,196	-	-		17,813,196
40	TL	FP WP 2	FORT PECK-WOLF POINT #2	7,554,492	-	-		7,554,492
41	TL	FR FT D	FORT RANDALL-FORT THOMPSON 1&2	7,782,247	-	-		7,782,247
42	TL	FR GP	FORT RANDALL-GAVIN'S POINT	2,319,939	-	-		2,319,939
43	TL	FR GY	FORT RANDALL-GREGORY	777,327	-	-		777,327
44	TL	FR MV	FORT RANDALL-MT VERNON	2,269,522	-	-		2,269,522

45	TL	FR ON	FORT RANDALL-O'NEILL	937,082	-	-	937,082
46	TL	FR SC D	FORT RANDALL-SIOUX CITY 1&2	11,919,659	-	-	11,919,659
47	TL	FT GI	FORT THOMPSON-GRAND ISLAND	17,840,941	-	-	17,840,941
48	TL	FT HU D	FORT THOMPSON-HURON 230-KV 1&2	7,747,203	-	-	7,747,203
49	TL	FT SF D	FORT THOMPSON-SIOUX FALLS 1&2	10,455,917	-	-	10,455,917
50	TL	GA BS D	GARRISON-BISMARCK 230KV 1&2	10,713,977	-	-	10,713,977
51	TL	GA JT	GARRISON-JAMESTOWN	5,062,688	-	-	5,062,688
52	TL	GA ML	GARRISON-MALLARD	1,948,079	-	-	1,948,079
53	TL	GA WJ	GARRISON-WM. J. NEAL	1,521,174	-	-	1,521,174
54	TL	GP BN	GAVINS POINT-BELDEN	455,727	-	-	455,727
55	TL	GP SF	GAVINS POINT-SIOUX FALLS	3,361,449	-	-	3,361,449
56	TL	GF MO	GRANITE FALLS- MORRIS	3,279,089	-	-	3,279,089
57	TL	GF MNV	GRANITE FALLS-MINNESOTA VALLEY	156,778	-	-	156,778
58	TL	GTFCON	GREAT FALLS-CONRAD	12,744,945	-	-	12,744,945
59	TL	GY MS	GREGORY-MISSION	10,110,752	-	-	10,110,752
60	TL	GR HU	GROTON-HURON	1,270,645	-	-	1,270,645
61	TL	GR SU	GROTON-SUMMIT	3,255,847	-	-	3,255,847
62	TL	HV RB	HAVRE-RAINBOW	8,681,332	-	-	8,681,332
63	TL	HV SH2	HAVRE-SHELBY#2	5,561,905	-	-	5,561,905
64	TL	HE DV	HESKETT-DEVAUL	6,016,436	-	-	6,016,436
65	TL	HETNU	HETTINGER-NEW UNDERWOOD	11,263,708	-	-	11,263,708
66	TL	HU MV	HURON-MT VERNON	617,623	-	-	617,623
67	TL	HU WT D	HURON-WATERTOWN 230KV 1&3	6,319,622	-	-	6,319,622
68	TL	JT ED	JAMESTOWN-EDGELEY	1,189,520	-	-	1,189,520
69	TL	JT FA 1	JAMESTOWN-FARGO NO. 1	4,941,649	-	-	4,941,649
70	TL	JT FA 2	JAMESTOWN-FARGO NO. 2	3,155,850	-	-	3,155,850
71	TL	JT GK	JAMESTOWN-GRAND FORKS	28,856,299	-	-	28,856,299
72	TL	JT VC	JAMESTOWN-VALLEY CITY	1,055,414	-	-	1,055,414
73	TL	LAHCF	LAKE HELENA SWITCHYARD - CANYON FERRY 100 KV	619,324	-	-	619,324
74	TL	LE DL	LEEDS-DEVILS LAKE	8,987,642	-	-	8,987,642
75	TL	LE RL	LEEDS-ROLLA	6,257,786	-	-	6,257,786
76	TL	ML RG	MALLARD-RUGBY	1,089,083	-	-	1,089,083
77	TL	MR MS	MARTIN-MISSION	1,816,904	-	-	1,816,904
78	TL	MR PL	MARTIN-PHILIP	2,349,423	-	-	2,349,423
79	TL	MA RC	MAURINE-RAPID CITY	6,346,265	-	-	6,346,265
80	TL	MC BK	MILES CITY-BAKER	11,220,164	-	-	11,220,164
81	TL	MC CU	MILES CITY-CUSTER	3,750,704	-	-	3,750,704
82	TL	NU PL	NEW UNDERWOOD-PHILIP	3,215,519	-	-	3,215,519
83	TL	NU RC 1	NEW UNDERWOOD-RAPID CITY NO. 1	1,132,486	-	-	1,132,486
84	TL	NU RC 2	NEW UNDERWOOD-RAPID CITY NO. 2	309,991	-	-	309,991
85	TL	NU SG C	NEW UNDERWOOD-STEGALL (HURON)	2,651,860	-	-	2,651,860
86	TL	OA FT N	OAHE-FORT THOMPSON 230KV 1&2	3,973,416	-	-	3,973,416
87	TL	OA FT S	OAHE-FORT THOMPSON 230KV 3&4	5,563,296	-	-	5,563,296
88	TL	OA GH	OAHE-GLENHAM	5,949,648	-	-	5,949,648
89	TL	OA MA	OAHE-MAURINE	1,967,901	-	-	1,967,901
90	TL	OA NU	OAHE-NEW UNDERWOOD	6,683,770	-	-	6,683,770
91	TL	OA PI	OAHE-PIERRE	388,816	-	-	388,816
92	TL	OF MC	O'FALLON CREEK-MILES CITY	2,488,318	-	-	2,488,318
93	TL	ORD GSO	ORDWAY-GROTON SOUTH	2,038,920	-	-	2,038,920
94	TL	PI PL	PIERRE-PHILIP	2,140,436	-	-	2,140,436
95	TL	RC DRY	RAPID CITY-DRY CREEK	9,269,194	-	-	9,269,194

96	TL	ELCRC	RAPID CITY-ELK CREEK 115-kV T/L	52,064	-	-	52,064
97	TL	RCOSU	ROBERTS COUNTY-SUMMIT	757,812	-	-	757,812
98	TL	RG LE	RUGBY-LEEDS	2,235,655	-	-	2,235,655
99	TL	SH SH2	SHELBY-SHELBY #2	576,090	(576,090)	-	0
100	TL	SC DN	SIOUX CITY-DENISON	15,738,204	-	-	15,738,204
101	TL	SC SP	SIOUX CITY-SPENCER	1,938,353	-	-	1,938,353
102	TL	SC SF	SIOUX FALLS- SIOUX CITY	3,217,192	-	-	3,217,192
103	TL	SF VFO	SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE	277,897	-	-	277,897
104	TL	SU WT	SUMMIT-WATERTOWN	6,743,203	-	-	6,743,203
105	TL	TT TI	TIBER TAP-TIBER	1,084,858	-	-	1,084,858
106	TL	UJ SF	UTICA JCT-SIOUX FALLS	3,485,236	-	-	3,485,236
107	TL	VC FO	VALLEY CITY-FORMAN	2,418,957	-	-	2,418,957
108	TL	VR GTF	VERONA GREAT FALLS 161-kV LINE	5,110,115	-	-	5,110,115
109	TL	UJ VFO	VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/RASMUS	312,931	-	-	312,931
110	TL	WDDBEF	WARD DELIVERY-BELFIELD 230KV T-LINE	120,026	-	-	120,026
111	TL	WT GF D	WATERTOWN-GRANITE FALLS 1&2	7,488,154	-	-	7,488,154
112	TL	WT SC	WATERTOWN-SIOUX CITY	26,924,889	-	-	26,924,889
113	TL	WC BU	WATFORD CITY-BEULAH	349,954	-	-	349,954
114	TL	WN WC	WILLISTON-WATFORD CITY	17,627,868	-	-	17,627,868
115	TL	WP CR	WOLF POINT-CIRCLE	11,035,514	-	-	11,035,514
116	TL	WJ RG	WM. J. NEAL-RUGBY	4,629,316	-	-	4,629,316
117	TL	YT CU	YELLOWTAIL-CUSTER	4,270,497	-	-	4,270,497
118	**TL Total**		**TRANSMISSION LINES**	**611,018,038**	**(576,090)**	**-**	**610,390,135**
119	SUB	AN	ANITA	6,259	-	-	6,259
120	SUB	AVS	ANTELOPE VALLEY	12,377	-		12,377
121	SUB	APD	APPELDORN SUBSTATION	5,795,384	-	-	5,795,384
122	SUB	AR	ARMOUR SUBSTATION	2,318,295	(800,024)	-	1,518,272
123	SUB	AHS	ASH SUBSTATION	63,325	-	-	63,325
124	SUB	AB	ASSINNIBOINE	35,005	(35,005)	-	0
125	SUB	AUR	AURORA SUBSTATION	2,931,082	(124,344)	-	2,806,738
126	SUB	BK	BAKER	279,691	-	-	279,691
127	SUB	BN	BELDEN SUBSTATION	298,522	-	-	298,522
128	SUB	BEF	BELFIELD SUBSTATION	13,926,843	(109,224)	-	13,817,619
129	SUB	BE	BERESFORD SUBSTATION	4,733,510	(231,321)	-	4,502,189
130	SUB	BB	BISBEE SUBSTATION	495,306	(441,104)	-	54,202
131	SUB	BS	BISMARK SUBSTATION	18,573,658	(200,648)	-	18,373,010
132	SUB	BI	BISON	37,821	-	-	37,821
133	SUB	BOL	BOLE SUB	3,077,348	(630,455)	-	2,446,893
134	SUB	BO	BONESTEEL SUBSTATION	3,496,396	(1,310,501)	-	2,185,895
135	SUB	BR	BROOKINGS SUBSTATION	14,164,196	-	-	14,164,196
136	SUB	CBC	CAMPBELL COUNTY SWITCHING STATION	4,765,826	-	-	4,765,826
137	SUB	CF	CANYON FERRY	83,039	-	-	83,039
138	SUB	CRP	CARPENTER SUBSTATION	2,841,163	-	-	2,841,163
139	SUB	CA	CARRINGTON SUBSTATION	3,879,364	(1,007,873)	-	2,871,491
140	SUB	CCR	CHARLIE CREEK	1,401,477	-	-	1,401,477
141	SUB	CR	CIRCLE SUBSTATION	8,543,590	(2,065,347)	-	6,478,242
142	SUB	CON	CONRAD SUB	5,362,775	(151,625)	-	5,211,149
143	SUB	CS	CRESTON SUBSTATION	8,521,707	-	-	8,521,707
144	SUB	CRO	CROSSOVER SUB	13,977,734	-	-	13,977,734
145	SUB	CQE	CULBERTSON EAST SWITCHING STATION	2,390,851	-	-	2,390,851
146	SUB	CU	CUSTER SUBSTATION	4,865,007	(346,142)	-	4,518,865

147	SUB	CT	CUSTER TRAIL SUBSTATION	1,567,242	(1,567,242)	-	0
148	SUB	DC	DAWSON COUNTY SUBSTATION	10,803,793	(2,305)	-	10,801,488
149	SUB	DNT	DENBIGH TAP	848,872	(109,673)		739,200
150	SUB	DN	DENISON SUBSTATION	16,272,743	-	-	16,272,743
151	SUB	DV	DEVAUL SUBSTATION	1,657,438	(1,657,438)	-	0
152	SUB	DL	DEVILS LAKE SUBSTATION	14,635,855	(537,805)	-	14,098,050
153	SUB	DK	DICKINSON	101,980	-	-	101,980
154	SUB	EJ	E. J. MANNING	49,112	-	-	49,112
155	SUB	EA	EAGLE	88,696	-	-	88,696
156	SUB	EB	EAGLE BUTTE SUBSTATION	2,149,404	(1,211,250)	-	938,154
157	SUB	ED	EDGELEY SUBSTATION	6,811,986	(1,197,122)	-	5,614,864
158	SUB	ELC	ELK CREEK SUBSTATION	2,101,779	(17,147)	-	2,084,632
159	SUB	EL	ELLENDALE SUBSTATION	579	(579)	-	0
160	SUB	ELI	ELLIOTT SWITCHING STATION	3,507,129	(41,652)	-	3,465,476
161	SUB	END	ENDERLIN TAP STATION	749,768	(494,847)	-	254,921
162	SUB	EXI	EXIRA SWITCHING STATION	5,508,482	(164,229)	-	5,344,253
163	SUB	FVW	FAIRVIEW WEST SWITCHING STATION	4,296,873	-	-	4,296,873
164	SUB	FH	FAITH SUBSTATION	1,235,034	(586,377)	-	648,658
165	SUB	FA	FARGO SUBSTATION	27,447,906	-	-	27,447,906
166	SUB	FL	FLANDREAU SUBSTATION	4,485,548	(40,435)	-	4,445,113
167	SUB	FO	FORMAN SUBSTATION	7,486,471	(1,303,371)	-	6,183,099
168	SUB	FR	FORT RANDALL	253,710	-	-	253,710
169	SUB	FT2	FORT THOMPSON #2	13,833,713	-	-	13,833,713
170	SUB	FT	FORT THOMPSON SUBSTATION	17,456,296	(163,144)	-	17,293,152
171	SUB	GL	GLENDIVE SUBSTATION	1,725,310	-	-	1,725,310
172	SUB	GK	GRAND FORKS SUBSTATION	14,306,727	-	-	14,306,727
173	SUB	GI	GRAND ISLAND SUBSTATION	19,014,782	-	-	19,014,782
174	SUB	GRP	GRAND PRAIRIE SUBSTATION /1	269,023	-	-	269,023
175	SUB	GF	GRANITE FALLS SUBSTATION	23,973,749	(1,922,930)	-	22,050,819
176	SUB	GTF	GREAT FALLS SUB	8,470,404	-	-	8,470,404
177	SUB	GY	GREGORY SUBSTATION	1,517,925	(43,752)	-	1,474,173
178	SUB	GR	GROTON SUBSTATION	6,180,011	(326,877)	-	5,853,134
179	SUB	GSO	GROTON SOUTH SUBSTATION	8,552,324	-	-	8,552,324
180	SUB	HA	HARLEM	98,534	-	-	98,534
181	SUB	HV	HAVRE SUBSTATION	12,268,218	(62,475)	-	12,205,743
182	SUB	HBN	HEBRON SWITCHING STATION	6,872,238	(59,777)	-	6,812,460
183	SUB	HET	HETTINGER	10,832	-	-	10,832
184	SUB	HLK	HILKEN SWITCHING STATION	3,937,936	(143,716)	-	3,794,220
185	SUB	HU	HURON SUBSTATION	12,929,080	(786,536)	-	12,142,544
186	SUB	JT	JAMESTOWN SUBSTATION	25,958,919	(1,112,294)	-	24,846,625
187	SUB	KD	KILLDEER SUBSTATION	7,092,854	(1,181,101)	-	5,911,753
188	SUB	LA	LAKOTA SUBSTATION	3,972,264	(1,591,198)	-	2,381,066
189	SUB	LE	LEEDS SUBSTATION	4,045,847	(158,722)	-	3,887,126
190	SUB	LET	LETCHER SUBSTATION	11,108,748	-	-	11,108,748
191	SUB	ML	MALLARD	29,969	-	-	29,969
192	SUB	MT	MALTA	340,848	-	-	340,848
193	SUB	MDN	MANDAN SUBSTATION	19,476	-	-	19,476
194	SUB	MR	MARTIN SUBSTATION	6,503,752	(836,290)	-	5,667,462
195	SUB	MA	MAURINE SUBSTATION	7,612,599	(343,742)	-	7,268,857
196	SUB	MD	MIDLAND SUBSTATION	1,329,826	(154,097)	-	1,175,729
197	SUB	MC2	MILES CITY SUB #2	7,904,071	-	-	7,904,071

198	SUB	MC3	MILES CITY SUB #3	1,895,702	-	-		1,895,702
199	SUB	MC	MILES CITY SUBSTATION	1,202,099	-	-		1,202,099
200	SUB	MGV	MINGUSVILLE SUBSTATION	5,351,152	-	-		5,351,152
201	SUB	MS	MISSION SUBSTATION	3,531,441	(586,992)	-		2,944,449
202	SUB	MO	MORRIS SUBSTATION	7,937,660	(1,095,435)	-		6,842,224
203	SUB	MV	MT VERNON SUBSTATION	5,418,696	(195,318)	-		5,223,378
204	SUB	NA	NASHUA SUB	72,368	(72,368)	-		0
205	SUB	NEL	NELSON SUBSTATION	1,944,817	(33,744)	-		1,911,073
206	SUB	NU	NEW UNDERWOOD SUBSTATION	18,362,017	-	-		18,362,017
207	SUB	NL	NEWELL SUBSTATION	4,160,418	(287,497)	-		3,872,921
208	SUB	OF	O'FALLON CREEK SUBSTATION	3,770,311	(71,356)	-		3,698,955
209	SUB	ON	O'NEILL SUB (NPP)	180,660	-	-		180,660
210	SUB	PET	PENN TAP	890,607	(108,485)	-		782,122
211	SUB	PL	PHILIP SUBSTATION	2,034,592	(209,290)	-		1,825,302
212	SUB	PI	PIERRE SUBSTATION	4,220,541	(699,890)	-		3,520,651
213	SUB	PLL	PLEASANT LAKE TAP	992,415	(160,601)	-		831,814
214	SUB	RB	RAINBOW SUBSTATION	250,629	(250,629)	-		0
215	SUB	RC	RAPID CITY SUBSTATION	5,739,051	(630,015)	-		5,109,036
216	SUB	RH	RICHLAND SUBSTATION	1,733,528	(1,733,528)	-		0
217	SUB	RCO	ROBERTS COUNTY /2	8,375,651	-		(8,375,651)	(0)
218	SUB	RL	ROLLA SUBSTATION	623,513	-	-		623,513
219	SUB	RY	RUDYARD SUBSTATION	3,439,427	(1,380,449)	-		2,058,978
220	SUB	RG	RUGBY SUBSTATION	8,746,430	(1,538,024)	-		7,208,406
221	SUB	SA	SAVAGE SUB	74,403	-	-		74,403
222	SUB	SH	SHELBY SUBSTATION	4,043,804	(4,043,804)	-		(0)
223	SUB	SH2	SHELBY SUBSTATION #2	5,664,918	(169,696)	-		5,495,222
224	SUB	SL	SHIRLEY TAP	22,102	-	-		22,102
225	SUB	SC2	SIOUX CITY #2	12,976,455	-	-		12,976,455
226	SUB	SC	SIOUX CITY SUBSTATION	15,965,765	-	-		15,965,765
227	SUB	SF	SIOUX FALLS SUBSTATION	14,869,650	(516,513)	-		14,353,137
228	SUB	SP	SPENCER	8,022,741	(254,683)	-		7,768,058
229	SUB	SNY	STANLEY	49,735	-	-		49,735
230	SUB	SB	SULLY BUTTES	93,606	-	-		93,606
231	SUB	SUH	SULPHUR	21,126	-	-		21,126
232	SUB	SU	SUMMIT SUBSTATION	3,393,721	(334,513)	-		3,059,208
233	SUB	TR	TERRY TAP	638,489	(103,121)			535,368
234	SUB	TT	TIBER TAP	166,306	-	-		166,306
235	SUB	TN	TOWNER	5,243,015	-	-		5,243,015
236	SUB	TY	TYNDALL SUBSTATION	937,621	(125,594)	-		812,027
237	SUB	UJ	UTICA JCT.	12,816,177	-	-		12,816,177
238	SUB	VH	V. T. HANLON	12,228,700	-	-		12,228,700
239	SUB	VC	VALLEY CITY SUBSTATION	6,935,918	(176,541)	-		6,759,377
240	SUB	VR	VERONA	50,121	-	-		50,121
241	SUB	VE	VETAL TAP	232,375	-	-		232,375
242	SUB	VFO	VIRGIL FODNESS SUBSTATION	3,220,641	-	-		3,220,641
243	SUB	WL	WALL SUBSTATION	1,645,871	(654,299)	-		991,572
244	SUB	WNB	WANBLEE TAP	-	-	-		0
245	SUB	WDD	WARD SUBSTATION	3,453,847	(45,362)	-		3,408,486
246	SUB	WB	WASHBURN SUBSTATION	2,244,715	(942,415)	-		1,302,300
247	SUB	WT2	WATERTOWN #2	3,223,563	-	-		3,223,563
248	SUB	WTS	WATERTOWN STATIC VAR SYSTEM	11,778,775	-	-		11,778,775

249	SUB	WT	WATERTOWN SUBSTATION	18,723,157	-	-		18,723,157
250	SUB	WC	WATFORD CITY SUB	7,600,294	(108,365)	-		7,491,928
251	SUB	WSG	WESSINGTON SPRINGS SUBSTATION	5,141,440	(181,849)	-		4,959,591
252	SUB	WH2	WHATELY (NORTHERN)	40,860	-	-		40,860
253	SUB	WH	WHATELY SUBSTATION	109,910	(54,083)	-		55,827
254	SUB	WHT	WHITE 345/115 SUB	11,088,274	-	-		11,088,274
255	SUB	WV	WICKSVILLE SUBSTATION	849,186	(250,593)	-		598,593
256	SUB	WN2	WILLISTON 2 SUBSTATION	15,594,604	-	-		15,594,604
257	SUB	WN	WILLISTON SUBSTATION /2	8,198,987	(97,320)	-	(403)	8,101,264
258	SUB	WI	WINNER SUBSTATION	3,289,729	(243,117)	-		3,046,613
259	SUB	WJ	WM. J. NEAL	183,222	-	-		183,222
260	SUB	WP	WOLF POINT SUBSTATION	7,289,287	(1,346,899)	-		5,942,388
261	SUB	WO	WOONSOCKET SUBSTATION	2,775,992	(1,579,680)	-		1,196,312
262	SUB	YJ	YANKTON JCT.	76,396	-	-		76,396
263	SUB	YA	YANKTON SUBSTATION	2,935	-	-		2,935
264	**SUB Total**		**SUBSTATIONS**	**768,126,381**	**(45,553,806)**	**-**	**(8,376,054)**	**714,196,521**
265	O&M	ARC	ARMOUR O&M SER. CEN.	3,488,667	-	-		3,488,667
266	O&M	BSM	BISMARCK O&M SER. CEN.	9,888,331	-	-		9,888,331
267	O&M	DCF	DAWSON SER. CEN.	6,853,289	-	-		6,853,289
268	O&M	DLM	DEVILS LAKE O&M SER. CEN.	3,852,064	-	-		3,852,064
269	O&M	FAO	FARGO LINE MAINTENANCE FACILITY	2,203,121	-	-		2,203,121
270	O&M	FAM	FARGO O&M SER. CEN.	584,445	-	-		584,445
271	O&M	FPM	FORT PECK SER. CEN.	8,407,259	-	-		8,407,259
272	O&M	FTM	FORT THOMPSON O&M S. C.	2,209,623	-	-		2,209,623
273	O&M	HVM	HAVRE SERVICE CENTER	493,999	-	-		493,999
274	O&M	HUM	HURON O&M SER. CEN.	3,084,644	-	-		3,084,644
275	O&M	JTM	JAMESTOWN O&M SER. CEN.	3,874,657	-	-		3,874,657
276	O&M	MCM	MILES CITY MTCE FAC.	1,025,254	-	-		1,025,254
277	O&M	NUM	NEW UNDERWOOD SER. CEN.	96,884	-	-		96,884
278	O&M	PLM	PHILIP O&M SER. CENT.	1,699,741	-	-		1,699,741
279	O&M	PIM	PIERRE O&M SER. CEN.	1,051,383	-	-		1,051,383
280	O&M	RCM	RAPID CITY GARAGE & STOR.	2,221,967	-	-		2,221,967
281	O&M	RCN	RAPID CITY NORTH O&M SER. CEN.	1,285,819	-	-		1,285,819
282	O&M	SCM	SIOUX CITY O&M SER. CEN.	7,115,527	-	-		7,115,527
283	O&M	SFC	SIOUX FALLS O&M SER. CEN.	239,920	-	-		239,920
284	O&M	WTM	WATERTOWN MAINT. CEN.	7,452,151	-	-		7,452,151
285	**O&M Total**		**O&M SERVICE & MAINT. CENTERS**	**67,128,745**	**-**	**-**		**67,128,745**
286	OPS	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,174,391	-	-	-	6,174,391
287	OPS	WTO	WATERTOWN OPERATIONS CENT	1,785,958	-	-	(283,038)	1,502,920
288	OPS	WTO F	WATERTOWN OPER CTR (BFPS)	11,977,195	-	-	(1,265,809)	10,711,386
289	**OPS Total**		**OPERATION CENTERS**	**19,937,544**	**-**	**-**	**(1,548,847)**	**18,388,698**
290	MOB	MOBW2	MOB 115KV SWITCH TRAILER	69,741	-	-		69,741
291	MOB	MOBT2	MOB TRANSF 115KV 10MVA	218,493	-	-		218,493
292	MOB	MOBT12	MOB TRANSF 115KV 25MVA	814,665	-	-		814,665
293	MOB	MOBT4	MOB TRANSF 115KV 40MVA	526,201	-	-		526,201
294	MOB	MOBT6	MOB TRANSF 230KV 1-33MVA	170,278	-	-		170,278
295	MOB	MOBB2	MOBILE BY PASS KIT (BISMARCK)	35,071	-	-		35,071
296	MOB	MOBB1	MOBILE BY PASS KIT (HURON)	163,695	-	-		163,695
297	MOB	MOBC4	MOBILE CAPACITOR BANK	19,075	-	-		19,075
298	MOB	MOBS6	MOBILE SUB 110KV	127,144	-	-		127,144
299	MOB	MOBS9	MOBILE SUB 115KV 20MVA	404,166	-	-		404,166

300	MOB	MOBS10	MOBILE SUB 115KV/41.8 KV 20MVA	1,474,766	(1,474,766)		0
301	MOB	MOBS7	MOBILE SUB 41.8 KV	192,498	(192,498)	-	0
302	MOB	MOBS5	MOBILE SUB 69KV	71,118	-	-	71,118
303	MOB	MOBR2	MOB SH.REACTOR	179,328	-	-	179,328
304	**MOB Total**		**MOBILE EQUIPMENT**	**4,466,239**	**(1,667,264)**	**-**	**2,798,975**
305	GEN	BG FT L	BIG BEND-FORT THOMPSON (LOW VOLTAGE)	81,944	-	(81,944)	0
306	GEN	FP	FORT PECK POWERPLANT (COE)	64,611	-	(64,611)	0
307	GEN	FT BG 1	FORT THOMPSON-BIG BEND NO. 1	922,164	-	-	922,164
308	GEN	FT BG 2	FORT THOMPSON-BIG BEND NO. 2	690,735	-	-	690,735
309	**GEN Total**		**TRANSMISSION-RELATED GEN. FACILITIES**	**1,759,454**	**-**	**(146,555)**	**1,612,899**
310	COM	ATC	ATLANTIC COMMUNICATION SITE	58,086	-	(18,558)	39,527
311	COM	BK2	BAKER RELAY	278,673	-	(89,036)	189,637
312	COM	BTY	BANTRY	409,860	-	(130,950)	278,909
313	COM	BAE	BARRETT	99,835	-	(31,897)	67,937
314	COM	BMW	BATTLE MT. MICROWAVE	352,404	-	(112,593)	239,811
315	COM	BPR	BELLE PRAIRIE	257,179	-	(82,169)	175,010
316	COM	BET	BENEDICT	227,040	-	(72,539)	154,501
317	COM	BU	BEULAH	10,679	-	(3,412)	7,267
318	COM	BG	BIG BEND	113,362	-	(36,219)	77,143
319	COM	BJR	BIJOU REPEATER	517,974	-	(165,493)	352,482
320	COM	BAO	BILLINGS AREA OFFICE	175,877		(56,193)	119,684
321	COM	BDO	BISMARCK DIS. OFFICE	44,789		(14,310)	30,479
322	COM	BSR	BISMARCK REPEATER	426,667	-	(136,320)	290,347
323	COM	BIR	BISON REPEATER	232,618	-	(74,321)	158,296
324	COM	BON	BOLE NORTH REPEATER	149,228	-	(47,678)	101,550
325	COM	BRI	BRINSMADE	279,566	-	(89,321)	190,245
326	COM	BSL	BRISTOL	19,704	-	(6,296)	13,409
327	COM	BRV	BRUNSVILLE REPEATER	92,595	-	(29,584)	63,011
328	COM	BFF	BUFFALO	107,342	-	(34,296)	73,046
329	COM	CAH	CAHOON	280,480	-	(89,613)	190,867
330	COM	CAZ	CARRINGTON REPEATER	703,661	-	(224,820)	478,841
331	COM	CHK	CHARTER OAK REPEATER	37,034	-	(11,832)	25,201
332	COM	CHI F	CHINOOK (BEFP)	284,048	-	(90,753)	193,295
333	COM	CHR	CHINOOK REPEATER	17,797	-	(5,686)	12,111
334	COM	CKR	CLARK MW REPEATER	771,076	-	(246,359)	524,717
335	COM	CLV	CLEVELAND REPEATER, N.D.	66,872	-	(21,366)	45,507
336	COM	CMR	COLEMAN REPEATER	105,281	-	(33,637)	71,644
337	COM	CME	COLOME REPEATER	301,355	-	(96,283)	205,072
338	COM	CBR	CONRAD BUTTE REPEATER	809,166	-	(258,529)	550,638
339	COM	CNN	COTTON	1,399	-	(447)	952
340	COM	CSR	CRESTON REPEATER	64,775	-	(20,696)	44,079
341	COM	CLR	CROW LAKE REPEATER	251,029	-	(80,204)	170,825
342	COM	CBT	CROWN BUTTE	52,565	-	(16,795)	35,770
343	COM	CRR	CULBERTSON RADIO RELAY SITE	1,926	-	(615)	1,311
344	COM	CQR	CULBERTSON REPEATER	31,102	-	(9,937)	21,165
345	COM	CUL	CUSTER LOOKOUT	208,941	-	(66,757)	142,184
346	COM	DAL	DALTON (WES)	63,660	-	(20,339)	43,321
347	COM	DLC	DEVILS LAKE FIBER REGEN	347,320	-	(110,969)	236,351
348	COM	DLZ	DEVILS LAKE REPEATER	658,544	-	(210,405)	448,139
349	COM	DOD	DODSON REPEATER	874,144	-	(279,289)	594,855
350	COM	DO	DOGDEN BUTTE	399,032	-	(127,491)	271,541

351	COM	DRS	DRISCOLL	79,113	-	(25,277)	53,837
352	COM	DU	DUPREE REPEATER	1,821	-	(582)	1,239
353	COM	DUT	DUTTON REPEATER (BEFP)	147,653	-	(47,175)	100,478
354	COM	ERB	EAST RAINY BUTTE	209,857	-	(67,049)	142,808
355	COM	ECK	ECKELSON	240,324	-	(76,783)	163,540
356	COM	EKR	ELKTON	211,379	-	(67,536)	143,844
357	COM	ELZ	ELLENDALE REPEATER	814,135	-	(260,116)	554,019
358	COM	EWA	ELLSWORTH AIR BASE	219,052	-	(69,987)	149,065
359	COM	ERH	ERHARD	99,569	-	(31,812)	67,757
360	COM	EX	EXIRA REPEATER	2,527	-	(807)	1,720
361	COM	FB	F. L. BLAIR	101,254	-	(32,351)	68,904
362	COM	FAP	FAIRPOINT REPEATER	206,550	-	(65,993)	140,557
363	COM	FNR	FALLON REPEATER	211,743	-	(67,652)	144,091
364	COM	FAC	FARGO MICROWAVE	128,931		(41,194)	87,738
365	COM	FCS	FERGUS FALLS COMMUNICATIONS SITE	542,231	-	(173,243)	368,988
366	COM	FLW	FLOWING WELLS	68,763	-	(21,970)	46,793
367	COM	FBS	FORBES COMMUNICATION SITE	70,575	-	(22,549)	48,026
368	COM	FTH	FORSYTH	227,269	-	(72,613)	154,657
369	COM	FP1	FORT PECK RELAY (WES)	97,512	-	(31,155)	66,357
370	COM	FPC	FORT PECK COMMUNICATIONS BUILDING	423,029	-	(135,158)	287,871
371	COM	FPR	FORT PECK REPEATER	105,589	-	(33,736)	71,853
372	COM	FPI	FORT PIERRE POLE YARD	785,698		(251,031)	534,668
373	COM	FTR	FORT THOMPSON REPEATER	99,223	-	(31,702)	67,521
374	COM	FTP	FORT THOMPSON REPEATER (EAST RIVER)	301,614	-	(96,366)	205,248
375	COM	FCR	FOX CREEK MICROWAVE	423,094	-	(135,179)	287,915
376	COM	FRY	FRYBURG SUB & MICROWAVE	61,204	-	(19,555)	41,649
377	COM	GA	GARRISON	331,415	-	(105,887)	225,528
378	COM	GAD	GARRISON DAM	26,390		(8,432)	17,959
379	COM	GRR	GARY REPEATER	80,799	-	(25,815)	54,983
380	COM	GP	GAVIN'S POINT	148,752	-	(47,526)	101,226
381	COM	GPR	GAVINS POINT REPEATER	325,520	-	(104,004)	221,516
382	COM	GET	GETTYSBURG REPEATER	378,095	-	(120,801)	257,294
383	COM	GH	GLENHAM COMM SITE	391,618	-	(125,122)	266,496
384	COM	GKM	GRAND FORKS MINNKOTA (MPC)	23,847	-	(7,619)	16,228
385	COM	GWN	GWINNER COMMUNICATIONS SITE	736,184		(235,211)	500,974
386	COM	HSB	HAILSTONE BUTTE	189,434	-	(60,524)	128,910
387	COM	HOY	HALLOWAY REPEATER	109,706	-	(35,051)	74,655
388	COM	HRT	HARLEM REPEATER	882,588	-	(281,987)	600,601
389	COM	HTH	HATHAWAY	174,404	-	(55,722)	118,682
390	COM	HMW	HERMOSA MICROWAVE	302,701	-	(96,713)	205,988
391	COM	HMR	HIGHMORE REPEATER	157,601	-	(50,354)	107,248
392	COM	HIW	HIGHWOOD	22,896	-	(7,315)	15,581
393	COM	HI	HINSDALE	201,837	-	(64,487)	137,350
394	COM	HIR	HINSDALE REPEATER	85,068	-	(27,179)	57,889
395	COM	HOE	HOPEWELL REPEATER	189,111	-	(60,421)	128,690
396	COM	HNT	HUNTER MICROWAVE	229,259	-	(73,248)	156,011
397	COM	HUD	HURON DISTRICT OFFICE	800,964	-	(255,908)	545,056
398	COM	HYS	HYSHAM	238,655	-	(76,250)	162,405
399	COM	JTR	JAMESTOWN REPEATER	46,981	-	(15,011)	31,971
400	COM	JCK	JONES CREEK	267,395	-	(85,433)	181,962
401	COM	KCK	KELLY CREEK	371,812	-	(118,794)	253,018

402	COM	KDZ	KILLDEER REPEATER	543,500	-	(173,648)	369,852
403	COM	KNE	KNEE HILL MW	896,566	-	(286,453)	610,113
404	COM	LAC	LAC QUI PARLE	759,357	-	(242,615)	516,743
405	COM	LKR	LAKE ANDES REPEATER	735,971	-	(235,143)	500,828
406	COM	LEF	LEFOR	210,945	-	(67,397)	143,548
407	COM	LI	LINDSAY RIDGE	64,370	-	(20,566)	43,804
408	COM	LCS	LINTON COMMUNICATIONS SITE	317,736		(101,517)	216,219
409	COM	LMO	LITTLE MISSOURI SUBSTATION	54,516	-	(17,418)	37,098
410	COM	MRP	MALTA REPEATER	794,469	-	(253,833)	540,636
411	COM	MNM	MANDAN MICROWAVE SITE	69,988	-	(22,361)	47,627
412	COM	MPR	MAPLE RIVER	172,792	-	(55,207)	117,585
413	COM	MRR	MARTIN REPEATER	308,682	-	(98,624)	210,058
414	COM	MAV	MAYVILLE	215,450	-	(68,836)	146,613
415	COM	MLR	MIDLAND REPEATER	550,238	-	(175,801)	374,437
416	COM	MOX	MOE REPEATER	15,012	-	(4,796)	10,215
417	COM	MH	MOORHEAD	125,057	-	(39,956)	85,101
418	COM	MSR	MORRIS REPEATER & MICROWAVE	161,994	-	(51,757)	110,237
419	COM	NWC	NEWCASTLE REPEATER	216,330	-	(69,117)	147,213
420	COM	OA	OAHE	669,569	-	(213,927)	455,641
421	COM	OK	O'KREEK REPEATER	395,868	-	(126,480)	269,388
422	COM	OR	ORCHARD REPEATER	587,442	-	(187,688)	399,754
423	COM	OTO	OTO MICROWAVE	16,445	-	(5,254)	11,191
424	COM	OTW	OTTUMWA ROAD REPEATER SITE	7,685	-	(2,455)	5,229
425	COM	PGE	PAGE N.D.	1,646	-	(526)	1,120
426	COM	PAH	PAHOJA SUB	126,805	-	(40,514)	86,291
427	COM	PEK	PEAK	92,751	-	(29,634)	63,117
428	COM	PLJ	PHILIP JCT. REPEATER	421,394	-	(134,635)	286,759
429	COM	PKT	PICKERT MINNKOTA (MPC)	17,849	-	(5,703)	12,147
430	COM	PIR	PINE RIDGE	315,256	-	(100,724)	214,532
431	COM	PO	POPLAR (MDU)	433,502	-	(138,504)	294,998
432	COM	PRR	PRIMGHAR REPEATER	37,178	-	(11,878)	25,299
433	COM	PUR	PUKWANNA REPEATER	4,772	-	(1,525)	3,247
434	COM	RCR	RAPID CITY REPEATER	419,355	-	(133,984)	285,371
435	COM	RE	RICHARDSON COULEE	161,748	-	(51,679)	110,070
436	COM	RER	RICHARDSON COULEE REPEATER	166,315	-	(53,138)	113,177
437	COM	RHM	RICHLAND MW REPEATER (BEPS)	235,573	-	(75,266)	160,307
438	COM	RRR	ROCKY RIDGE REPEATER	201,973	-	(64,530)	137,443
439	COM	ROG	ROLLAG	83,270	-	(26,605)	56,665
440	COM	RGZ	RUGBY REPEATER	822,053	-	(262,646)	559,407
441	COM	RI	RUTLAND	1,122,799	-	(358,734)	764,064
442	COM	RP	ROUNDUP	11,533		(3,685)	7,848
443	COM	SAO	SACO	1,237	-	(395)	842
444	COM	SNB	SENTINEL BUTTE	92,148	-	(29,441)	62,707
445	COM	SRE	SHEEP COULEE REPEATER	861,856	-	(275,363)	586,493
446	COM	SCQ	SIOUX CITY REPEATER	443,199	-	(141,602)	301,597
447	COM	SFR	SIOUX FALLS REPEATER	329,860	-	(105,390)	224,469
448	COM	SI	SIOUX PASS	1,366	-	(436)	930
449	COM	SNA	SNAKE BUTTE REPEATER	541,759	-	(173,092)	368,667
450	COM	SPN	SPALDING REPEATER	534,311	-	(170,712)	363,599
451	COM	SM	SPIRIT MOUND	295,982	-	(94,566)	201,416
452	COM	STR	STRASBERG	1,853	-	(592)	1,261

453	COM	SMR	SUMMIT REPEATER	50,053	-	(15,992)	34,061
454	COM	TCS	TAPPEN COMMUNICATION SITE	510,520	-	(163,111)	347,409
455	COM	TA	TAPPEN REPEATER	461,151	-	(147,338)	313,813
456	COM	TEN	TENNANT COMMUNICATIONS SITE	8,782	-	(2,806)	5,976
457	COM	TOR	TORONTO REPEATER	106,096	-	(33,898)	72,198
458	COM	TFR	TRIPP REPEATER	216,887	-	(69,295)	147,592
459	COM	TU	TURKEY RIDGE REPEATER	628,990	-	(200,962)	428,028
460	COM	TYE	TYLER REPEATER	1,168,081	-	(373,202)	794,879
461	COM	VIC	VICTOR (EREC)	228,059	-	(72,865)	155,194
462	COM	VIA	VIDA	102,031	-	(32,599)	69,432
463	COM	WLR	WALL REPEATER	579,363	-	(185,107)	394,257
464	COM	WTR	WATERTOWN REPEATER	729,389	-	(233,040)	496,349
465	COM	WS	WAYSIDE	37,023	-	(11,829)	25,194
466	COM	WSR	WESSINGTON SPGS. REPEATER	703,268	-	(224,694)	478,574
467	COM	WEF	WESTFIELD	25,198	-	(8,051)	17,147
468	COM	WSW	WHITE SWAN	91,987	-	(29,390)	62,597
469	COM	WK	WHITLOCK	21,500		(6,869)	14,631
470	COM	WK C	WHITLOCK (BCPS)	117,922	-	(37,676)	80,246
471	COM	WRP	WILLISTON REPEATER	36,499		(11,662)	24,838
472	COM	WOB	WOLBACH REPEATER	28,280	-	(9,035)	19,244
473	COM	YT P	YELLOWTAIL SWITCHYARD (BEPS)	318,585	-	(101,788)	216,797
474	**COM Total**		**COMMUNICATION FACILITIES**	**44,616,415**	**-**	**(14,254,945)**	**30,361,470**
475	MCCS	MC4	MILES CITY CONVERTER STATION - BEPS	19,890,752	-	-	19,890,752
476	MCCS	MC4	MILES CITY CONVERTER STATION - BEFP	3,771,807	-	-	3,771,807
477	**MCCS Total**		**MILES CITY CONVERTER STATION**	**23,662,558**	**-**	**-**	**23,662,558**
478	DIST	BFTBP	BUFORD TRENTON TAP - BUFORD TRENTON P.P.	650,001	(650,001)	-	0
479	DIST	BP	BUFORD TRENTON PUMP SUB	184,827	(184,827)	-	0
480	DIST	FN	FALLON PUMPING PLANT SUB	223,594	(223,594)	-	0
481	DIST	FE	FALLON RELIFT PUMPING PLANT	171,257	(171,257)	-	0
482	DIST	FN GG	FALLON-GLENDIVE PUMP #4	25,506	(25,506)	-	0
483	DIST	FP WP	FORT PECK-WOLF POINT	545,880	(391,368)	-	154,512
484	DIST	FG	FRAZER PUMP SUB	253,597	(253,597)	-	0
485	DIST	GA SK	GARRISON-SNAKE CREEK	1,079,092	(1,079,092)	-	0
486	DIST	GG	GLENDIVE P.P. #1 SUB	425,706	(425,706)	-	0
487	DIST	IN	INTAKE SUBSTATION	108,040	(108,040)	-	0
488	DIST	IN INP	INTAKE-INTAKE PUMP	6,494	(6,494)	-	0
489	DIST	SV	SAVAGE PUMPING PLANT SUB	102,283	(102,283)	-	0
490	DIST	SY	SHIRLEY PUMP SUBSTATION	1,237,730	(1,237,730)	-	0
491	DIST	SK	SNAKE CREEK PUMP SUBSTATION	920,941	(920,941)	-	0
492	DIST	TE	TERRY PUMPING PLANT SWITCH	474,404	(474,404)	-	0
493	DIST	TI	TIBER DAM SUBSTATION	681,602	(681,602)	-	(0)
494	DIST	VA	WIOTA SUBSTATION	216,163	(216,163)	-	0
495	**DIST Total**		**DISTRIBUTION FACILITIES**	**7,307,117**	**(7,152,605)**	**-**	**154,511**
496	RMR	NU SG J	NEW UNDERWOOD-STEGALL	287,835	-	-	287,835
497	RMR	SG	STEGALL SUBSTATION	12,414,413	(12,111,804)	-	302,609
498	RMR	SG	STEGALL SUBSTATION	220,814	(220,814)		0
499	RMR	SG WS	STEGALL-WAYSIDE	2,978,205	-	-	2,978,205
500	RMR	WS	WAYSIDE	237,296			237,296
501	RMR	YT PY	YELLOWTAIL SWITCHYARD-YELLOWTAIL (PPL)	121,495	(91,121)		30,374
502	RMR	PY	YELLOWTAIL (PPL)	692,335	(519,251)		173,084

503	RMR	YT P	YELLOWTAIL SWITCHYARD	13,290,836	(9,968,127)			3,322,709
504	RMR	YT	YELLOWTAIL SWITCHYARD (YT)	33,085	(24,814)			8,271
505	**RMR Total**		**ROCKY MOUNTAIN REGION FACILITIES**	**30,276,314**	**(22,935,931)**	**-**	**-**	**7,340,383**
506	COE		BIG BEND	2,370,873	(1,772,523)			598,349
507	COE		FORT PECK	16,421,523	(11,212,794)			5,208,728
508	COE		FORT RANDALL	25,829,317	(6,265,802)			19,563,515
509	COE		GARRISON	55,665,574	(14,103,135)			41,562,439
510	COE		GAVINS POINT	9,392,149	(7,097,567)			2,294,582
511	COE		OAHE	21,797,122	(1,824,651)			19,972,471
512	**COE Total**		**CORPS OF ENGINEERS FACILITIES**	**131,476,558**	**(42,276,473)**	**-**		**89,200,085**
513	**Grand Total**		**TOTAL FACILITIES**	**1,709,775,362**	**(120,162,169)**	**(14,401,500)**	**(9,976,714)**	**1,565,234,980**
514			SUBTOTAL WESTERN-UGP ONLY	1,548,022,490	(54,949,765)	14,401,500	9,976,714	1,468,694,512
515	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)							
516	2/ Plant balance does not include facilities included in Zonal and Regional Worksheet, WS7-BPUFac							
517			DISTRIBUTION FACILITIES		97,226,238			1,561,463,246

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)
Worksheet 9 - WAPA-UGP Facilities Included per SPP Tariff Attachment AI*
12 Months Ending 09/30/2022 True-up

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
				Attachment AI Criteria							
Line No.	FID	Facility	Specific Plant Included	1	1(b)	2	3	4	5	6	Further Description
		Substations									
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 952, 1162, 1266, 1462, 1466, 1562,1662,1666, 1762, 1766 and	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 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	CQE	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, 2552, 2652, 2754, 2952, 5152 and assoc. switches	x							
88			capacitors PZ27A, PZ22A	x							
89			reactors KZ27A, KZ22A	x							
90			station service KW30B, KW20C and assoc. switches	x							

91	DL	Devils Lake	115-kV breakers 1162, 1266, 1362, 1462, 1564, 1664, 1762, 1882 and assoc. switches	x							
92			50 percent of 115/41.8-kV transformer KY14A	x							capacitors and maintenance building
93			41.8-kV breaker 244 and assoc. switches	x							
94			capacitors PY15A, PY16A, PX2A and assoc. switches	x							
95			station service KX3A and KW4A and assoc. switches	x							
96			transformers KX3B, KW4B and assoc. switches	x							warehouse and maintenance buildings
97	EB	Eagle Butte	115-kV breakers 162, 362 and assoc. switches / switch 763	x							
98			Station Service KW1A	x							
99	ED	Edgeley	115-kV breakers 462, 562, 662, 762 and assoc. switches	x							
100			115/69-kV transformer KY6A	x							
101			69-kV breaker 1352 and assoc. switches	x							
102			capacitor KW31A, breaker 3124 and assoc. switches	x							
103	ELC	Elk Creek	115-kV breakers 1162, 1262, 1462 and assoc switches	x							
104			station service KY22A, switches 2261, 2221	x							
105	ELI	Elliot	115-kV breakers 262, 362, 462 and assoc switches	x							
106	END	Enderlin Tap	115-kV switches 176x, 196x	x							
107	EXI	Exira	161-kV breakers 162, 166, 262, 362, 366, 462, 562, 662 and assoc. switches	x							
108			station service KHA	x							
109	FVW	Fairview West	115-kV breakers 162, 262, 362, 462 and assoc. switches	x							
110			transformer KY20A for station service, switches 2011, 2061	x							
111	FH	Faith	115-kV switches 16x and 26x	x							
112	FA	Fargo	230-kV breakers 182, 282, 382, 582, 682, 782, 882, 9182 and assoc. switches	x							
113			115-kV breakers 1162, 1262, 1362, 1462, 1662, 1862, 1962, 2362, 2462, 2764, 2864, 2964 and asscoc switches	x							
114			115-kV switch 5461	x							
115			capacitors PY14A, PY14B, PY14C	x							
116			230/115-kV transformers KV1A, KV2A	x							
117			115/69-kV transformers KY3A and KY3B			x					to Minnkota
118			69-kV breakers 3552, 3652 and assoc switches			x					to Minnkota
119			69-kV switches 315x, 335x, 345x			x					to Minnkota
120			station service KY4A, KSB, KSA, switches 5447, 552x	x							
121			13.2-kV breakers 4122, 4322, 4622, 4722, 4822 and assoc. switches	x							
122			reactors KW6A, KW7A, KW8A	x							
123			SVC and associated equipment	x							
124	FL	Flandreau	115-kV breakers 1162, 1262, 1362, 1662 and assoc. switches	x							
125			capacitor PY3A	x							
126			station service KZ1A, KW1C switches 302x, 205x, 401x	x							
127			115/69-kV transformer KY1A		x						One East River member, two municipal customers and Basin generation served through KY1A (Sioux Valley Energy, City of Colman, and City of Madison)
128			69-kV breaker 2152, 2252 and assoc. switches		x						One East River member, two municipal customers and Basin generation served through 2152 (Sioux Valley Energy, City of Colman, and City of Madison)
129	FO	Forman	115-kV breakers 1162, 1362, 1462, 1562, 1764 and assoc switches	x							
130			capacitor PY7A	x							
131			station service KW9A, switches 92x	x							
132			115/69-kV transformer KY1A, switches 126x	x							
133			69-kV breakers 152, 252, 452 and assoc. switches	x							
134			69-kV switches 353, 355	x							
135	FT	Fort Thompson	230-kV breakers 582, 586, 682, 782, 786, 882, 1182, 1186, 1282, 1382, 1386, 1482, 1582, 1586, 1682, 1782, 1786, 1882, 2382, 2386, 2482 and assoc. switches	x							
136			230-kV switches 181, 281, 381, 2583, 2683	x							
137			230/69-kV transformers KV1B, KV1A	x							
138			13.8-kV switches 121, 221, 253, 153, 6323, 6321, 6022, 3121, 3221	x							
139			station service KW1A, KW1B and assoc switches	x							
140			69-kV breakers 4352	x							
141	FT2	Fort Thompson 2	345-kV breakers 3392, 3396 and assoc. switches	x							
142			reactor KU4A, switch 3991	x							
143			345/230-kV transformers KU1A, KU1B and 345-kV switches 2391, 2491	x							
144			reactors KW2A, KW2B, breakers 6422, 6822 and assoc. switches	x							
145			capacitor PW2A	x							
146			reactor KW3A, breaker 6522 and assoc. switches	x							
147			capacitor PW3A	x							
148			station service KW1D, KW1C, switches 662x, 6611, 6311, 632x	x							
149	GL	Glendive	115-kV switch 362	x							
150			115/57-kV transformer KY1A		x						2 customers - MDU and Lower Yellowstone
151			57-kV breaker 342 and assoc. switches		x						2 customers - MDU and Lower Yellowstone
152	GK	Grand Forks	230-kV breakers 286, 382, 486 and associated switches / switches 183 and 580	x							
153			230/115-kV transformer KV1A	x							
154			reactor KW43A, breaker 4324 and assoc. switches	x							
155			station service KW41A, KW42A and associated switches	x							
156			115-kV breakers 1462, 1562, 1662, 1862, 1962 and assoc. switches	x							
157			115/69-kV transformer KY2B, switch 3261 and 3259	x							
158			69-kV breakers 2252, 2352, 2452, 2552 and assoc. switches / switches 2151, 2153			x					2452 to MPC, 2552 to NSP
159			capacitors PZ3A, PZ3B, switches 335x, 345x	x							
160	GI	Grand Island	345-kV breakers 1092, 1192, 1196, 1292, 1596, 1592, 1692, 1796 and assoc. switches	x							
161			reactor KU4A, switch 1098	x							
162			reactors KW1B, KW1A, breakers 5122, 5022 and assoc. switches	x							
163			345/230-kV transformers KU1A, KU1B and switch 293	x							
164			reactors KW2A, breakers 6022 and assoc. switches	x							
165			station service KHA, KHB and assoc switches	x							
166	GRP	Grande Prairie	345-kV breakers 196, 292, 396, 298, 198 and assoc. switches	x							
167			reactors KU1A and KU2A	x							
168	GF	Granite Falls	230-kV breakers 184, 282, 382, 486, 582, 682, 782, 882, 1082, 1184, 9182 and assoc. switches	x							
169			capacitors PV1A, PV11A	x							
170			reactors KV1A, KV11A	x							
171			230/115-kV transformers KV3A, KV8A	x							
172			reactors KW3A, KW54A, KW55A, KW56A, KW57A	x							
173			13.8-kV breakers 5424, 5524, 5624, 5724 with assoc. switches and switches 5121, 5123	x							
174			115-kV breakers 2062, 2262, 2366, 2762, 2862, 3162, 8162 and assoc. switches	x							
175			115-kV switches 246x, 296x	x							
176			capacitors PY25A, PY26A, breakers 2564, 2664 and assoc. switches	x							
177			reactors KY25A, KY26A	x							
178			station service KW50A, KW51A and assoc switches	x							
179	GTF	Great Falls	230-kV breakers 230/99, 230/100, 230/22, 230/23 and assoc. switches			x					in NWMT Great Falls Sub
180			230/161-kV transformer KV1A	x							
181			161-kV breaker 162 and assoc switchers	x							
182			station service KW1A and switch 221	x							
183	GY	Gregory	115-kV breakers 162, 262, 762 and assoc. switches	x							
184	GR	Groton	station service KW1A and switch 521	x							
185			115-kV breakers 262, 362, 462, 562, 862, 966 and assoc. switches / switches 16x	x							862 due to Groton Synch Condensor

186			115-kV switches 16x, 126x	x							
187			115/69-kV transformer KY1A		x						Two East River members served through KY1A (Lake Region, Northern)
188			station service KZ1A and KW2A	x							
189			115/69-kV transformer KY2A	x							NWPS line is networked and included
190			69-kV breakers 1152 and 1352 and assoc. switches	x							East River 2 customers
191	GSO	Groton South	115-kV breakers 1162, 1262, 1266, 1362, 1462, 1466, 1562, 1662, 1666, 2062, 2066 and assoc. switches	x							
192			station service KW4A	x							
193	HV	Havre	161-kV breakers 162, 262, 362 and assoc. switches	x							
194			115-kV breaker 1362, 1462, 1562, 1662 and assoc. switches		x						Hill County Coop and Tiber LLC
195			161/115-kV transformer KZ1A	x							
196			12.47-kv breaker 522 and assoc switches	x							
197			reactor KW1A	x							
198			station service KW1E, KW2A, switches 921, 221, 223	x							
199	HBN	Hebron	230-kV breakers 586, 682, 882, 986 and assoc switches	x							
200	HLK	Hilken	230-kV breakers 186, 386, 482 and assoc. switches	x							
201	HU	Huron	230-kV breakers 582, 586, 782, 786, 882 and assoc. switches, switches 181, 281	x							
202			230/115-kV transformers KV1A, KV1B	x							
203			reactors KW1A, KW3A, breakers 132, 332 and assoc. switches	x							
204			station service KW1C, KW1D and assoc. switches	x							
205			115-kV breakers 1062, 1162, 1362, 1962 and assoc. switches, switches 126x, 1761	x							
206	JT	Jamestown	230-kV breakers 3182, 3282, 3382, 3482, 3582, 3682, 3782, 3882, 3982, 9182 and assoc switches	x							
207			115-kV breakers 162, 262, 362, 462, 562, 762, 1864, 1964, 2064 and assoc switches	x							not 662 - to OTP N.O.
208			capacitors PY20A, PY19A	x							
209			reactors KY20A, KY19A, KY7A	x							
210			230/115-kV transformers KU3A, KU6A	x							
211			reactor KW21A, breaker 2122 and assoc. switches	x							
212			station service KWA, KWB switches 222x, 232x	x							
213			station service KW4B, wiches 242x, 252x 302x	x							
214			reactor KW26A, breaker 2622 and assoc. switches	x							
215	KD	Killdeer	115-kV breakers 162, 166, 366, 462 and assoc. switches	x							
216			Capacitor PY2A, 115-kV breaker 264 and assoc. switches	x							
217			station service KY1A, switch 3163, KX3A and assoc. switches	x							
218	LA	Lakota	115-kV breaker 162 and assoc switches	x							
219			station service KW1A, switches 825, 921	x							
220	LE	Leeds	115-kV breakers 262, 362, 462, 562 and assoc. switches	x							
221			capacitor PZ4A, breaker 744 and assoc. switches	x							
222			115/69-kV transformer KY1A, switches 161, 162	x							
223			69-kV breakers 444, 544 and assoc switches / switch 143	x							
224			station service KW3B and switch 1021	x							
225	LET	Letcher	230-kV breakers 382, 582, 686 and assoc. switches	x							NWPS line to Mitchell is Networked
226			230/115-kV transformer KV3A	x							
227			115-kV breakers 1266, 1362, 1562 and assoc. switches	x							
228			station service KW3B and assoc switches	x							
229	MR	Martin	115-kV breakers 2262, 2466, 2362, 2562 and assoc. switches	x							
230			station service KW18A and switches 1821, 1823	x							
231	MA	Maurine	230-kV breakers 182, 282, 582 and assoc. switches	x							
232			230/115-kV transformer KV1A	x							
233			115-kV breakers 1362, 1462, 1562, 1662, 1964, 2064 and assoc switches	x							
234			capacitors PY19A, PY20A	x							
235			reactors KY19A, KY20A	x							
236			reactor KW32A, breaker 3224 and assoc switches	x							
237			station service KW30A, KW31A and assoc switches	x							
238	MD	Midland	115-kV switches 16x and 26x / switch 361	x							
239			station service KW20A, switches 2031, 2011, 3011	x							
240	MC	Miles City	57-kV breaker 152 and assoc. switches		x	x					2 customers (MDU, Kinsey Irrigation)
241	MC2	Miles City 2	230-kV breakers 382, 386, 482, 582 and assoc. switches and switch 783	x							
242			230/115-kV transformer KV1A	x							
243			115-kV breakers 1262, 1362, 1462, 1662 and assoc. switches, switches 1161 and 1165	x							
244			reactor KW7A, breaker 724 and assoc switches	x							
245			capacitor KPY5A, breaker 1562 and assoc. switches	x							
246			station service K2, K1 and assoc switches	x							
247			13.8-kV SS to Miles City DC Converter Station	x							
248	MC3	Miles City 3	All Facilities and Equipment	x							
249	MGV	Mingusville	230-kV breakers 182, 282, 382 and assoc. switches, and line disconnects	x							
250			station service transformer KV10A and station service equipment	x							
251	MS	Mission	115-kV breakers 162, 262, 462 and assoc. switches, switches 863, 865	x							
252			reactors KY30A, KY31A, KY7A	x							
253			capacitors PY30A, PY31A	x							
254			115-kV breakers 764, 3064, 3164 and assoc. switches	x							
255			station service KX2A, KX1A and switches 243x, 253x	x							
256	MO	Morris	230-kV breakers 182, 382, 482, 582 and assoc switches	x							
257			230/115-kV transformer KV1A	x							
258			115-kV breakers 1162, 1462, 1562, 1762 and assoc switches	x							
259			station service KW1B and switches 512x	x							
260	MV	Mount Vernon	115-kV breakers 162, 262, 662 and assoc switches	x							
261			station service KZ1A and assoc switches	x							
262			115/69 kV transformer KY1A		x						One East River member and one municipal customer served through KY1A and East River 1952 (Central and City of Plankinton)
263	NEL	Nelson Tap	115-kV switches 176x, 196x	x							
264	NU	New Underwood	230-kV breakers 282, 382, 384, 484, 582, 682, 782, 882, 986, 9182, 9282 and assoc switches	x							
265			reactor KV3A, KV4A	x							
266			230/115-kV transformers KV2A, KV1A	x							
267			115-kV breakers 1262, 1362, 1462, 1562, 1662, 1866, 8162, 8262 and assoc switches	x							
268			13.8-kV breaker 4522, 4022, 4122, 4222 and assoc switches	x							
269			reactor KW45A, KW40A, KW41A, KW42A	x							
270			station service KW1A, KW1B and assoc switches	x							
271	NL	Newell	115-kV breakers 1162, 1362 and assoc switches and switch 1262	x							
272			115/69-kV transformer KY1A		x						2 customers: Butte Electric and West River
273			Station Service KW1A and assoc equipment	x							
274	OF	O'Fallon Creek	115-kV breakers 162, 262, 362 and assoc switches	x							
275			115/69-kV transformer KY1A		x						2 customers: Buffalo Rapids Irrigation and Tongue River Electric
276			69kV breaker 452 and assoc switches		x						2 customers: Buffalo Rapids Irrigation and Tongue River Electric
277			Station Service KW1B	x							
278	PY	Pace Yellowtail	230-kV breakers IH278, IH296 and assoc switches	x							
279	PL	Philip	115-kV breakers 1462, 1562, 1762, 1862 and assoc switches	x							
280			station service KW32A, KW31A and assoc switches	x							
281	PI	Pierre	115-kV breakers 162, 362, 662, 862 and assoc switches	x							
282			115-kV switches 563, 565, 761	x							
283			station service KW1A, KW2A, KW1B, switches 271x, 281x, 302x	x							

284			69kV breaker 1252 and assoc breakers		x						One East River member and two irrigation districts served through KY2A and 1252 (Oahe, Grey Goose Irrigation and Crow Creek Irrigation)
285			Station Service KW1D, KW1E, KW1F and assoc switches	x							
286	RC	Rapid City	115-kV breakers 162, 262, 362, 462, 562, 664, 766, 862, 2164 and assoc switches	x							
287			reactors KY10A, KY21A	x							
288			capacitors PY6A, PY21A	x							
289			station service KW20A, KW43A KW42A, switches 202x, 422x, 432x, 431x	x							
290	RCO	Roberts County	115-kV breakers 2162, 2262, 2362 and assoc. switches	x							
291			69-kV breakers 5152, 5252, 5456, 5652 and assoc. switches	x							
292			station service KY21A	x							
293	RL	Rolla	115-kV breaker 1162 and assoc switches	x							
294	RY	Rudyard	115-kV switches 260, 261, 160, 161	x							
295			station service KW1A, switches 521, 523	x							
296	RG	Rugby	115-kV breakers 1262, 1362, 1462, 1566, 1662, 1762, 1864, 1966 and assoc switches	x							
297			capacitor PY8A	x							
298			reactor KY2A	x							
299			Station Service KX2A, KW1A and assoc. switches and equipment	x							
300	SH2	Shelby 2	115-kV breakers 1062, 1362, 1462 and assoc. switches, switches 1263, 1265	x							
301			230/115-kV transformer KV3A	x							
302			reactor KW3A, breaker 3124 and assoc switches	x							
303			station service KW2A and assoc. switches	x							
304			230-kV breakers 482, switches 481, 383, 281, 183	x							
305	SC	Sioux City	230-kV breakers 182, 282, 382, 482, 582, 682, 9182 and assoc switches, switch 7283	x							
306			230/161-kV transformers KV1A and KV5A	x							
307			161-kV breakers 1062, 1162, 1262, 1362, 1562, 1662, 8162	x							
308			reactors KW53A, KW54A, breakers 5324, 5424 and assoc switches	x							
309			station service KW1B, KW1C, switches 502x, 512x, 522x	x							
310			69-kV breakers 2156, 2352, 2852, 2952, 3052, 3152 and assoc switches	x	x						to NIPCO (looped) and MEC
311	SC2	Sioux City 2	345-kV breakers 8498, 8592, 8692, 8696 and assoc switches	x							
312			reactor KU6A	x							
313			345/230-kV transformers KU1A, KU1B, switches 8091, 8081, 8291, 8281	x							
314			230-kV breakers 7382, 7482 and assoc switches	x							
315			reactors KW10A, KW10B, breakers 5522, 5622 and assoc switches	x							
316			station service K1, K2 and assoc switches	x							
317	SF	Sioux Falls	230-kV breakers 2182, 2282, 2382, 2482, 2582, 2682, 2782, 9182 and assoc switches	x							
318			230/115-kV transformers KV3A, KV5A	x							
319			reactors KW31A, KW51A	x							
320			breakers 3124, 5124 and assoc switches	x							
321			station service KW33A, KW53A, KZ1A, switches 33xx, 53xx, 1851	x							
322			115-kV breakers 162, 262, 362, 462, 562, 662, 762, 966, 7162 and assoc switches	x							
323	SP	Spencer	161-kV breakers 162,462,562, 662 and assoc switches	x							
324			Reactor PY6A	x							
325			161/69-kV transformer KY1A	x							
326			69-kV breakers 1142, 1242, 1342, 1442, 1542 and assoc switches	x	x						to NIPCO and Wisdom Sub
327			station service KW10A and assoc switches	x							
328	SG	Stegall	230 kV main and transfer bus, breaker 382 and assoc switches	x							
329			Reactor KV3A, breaker 384 and assoc. switches	x							
330	SUH	Sulpher	115-kV breakers 162, 362, 462, and assoc switches	x							
331			station service KY31A1 and switch 3161	x							
332	SU	Summit	115-kV breakers 262, 362, 462, 562, 762, and assoc switches , switch 163	x							
333			station service KZ1A, switch 1351	x							
334			115/69 kV transformer KY1A		x						Four East River members served through KY1A (Whetstone, Lake Region, Traverse, and Codington-Clark)
335			69 kV breaker 1152 and assoc. switches		x						Three East River members served through 1152 (Whetstone, Lake Region, and Traverse)
336	TI	Tiber	115-kV switches 1260, 1261		x						2 customers (generator and Marias)
337	TN	Towner	115-kV breakers 2166, 2262, 2362, 2366 and assoc switches	x							
338			station service KY1A1	x							
339	TY	Tyndall	115-kV switches 16x, 26x, 361	x							
340			Station Service KZ1A and switches 351 and 751	x							
341	UJ	Utica Junction	230-kV breakers 282, 286, 382, 482, 486, 582, 682, 686 and assoc switches	x							
342			230/115-kV transformer KV3A	x							
343			115-kV breakers 1266, 1362, 1562, 1762 and assoc switches	x							
344			station service KW3A and assoc switches	x							
345	VC	Valley City	115-kV 162, 262, 362, 462, 562 and assoc switches	x							
346			115/69-kV transformer KY1A		x	x					2 customers (Minnkota Power and City of Valley City)
347			station service KW2A and switch 321	x							
348	VFO	Virgil Fodness	230-kV breakers 382, 386, 482, 486 and assoc switches	x							
349			230-kV switches 185 and 283	x							
350	VH	VT Hanlon	230-kV breakers 382, 482, 582, 682, 686 and assoc switches	x							
351			Reactor KW70A and breaker 7024	x							
352			69-kV breaker 5053 and assoc switch	x							
353			station service KW60A, KW24A, breaker 7423 and assoc switches	x							
354	WL	Wall	115-kV switches 16x, 26x, 36x, 461	x							
355			station service KW1B, switch 821	x							
356		Wanblee Tap	115-kV interrupters 162 and 262 and assoc. switches	x							Zero costs, customer funded
357	WDD	Ward	230-kV breakers 182, 282, 286 and assoc switches	x							
358			new 230-kV breaker in ring bus	x							Zero costs, customer funded
359	WB	Washburn	230-kV switches 18x, 28x	x							
360			station service KX3A, KW9A and assoc switches	x							
361	WT	Watertown	230-kV breakers 182, 282, 382, 482, 582, 682, 882, 984, 1082, 1182, 9182 and assoc switches	x							
362			reactor KV9A	x							
363			capacitor PV9A	x							
364			230/115-kV transformers KV2A, KV8A	x							
365			115-kV breakers 862, 1162, 1262, 1362, 1562, 1762, 1862, 1962, 8162 and assoc switches	x	x						1762 - two customers MRES and NorthWestern Energy
366			station service KY3A, KHA, KHB, K1, K2 and assoc switches	x							
367			reactor KW1A, breaker 3122 and assoc switches	x							
368			13.2-kV switches 372x, 362x, 82x	x							
369			115/69 kV transformer KY3A		x						Two East River members are served through KY3A (Codington-Clark and H-D)
370			69 kV breaker 2752 and assoc switches		x						Two East River members served through 2752 (Codington-Clark and H-D)
371	WT2	Watertown 2	345-kV breakers 7296, 7292, 7398 and assoc switches	x							
372			reactor KU3A	x							
373	WTS	Watertown Static Var	All Facilities and Equipment	x							
374	WC	Watford City	230-kV breakers 682, 782, 882, 982 and assoc switches	x							
375			230-kV switches 282, 283, 182, 183	x							
376			station service KW1B, switches 121, 123	x							
377			reactor KY16A, switches 166x	x							
378			capacitor PY16A	x							
379			115-kV breakers 1262, 1362 and assoc switches	x							

380			reactor KY17A, switches 176x	x							
381			capacitor PY17A	x							
382	WSG	Wessington Springs	230-kV breakers 586, 682, 786, 882 and assoc switches	x							
383			Station Service	x							
384	WH	Whately	69 kV switches 151, 351	x							
385	WHT	White	345-kV breakers 292, 296, 392, 396, 492, 496, 592, 596 and assoc switches	x							
386			115-kV breakers 2262, 2362, and assoc switches	x							
387			345/115-kV transformer KU1A, switches 2163, 2165	x							
388			station service KWA, KWB switches 312x, 3311, 3511	x							
389			reactor KW32A, breaker 3224 and assoc switches	x							
390			Neutral blocking device	x							
391	WV	Wicksville	115-kV breakers 162, 262, and assoc switches / switch 361	x							
392	WN	Williston	115-kV breakers 1262, 1362, 1462, 1562, 1662, 1762, 1866 and assoc switches	x							
393			115/57-kV transformers KY4B, switches 2465, 2469			x					to MDU
394			57-kV breakers 3152, 3252, 3352, 3452 and assoc switches			x					to MDU
395	WN2	Williston 2	230-kV breakers 182, 286, 382, 482, 486, 582, 686 and assoc switches	x							
396			115-kV breakers 2162, 2266, 2362, 2466, 2562, 2662, 2666 and assoc switches	x							
397			Reactors KW1C and KW2C, breakers 1224 and 2224 and switches 1223 and 2223	x							
398			station service KW1B, KW2B and assoc switches	x							
399	WI	Winner	115-kV breakers 162, 362, 462, 1062 and assoc switches / switches 661, 761	x							
400			reactor KY10A	x							
401			capacitor PY10A, PY11A, switches 1160, 1161	x							
402	WP	Wolf Point	115-kV breakers 1362, 1562, 1662, 1762, 1862 and assoc switches/switches 1963, 1965	x							
403			station service KW1A	x							
404	WO	Woonsocket	115-kV breakers 162, 262 and assoc switches/ switches 361 and 861	x							
405			station service KX1A, KW1B and assoc switches	x							
406											
407		**Transmission Lines**									
408		AURORA- BROOKINGS 115-KV T/L		x							
409		AURORA-FLANDREAU 115-KV T/L		x							
410		BAKER-HETTINGER		x							
411		BEULAH-GARRISON		x							
412		BISMARCK-GLENHAM		x							
413		BISMARCK-JAMESTOWN NO. 1		x							
414		BISMARCK-JAMESTOWN NO. 2		x							
415		BISMARCK-MEDORA		x							
416		BROOKINGS-SIOUX FALLS		x							
417		BROOKINGS-WATERTOWN NO. 1		x							
418		BROOKINGS-WATERTOWN NO. 2		x							
419		BROOKINGS-WHITE 115/230KV		x							
420		CANYON FERRY - EAST HELENA A		x							
421		CARRINGTON-JAMESTOWN		x							
422		CHARLIE CREEK - WATFORD CITY		x							
423		CHARLIE CREEK-BELFIELD		x							
424		CHARLIE CREEK - BEULAH		x							
425		CONRAD-SHELBY #2	230-kV	x							
426		CRESTON-MARYVILLE		x							
427		DAWSON COUNTY - MILES CITY		x							
428		DAWSON-GLENDIVE		x							
429		DAWSON-MEDORA		x							
430		DAWSON-O'FALLON CREEK		x							
431		DAWSON-WILLISTON		x							
432		DENISON-CRESTON		x							
433		DEVILS LAKE-CARRINGTON		x							
434		DEVILS LAKE-LAKOTA		x							
435		EDGELEY-FORMAN		x							
436		EDGELEY-GROTON		x							
437		ELK CREEK-NEWELL-MAURINE 115-kV T/L		x							
438		FARGO-GRAND FORKS		x							
439		FARGO-MORRIS		x							
440		FORMAN-SUMMIT (BISMARCK)		x							
441		FORMAN-SUMMIT (HURON)		x							
442		FORT PECK-DAWSON #1		x							
443		FORT PECK-DAWSON #2		x							
444		FORT PECK-HAVRE	161-kV	x							
445		FORT PECK-WHATELY	69-kV	x							
446		FORT PECK-WILLISTON		x							
447		FORT PECK-WOLF POINT #2		x							
448		FORT RANDALL-FORT THOMPSON 1&2		x							
449		FORT RANDALL-GAVIN'S POINT		x							
450		FORT RANDALL-GREGORY		x							
451		FORT RANDALL-MT VERNON		x							
452		FORT RANDALL-O'NEILL		x							
453		FORT RANDALL-SIOUX CITY 1&2		x							
454		FORT THOMPSON-GRAND ISLAND		x							
455		FORT THOMPSON-HURON 230-KV 1&2		x							
456		FORT THOMPSON-SIOUX FALLS 1&2		x							
457		GARRISON-BISMARCK 230KV 1&2		x							
458		GARRISON-JAMESTOWN		x							
459		GARRISON-MALLARD		x							
460		GARRISON-WM. J. NEAL		x							
461		GAVINS POINT-BELDEN		x							
462		GAVINS POINT-SIOUX FALLS		x							
463		GRANITE FALLS- MORRIS		x							

464		GRANITE FALLS-MINNESOTA VALLEY		x							
465		GREAT FALLS-CONRAD	230-kV	x							
466		GREGORY-MISSION		x							
467		GROTON-HURON		x							
468		GROTON-SUMMIT		x							
469		HAVRE-VERONA	161-kV	x							
470		HAVRE-SHELBY#2	115-kV	x							
471		HESKETT-DEVAUL		x							
472		HETTINGER-NEW UNDERWOOD		x							
473		HURON-MT VERNON		x							
474		HURON-WATERTOWN 230KV 1&3		x							
475		JAMESTOWN-EDGELEY		x							
476		JAMESTOWN-FARGO NO. 1		x							
477		JAMESTOWN-FARGO NO. 2		x							
478		JAMESTOWN-GRAND FORKS		x							
479		JAMESTOWN-VALLEY CITY		x							
480		LEEDS-DEVILS LAKE		x							
481		LEEDS-ROLLA		x							
482		MALLARD-RUGBY		x							
483		MARTIN-MISSION		x							
484		MARTIN-PHILIP		x							
485		MAURINE-RAPID CITY		x							
486		MILES CITY-BAKER		x							
487		MILES CITY-CUSTER	230-kV	x							
488		NEW UNDERWOOD-PHILIP		x							
489		NEW UNDERWOOD-RAPID CITY NO. 1		x							
490		NEW UNDERWOOD-RAPID CITY NO. 2		x							
491		NEW UNDERWOOD-STEGALL (HURON)		x							
492		OAHE-FORT THOMPSON 230KV 1&2		x							
493		OAHE-FORT THOMPSON 230KV 3&4		x							
494		OAHE-GLENHAM		x							
495		OAHE-MAURINE		x							
496		OAHE-NEW UNDERWOOD		x							
497		OAHE-PIERRE		x							
498		O'FALLON CREEK-MILES CITY		x							
499		PIERRE-PHILIP		x							
500		RAPID CITY-DRY CREEK		x							
501		RAPID CITY-ELK CREEK 115-kV T/L		x							
502		RUGBY-LEEDS		x							
503		SIOUX CITY-DENISON		x							
504		SIOUX CITY-SPENCER		x							
505		SIOUX FALLS- SIOUX CITY		x							
506		SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE		x							
507		SUMMIT-WATERTOWN		x							
508		TIBER TAP-TIBER	115-kV	x	x						
509		UTICA JCT-SIOUX FALLS		x							
510		VALLEY CITY-FORMAN		x							
511		VERONA GREAT FALLS	161-kV	x							
512		VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/RASMUS		x							
513		WATERTOWN-GRANITE FALLS 1&2		x							
514		WATERTOWN-SIOUX CITY		x							
515		WATFORD CITY-BEULAH		x							
516		WILLISTON-WATFORD CITY		x							
517		WOLF POINT-CIRCLE		x							
518		WM. J. NEAL-RUGBY		x							
519		YELLOWTAIL-CUSTER	230-kV	x							
520		YELLOWTAIL-YELLOWTAIL (PACE)	230-kV, 110 MW Capacity Rights on RMR Line	x							
521											
522		**Taps**									
523	CCR	Charlie Creek	345-kV breakers 4096, 4192 and assoc switches	x							
524	DNT	Denbigh Tap	115kV breakers 1362, 1562 and assoc switches	x							
525	ON	O'Neill	115-kV inerrupters and switches	x							
526	PET	Penn Tap	115-kV switches 176x, 196x	x							
527	PLL	Pleasant Lake Tap	115-kV switches 56x, 66x	x							
528	SL	Shirley Tap	115-kV switches 561, 560	x							
529	TR	Terry Tap	115-kV switches 160, 161, 260, 261, 361	x							
530	TT	Tiber Tap	115-kV switches 163, 260, 261, 360, 361	x	x						2 customers from Tiber (Bureau of Reclamation and Tiber LLC)
531	VE	Vetal Tap	115-kV switches 16x, 26x, 36x	x							
532											
533		**O&M Service & Maintenance Centers**									
534		ARMOUR O&M SER. CEN.					x				
535		BISMARCK O&M SER. CEN.					x				
536		DAWSON SER. CEN.					x				
537		DEVILS LAKE O&M SER. CEN.					x				
538		FARGO LINE MAINTENANCE FACILITY					x				
539		FARGO O&M SER. CEN.					x				
540		FORT PECK SER. CEN.					x				
541		FORT THOMPSON O&M S. C.					x				
542		HAVRE SERVICE CENTER					x				
543		HURON O&M SER. CEN.					x				
544		JAMESTOWN O&M SER. CEN.					x				
545		MILES CITY MTCE FAC.					x				
546		MILES CITY MTCE FAC.					x				
547		NEW UNDERWOOD SER. CEN.					x				
548		PHILIP O&M SER. CENT.					x				
549		PIERRE O&M SER. CEN.					x				
550		RAPID CITY GARAGE & STOR.					x				
551		SIOUX CITY O&M SER. CEN.					x				
552		SIOUX FALLS O&M SER. CEN.					x				
553		WATERTOWN MAINT. CEN.					x				

554											
555		**Operation Centers**									
556		WATERTOWN ALTERNATE OPERATIONS CENTER					x				
557		WATERTOWN OPERATIONS CENT					x				
558		WATERTOWN OPER CTR (BFPS)					x				
559											
560		**Mobile Equipment**									
561		MOB 115KV SWITCH TRAILER		x							
562		MOB 115KV SWITCH TRAILER		x							
563		MOB TRANSF 111KV 15MVA		x							
564		MOB TRANSF 115KV 10MVA		x							
565		MOB TRANSF 115KV 10MVA		x							
566		MOB TRANSF 115KV 25MVA		x							
567		MOB TRANSF 115KV 40MVA		x							
568		MOB TRANSF 230KV 1-33MVA		x							
569		MOBILE BY PASS KIT (BISMARCK)		x							
570		MOBILE BY PASS KIT (HURON)		x							
571		MOBILE CAPACITOR BANK		x							
572		MOBILE SUB 110KV		x							
573		MOBILE SUB 115KV 20MVA		x							
574		MOBILE SUB 69KV		x							
575		MOB SH.REACTOR		x							
576											
577		**Transmission-Related Generation Facilities**									
578		FORT THOMPSON-BIG BEND NO. 1		x							
579		FORT THOMPSON-BIG BEND NO. 2		x							
580											
581		**Communication Facilities**									
582		ANITA	SCADA				x				
583	AB	ASSINNIBOINE	meters for NWMT NITS from Havre				x				
584		BAKER	microwave, RTU				x				
585		ATLANTIC COMMUNICATION SITE					x				
586		BAKER RELAY					x				
587		BANTRY					x				
588		BARRETT					x				
589		BATTLE MT. MICROWAVE					x				
590		BELLE PRAIRIE					x				
591		BENEDICT					x				
592		BEULAH					x				
593		BIG BEND					x				
594		BIJOU REPEATER					x				
595		BISMARCK REPEATER					x				
596	BI	Bison	microwave alarm system				x				
597		BISON REPEATER					x				
598		BOLE NORTH REPEATER					x				
599		BRINSMADE					x				
600		BRISTOL					x				
601		BRUNSVILLE REPEATER					x				
602		BUFFALO					x				
603		CAHOON					x				
604		CARRINGTON REPEATER					x				
605		CHARTER OAK REPEATER					x				
606		CHINOOK (BEFP)					x				
607		CHINOOK REPEATER					x				
608		CLARK MW REPEATER					x				
609		CLEVELAND REPEATER, N.D.					x				
610		COLEMAN REPEATER					x				
611		COLOME REPEATER					x				
612		CONRAD BUTTE REPEATER					x				
613		COTTON	meters for Central MT (Basin NITS)				x				
614		CRESTON REPEATER					x				
615		CROW LAKE REPEATER					x				
616		CROWN BUTTE					x				
617		CULBERTSON RADIO RELAY SITE					x				
618		CUSTER LOOKOUT					x				
619		DALTON (WES)					x				
620		DEVILS LAKE FIBER REGEN					x				
621		DEVILS LAKE REPEATER					x				
622		DICKINSON	communications equipment				x				
623		DODSON REPEATER					x				
624		DOGDEN BUTTE					x				
625		DRISCOLL					x				
626		DUPREE REPEATER					x				
627		DUTTON REPEATER (BEFP)					x				
628		EAGLE	microwave, RTU, SCADA				x				
629		EAST RAINY BUTTE					x				
630		ECKELSON					x				
631		E. J. MANNING	fiber, microwave, SCADA				x				
632		ELKTON					x				
633		ELLENDALE REPEATER					x				
634		ELLSWORTH AIR BASE					x				
635		ERHARD					x				
636		EXIRA REPEATER					x				
637		F. L. BLAIR					x				
638		FAIRPOINT REPEATER					x				
639		FALLON REPEATER					x				
640		FERGUS FALLS COMMUNICATIONS SITE					x				
641		FLOWING WELLS					x				
642		FORBES COMMUNICATION SITE					x				
643		FORSYTH	radio, quarters, fence				x				
644		FORT PECK RELAY (WES)					x				
645		FORT PECK COMMUNICATIONS BUILDING					x				
646		FORT PECK REPEATER					x				
647	FR	Fort Randall	Multiplexer, Termination Equiment				x				

648		FORT THOMPSON REPEATER					x				
649		FORT THOMPSON REPEATER (EAST RIVER)					x				
650		FOX CREEK MICROWAVE					x				
651		FRYBURG SUB & MICROWAVE					x				
652		GARRISON					x				
653		GARY REPEATER					x				
654		GAVIN'S POINT					x				
655		GAVINS POINT REPEATER					x				
656		GETTYSBURG REPEATER					x				
657		GLENHAM					x				
658		GRAND FORKS MINNKOTA (MPC)					x				
659		HAILSTONE BUTTE					x				
660		HALLOWAY REPEATER					x				
661		HARLEM	microwave, RTU				x				
662		HARLEM REPEATER					x				
663		HATHAWAY					x				
664		HERMOSA MICROWAVE					x				
665		HETTINGER	RTU, PTs				x				
666		HIGHLAND REPEATER					x				
667		HIGHMORE REPEATER					x				
668		HIGHWOOD	meters NWMT NITS from Great Falls				x				
669		HINSDALE					x				
670		HINSDALE REPEATER					x				
671		HOPEWELL REPEATER					x				
672		HUNTER MICROWAVE					x				
673		HURON DISTRICT OFFICE					x				
674		HYSHAM					x				
675		JAMESTOWN REPEATER					x				
676		JONES CREEK					x				
677		KELLY CREEK					x				
678		KILLDEER REPEATER					x				
679		KNEE HILL MW					x				
680		LAC QUI PARLE					x				
681		LAKE ANDES REPEATER					x				
682		LEFOR					x				
683		LINDSAY RIDGE					x				
684		LINTON COMMUNICATIONS SITE					x				
685		LITTLE MISSOURI SUBSTATION					x				
686		LODGEPOLE REPEATER					x				
687		MALLARD	RTU, SCADA				x				
688		MALTA	microwave, RTU				x				
689		MALTA REPEATER					x				
690	MDN	Mandan	multiplexer				x				
691		MANDAN MICROWAVE SITE					x				
692		MAPLE RIVER					x				
693		MARTIN REPEATER					x				
694		MAYVILLE					x				
695		MIDLAND REPEATER					x				
696		MILES CITY SUB (BEFP)					x				
697		MOE REPEATER					x				
698		MOORHEAD					x				
699		MORRIS REPEATER & MICROWAVE					x				
700		NEWCASTLE REPEATER					x				
701		OAHE					x				
702		O'KREEK REPEATER					x				
703		ORCHARD REPEATER					x				
704		OTO MICROWAVE					x				
705		OTTUMWA ROAD REPEATER SITE					x				
706		PAGE N.D.					x				
707		PAHOJA SUB					x				
708		PEAK					x				
709		PHILIP JCT. REPEATER					x				
710		PINE RIDGE					x				
711		POPLAR (MDU)	antenna, meters for MDU				x				
712		PRIMGHAR REPEATER					x				
713		PUKWANNA REPEATER					x				
714		RAPID CITY REPEATER					x				
715		RICHARDSON COULEE					x				
716		RICHARDSON COULEE REPEATER					x				
717		RICHLAND MW REPEATER (BEPS)					x				
718		ROCKY RIDGE REPEATER					x				
719		ROLLAG					x				
720		RUGBY REPEATER					x				
721		RUTLAND					x				
722		SACO					x				
723	SA	SAVAGE	land, steel structure, meter equipment				x				
724		SENTINEL BUTTE					x				
725		SHEEP COULEE REPEATER					x				
726		SIOUX CITY REPEATER					x				
727		SIOUX FALLS REPEATER					x				
728		SIOUX PASS					x				
729		SNAKE BUTTE REPEATER					x				
730		SPALDING REPEATER					x				
731		SPIRIT MOUND					x				
732		STANLEY	meters to MDU				x				
733		STRASBERG					x				
734	SB	SULLY BUTTES	fiber termination equipment				x				
735		SUMMIT REPEATER					x				
736		TAPPEN COMMUNICATIONS SITE					x				
737		TAPPEN REPEATER					x				
738		TENNANT COMMUNICATIONS SITE					x				
739		TORONTO REPEATER					x				
740		TRIPP REPEATER					x				
741		TURKEY RIDGE REPEATER					x				
742		TYLER REPEATER					x				
743	VR	Verona	comm, miltiplex, battery				x				
744		VICTOR (EREC)					x				

745		VIDA					x				
746		V. T. HANLON	SCADA				x				
747		WALL REPEATER					x				
748		WATERTOWN REPEATER					x				
749		WAYSIDE					x				
750		WESSINGTON SPGS. REPEATER					x				
751		WESTFIELD					x				
752	WH2	Whately (Northern)	Instrument Transformer				x				
753		WHITE SWAN					x				
754		WHITLOCK (BCPS)					x				
755		WM. J. NEAL	multiplexer				x				
756		WOLBACH REPEATER					x				
757		YANKTON JCT.	multiplexer, channel bank, SCADA				x				
758		YELLOWTAIL SWITCHYARD (BEPS)					x				
759		**Miles City Converter Station**									
760		MILES CITY CONVERTER STATION - BEPS		x							
761		MILES CITY CONVERTER STATION - BEFP		x							
762		**Rocky Mountain Region Facilities**									
763		NEW UNDERWOOD-STEGALL		x							
764		STEGALL SUBSTATION		x							
765		STEGALL-WAYSIDE		x							
766	YT	YELLOWTAIL SWITCHYARD	230-kV breakers 182, 282, 9182 and assoc switches	x							
767											
768		**Corps Switchyard Facilities**									
769	BG	Big Bend	230-kV interrupters 1083, 7089, 4083 and assoc. switches	x							
770	FP	Fort Peck	69-kV breaker 1142 and assoc. switches	x							
771			161-kV breaker 762	x							
772			115-kV breakers 772, 776, 1572, 1576, 1672, 1676 and assoc switches	x							
773			230-kV breaker 1382 and associated switches	x							
774			230/115-kV transformer	x							
775			161/115-kV transformer KV7A	x							
776	FR	Fort Randall	230-kV breakers 1182, 1186, 1282, 1286, 1382, 1386, 1982, 1986, 2182, 2186, 2282, 2286, 2382, 2386, 2482, 2486, 2682, 2686 and assoc breakers	x							
777			115-kV breakers 962, 966, 1562, 1556, 1662, 1666, 1762, 1766, 1862, 1866, 1962, 1966 and assoc switches	x							
778			2 - 230/115-kV transformers	x							
779	GA	Garrison	115-kV breakers 2062, 2066, 2162, 2166, 2262, 2266, 2362, 2366, 2462, 2466, 2562, 2566, 2662, 2666, 2769 and assoc switches	x							
780			230-kV breakers 3389, 3482, 3486, 3682, 3686, 3782, 3786, 3882, 3886, 3982, 3986, 4082, 4086, 4182, 4186 and assoc switches, switches 33xx	x							
781			230/115-kV transformer	x							
782	GP	Gavins Point	115-kV breakers 462, 562, 662, 762, 862 and assoc switches	x							
783	OA	Oahe	230-kV breakers 2182, 2282, 2286, 2382, 2482, 2486, 2582, 2682, 2782, 2982, 3082 and assoc switches	x							
784			115-kV breakers 1062, 1262, 1362, 1386, 1462, 1562, 1566 and assoc switches	x							
785			2 - 230/115-kV transformers	x							

One-Line Diagrams showing these included facilities are available upon request.
The diagrams include CEII 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.

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)
Worksheet 10 - WAPA-UGP Facilities Excluded under SPP Tariff Attachment AI*
12 Months Ending 09/30/2022 True-up

	(1)	(2)	(3)	(4)
Line No.	FID	Facility	Specific Plant NOT Included	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			12.47-kV switch 821, 823, 829	City of Beresford
10	BG	Big Bend	230-kV interrupters 1081, 2081, 2081, 4081 and assoc switches	
11	BB	Bisbee	69/12.5-kV transformer KZ1A and switch 145	
12			12.5-kV breaker 124 and assoc. switches	CPEC
13	BS	Bismarck	115-kV breaker 3462 and assoc. switches	Capitol Electric
14			12.5-kV switches 1527, 1529	USBR
15	BOL	Bole	69-kV breaker 1452 and 1252 and assoc. switches	NWMT
16	BO	Bonesteel	115-kV breaker 362 and assoc. switches	
17			115/12.47-kV transformer KY1A	
18			12.47-kV breaker 1422 and assoc. switches	Rosebud Electric
19	BFT	Buford Trenton Tap	All Not Included	
20	BP	Buford Trenton Pumping	All Not Included	
21	CA	Carrington	115-kV interrupter 162	protection for non-included transformer (transformer not owned by Western)
22			41.8-kV breakers 142, 242, 342, 442, 542, 642, 842 and assoc. switches	Otter Tail and CPE
23	CR	Circle	115-kV breaker 1162 and assoc. switches	Keystone
24			115-kV breaker 1262, 1362 and assoc. switches	McCone
25			115/34.5-kV transformer KY12A	
26			34.5-kV breaker 142 and assoc. switches	McCone
27	CON	Conrad	115-kV breaker 1062 and assoc. switches	Sun River
28	CU	Custer	69-kV breakers 2252, 2352 and assoc. switches	Yellowstone Valley and Mid-Yellowstone
29	CT	Custer Trail	All Not Included	
30	DC	Dawson County	115-kV switch 1061	protection for non-included transformer (transformer not owned by Western)
31	DNT	Denbigh Tap	Switches 1460, 1461	
32	DV	Devaul	All Not Included	
33	DL	Devils Lake	41.8-kV breaker 342 and assoc. switches	Otter Tail normally open-emergency tie
34			12.5-kV breaker 1122 and assoc. switches	Minnkota
35	EB	Eagle Butte	115/69-kV transformer KY1A and 115-kV interrupter 762	
36			69-kV breaker 1752 and assoc. switches	Moreau Grand
37	ED	Edgeley	115/41.8-kV transformer KY2A	
38			115-kV breaker 362	
39			41.8-kV breaker 2342 and assoc. switches	Otter Tail
40			69-kV breaker 1252 and assoc. switches	
41	ELC	Elk Creek	115-kV ground switch 1160	
42	ELI	Elliot	115-kV interrupter 2063 and assoc. switches, 115-kV switch 369	
43	END	Enderlin Tap	Interrupter 1862 and assoc. switches	
44	EXI	Exira	Switches 169, 369, 569	Generator Lead
45	FH	Faith	115/12.47-kV tranformer KY1A and 115-kV interrupter 362	
46			12.47-kV breaker 1022 and assoc. switches	City of Faith
47	FN	Fallon Pumping	All Not Included	
48	FE	Fallon Relift	All Not Included	
49	FL	Flandreau	12.47-kV switches 3121, 3122, 3123, 3129, 3223	City of Flandreau
50	FO	Forman	69-kV breaker 452 and assoc. switches	
51			69/41.8-kV transformer KZ3A and 69-kV switches 353, 355	
52			115-kV breaker 1662 and assoc. switches	
53			41.8-kV breaker 2142 and assoc. switches	Otter Tail
54			41.8/12.5-kV transformer KX6A and switch 1443	
55			12.5-kV breaker 2222 and assoc. switches	Dakota Valley
56	FR	Fort Randall	115-kV breaker 962 and assoc. switches	
57	FT	Fort Thompson	69-kV breaker 4452 and assoc. switches	West Central
58	FG	Frazer Pumping	All Not Included	
59	GA	Garrison	115-kV breakers 462, 562 and assoc switches	generator leads
60	GP	Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	generator leads
61	GGT	Glendive Pumping No. 1 Tap	All Not Included	
62	GG	Glendive Pumping No. 1	All Not Included	
63	GF	Granite Falls	69-kV breakers 4352, 4452, 4552, 4652 and assoc. switches	GRE normally open and Minn. Valley
64			115/69-kV transformer KY2A	
65			115-kV breakers 2862, 3262 and assoc. switches	
66	GY	Gregory	115-kV Disconnect Switch 463	protection for non-included transformer (transformer not owned by Western)
67			12.47-kV breaker 422 and asswoc. Switches	
68	GR	Groton	69-kV breaker 1552 and assoc. switches	East River
69	HV	Havre	12.5-kV breaker 822 and assoc. switches	Hill County
70	HBN	Hebron	230-kV switches 989 and 589	
71	HLK	Hilken	take-off structure to Baldwin Wind	generator lead
72	HU	Huron	115-kV switches 1261, 1265	
73			115/69-kV transformer KY1A	
74			69-kV breakers 1952, 2052 and assoc. switches	East River
75	IN	Intake	All Not Included	
76	INP	Intake Pumping	All Not Included	
77	JT	Jamestown	115/41.8-kV transformers KY1A and KY2A	
78			115-kV breaker 662 and assoc. switches	
79			41.8-kV breaker 1142 and assoc. switches	Otter Tail, Normally Open - emergency tie
80			12.47-kV breaker 1522, 1722 and assoc. switches	
81	KD	Killdeer	115/41.8-kV transformer KY4A and switch 469	
82			41.8-kV breaker 442, 642 and switches 343, 345	MDU and Upper Mo.
83	LA	Lakota	12.5-kV breaker 1022 and assoc. switches	City of Lakota
84			69-kV breaker 152 and assoc. switches	
85			115/69-kV transformer KY1A, switches 362, 363	
86	LE	Leeds	69/12.5-kV transformer KZ3A and switch 645	
87			12.5-kV breaker 624 and assoc. switches	CPEC
88	MR	Martin	115/34.5-kV tranformer KY1A and breaker 1962 and assoc. switches	
89			34.5-kV breaker 1242 and assoc. switches	LaCreek
90	MA	Maurine	115/69-kV transformer KY1A and breaker 1262 and assoc. switches	
91			115-kV breaker 1762	
92			69-kV breaker 2252 and assoc. switches	Grand Electric
93	MD	Midland	Capacity Rights in 115/69 kV Transformer KY1A	
94	MS	Mission	115/24.9-kV transformer KY1A and interrupter 362	Cherry-Todd
95	MO	Morris	41.8-kV breakers 3132, 3232, 3332 and assoc switches	
96			115/41.8-kV transformer KY3A	
97			115-kV breaker 1362 and assoc switches	
98	MV	Mount Vernon	69-kV breaker 1852 and assoc. switches	East River
99	NAT	Nashua Tap	All Not Included	
100	NEL	Nelson Tap	Switch 1861	
101	NL	Newell	69-kV breakers 2252, 2452 and assoc. switches	Rushmore
102	NU	New Underwood	13.8 kV interrupter 4423 and assoc. switch	
103	OA	Oahe	230-kV breakers 2882, 2482, 2486, 2082, 1162 and assoc. switches	generator lead

104			115-kV breaker 1162 and assoc. switches	generator lead
105	OF	O'Fallon Creek	12.47-kV breaker 522 and assoc. switches and equipment	MDU
106	PET	Penn Tap	Switches 1860, 1861	
107	PL	Philip	115/69-kV transformer KY1A and switches 1963	
108			69-kV breaker 2152 and assoc. switches	West Central
109	PI	Pierre	115/12.47-kV transformer KY1A and 115-kV interrupter 762	
110			12.47-kV breakers 2212, 2312, 2412 and assoc. switches	City of Pierre
111	PLL	Pleasant Lake Tap	Switched 760, 761	
112	RC	Rapid City	115/12.47-kV transformer KY1A	
113	RH	Richland	All Not Included	
114	RY	Rudyard	115/69/12.5-kV transformer KY1A and interrupter 362	
115			69-kV breaker 752 and assoc. switches	Hill County
116			12.5-kV breaker 422 and assoc. switches	Hill County
117	RG	Rugby	115/41.8-kV transformer KY1A and breaker 1162 and assoc. switches	
118			41.8-kV breaker 2142 and assoc. switches	Otter Tail
119	SV	Savage Pumping	All Not Included	
120	SH2	Shelby	All Not Included	
121	SH2	Shelby 2	115-kV breaker 1162 and assoc. switches	to Shelby
122	SY	Shirley Pumping	All Not Included	
123	SF	Sioux Falls	115-kV breaker 862 and assoc. switches	East River
124			69-kV breaker 1552 and assoc. switches	East River
125	SP	Spencer	69-kV breaker 1642 and assoc. switches	City of Spencer
126	SU	Summit	41.8-kV breakers 2142, 2242 and assoc. switches	
127			115/41.8-kV transformer KY1B	
128			115-kV interupter 862 and switch 861	
129	TE	Terry Pumping	All Not Included	
130	TR	Terry Tap	115/34.5-kV transformer KY1A and switch 363	
131			34.5-kV breaker 342 and assoc. switches	Buffalo Rapids and MDU
132	TI	Tiber	115/12.5-kV transformer KY1A and breaker 1262	
133			12.5-kV breaker 122 and assoc. switches	USBR
134	TY	Tyndall	69-kV breaker 452 and assoc. switches	East River
135			115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
136	VC	Valley City	69-kV breakers 344, 1144 and assoc. switches	City of Valley City
137	WL	Wall	115/12.47-kV transformer KY1B and interrupters 461 and 562	
138			12.47-kV breaker 622 and assoc. switches	West River
139	WDD	Ward	230-kV Switch 889	
140	WB	Washburn	230/41.8-kV transformer KU1A and breaker 282	
141			41.8-kV breaker 342 and assoc. switches	Otter Tail - emergency tie
142	WC	Watford City	115-kV interrupter 162	protection for non-included transformer (transformer not owned by Western)
143	WSG	Wessington Springs	230-kV switch 989	generator outlet
144	WH	Whately	69/12.5-kV transformer KYA and switches 253, 257	
145			12.5-kV breaker 224 and assoc. switches	Norval
146	WV	Wicksville	115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
147			24.9-kV breaker 1032 and assoc. switches	West River
148	WN	Williston	60-kV breaker 3552 and assoc. switches	MDU non-credited line
149	WN2	Williston 2	115-kV breaker 2562 and assoc. switches	
150	WI	Winner	12.47-kV breakers 2222, 2422, 2523 and assoc. switches	City of Winner and Rosebud Electric
151	VAT	Wiota	All Not Included	
152	VAT	Wiota Tap	All Not Included	
153	WP	Wolf Point	115/34.5-kV transformer KY1A and switches 1963, 1965	
154			34.5-kV breakers 2142, 2242, 2342, 2442 and assoc. switches	MDU and Norval
155			12.5-kV breakers 3222, 3322, 3422 and assoc. switches	Norval and McCone
156	WO	Woonsocket	34.5-kV breakers 442 and 542 and assoc. switches	NWPS and City of Wessington Springs
157			115/69-kV transformer KY1B and 115-kV breaker 862	
158			Mobile Transformer 115/34.5-kV	
159			115-kV interupters 362 and 862 and assoc. switches, switch M263, M261	
160		**Transmission Lines**		
161		SHELBY-SHELBY2	115-kV	
162		**Corps Switchyard Facilities**		
163		Big Bend	230-kV interrupters 1081, 2081, 3081, 4081 and assoc switches	
164		Fort Peck	230-kV interrupters 481, 581 and assoc switches	
165			115-kV switches 861, 961	
166		Fort Randall	115-kV switch 960	
167			230-kV switches 1180, 1280, 1380	
168		Garrison	230-kV breakers 182, 282, 382 and assoc switches	
169			115-kV breakers 462, 561, 1762 and assoc switches	
170			13.8-kV breaker 2722 and assoc switches	
171		Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	
172		Oahe	115-kV breaker 1162 and assoc. switches	
173			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 2022 Rate True-up Calculation (Rev 1) Worksheet 11 - Facility Changes 12 Months Ending 09/30/2022 True-up		(Back to Worksheet Links)
	(1)	(2)
Line No.	**Facility**	**Description**
1	Miles City 2	115 kV Line Bay for MDU (customer funded) and Cap Bank Addition (20% customer funded)
2	Watertown	Ownership transfer from Basin to WAPA of PCB 1082 and assoc. switches. Facilities already qualified for SPP Inclusion.
3	WDD-BEF (Ward Delivery - Belfield)	This appears as a new line segment, but is part of the established Bismarck-Medora line segment.
4	Antelope Valley	Costs for fiber in already established Basin Electric owned Substation.
5	Brookings	Customer Funded. New 69-kV Breaker 952 and assoc. switches.
6	Devils Lake	Rebuilt Substation. Addition of two 115-kV breakers/switches and 115-kV cap bank and removal of 41.8-kV cap bank.
7	Flandreau	Customer Funded. New 69-kV Breaker 2252 and assoc. switches.
8	White	Neutral Blocking Device funded by DOE
9	Bismarck District Office	Added communications
10	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.
11	Huron	Take over ownership of 230-kV Breaker 682 and assoc. switches. Was already in the Zone

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)

(Back to Worksheet Links)

Worksheet 12 - Scheduling, System Control, and Dispatch Service

12 Months Ending 09/30/2022 True-up

	(1)	(2)	(3)
Line No.	DESCRIPTION	SSCD	REFERENCE
1	**A. Operation and Maintenance Expense ($)**	$12,120,489	WS4-CostData (O&M Expenses Worksheet)
2	**B. A&G Expense ($)**	$280,214	WS4-CostData (A&G Expenses Worksheet)
3	**C. Depreciation Expense ($)**	$366,220	WS4-CostData (Depreciation Expense Worksheet)
4	**D. Taxes Other than Income Taxes for Transmission ($)**	$0	Not Applicable
5	**E. Allocation of General Plant**	$0	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	3.95%	WS4-CostData (C6 L61)
8	Net Plant Investment	$8,454,409	WS4-CostData (C2 L21)
9	Cost of Capital	$333,918	L7*L8
10	**H. Revenue Requirement**		
11	Annual Western-UGPR Cost	$13,100,841	L1+L2+L3+L9
12	SSCD Revenue from non-Transmission Facilities	$815,738	L11*L15
13	Revenue Requirement for SSCD for Transmission Facilities	$12,285,103	L11-L12
14			
15	Ratio for Line 12	6.23%	WS8-TranFac (L511 C5/C8)

WAPA-UGP 2022 Rate True-up Calculation (R (Back to Worksheet Links)
Worksheet 13 - SSCD Facilities
12 Months Ending 09/30/2022 True-up

Line No.	FID	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		2022 SPP TRUE UP SUMMARY:						
				PRIOR YEAR FACILITY		**ATTACHMENT AI**	**GENERATION ADJUSTMENTS**	**FY2022 ACT SPP**
	FID	**DESCRIPTION**	**DATA SOURCE:**	**TOTALS ($)**		**ADJUSTMENTS ($)**	**($)**	**TOTALS ($)**
1	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	2021 ROOS BALANCE	6,174,392		0	0	6,174,392
2	WTO	WATERTOWN OPERATIONS CENTER	2021 ROOS BALANCE	1,785,958		0	(283,038)	1,502,920
3	WTO F	WATERTOWN OPERATIONS CENTER (BFPS)	2021 ROOS BALANCE	11,977,195		0	(1,265,809)	10,711,386
4				19,937,544	-	0	(1,548,847)	18,388,698
		2022 SPP DETAIL:						
5	**FID**	**DESCRIPTION**	**ADDITIONAL:**	**FID COST DETAIL ($)**	**SSCD %**	**SSCD TOTAL ($)**	**TRANS %**	**TRANS TOTAL ($)**
6	WAO	IDC	IDC	299	100%	299	100%	299
7	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	9,790	100%	9,790	100%	9,790
8	WAO	LAND AT KCR	LAND & LAND RIGHTS	1,539	100%	1,539	100%	1,539
9	WAO	MICROWAVE TOWER	ANTENNA TOWER	295,486	100%	295,486	100%	295,486
10	WAO	INTEREST DURING CONSTRUCTION	IDC	57,816	100%	57,816	100%	57,816
11	WAO	INTEREST DURING CONSTRUCTION	PLANT NOT CLASSIFIED	5,246	100%	5,246	100%	5,246
12	WAO	ANTENNA	PLANT NOT CLASSIFIED	17,480	100%	17,480	100%	17,480
13	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	122,582	100%	122,582	100%	122,582
14	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	12,407	100%	12,407	100%	12,407
15	WAO	SCADA COMMUNICATION EQUIPMENT	SEQUENTIAL EVENT RECORDING SYST	20,217	100%	20,217	100%	20,217
16	WAO	INTEREST DURING CONSTRUCTION	IDC	2,475	100%	2,475	100%	2,475
17	WAO	PLANT COMM SYSTEM	PLANT COMM SYSTEM	43,699	100%	43,699	100%	43,699
18	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	54,138	100%	54,138	100%	54,138
19	WAO	BUILDINGS	SERVICE BUILDINGS	531,049	100%	531,049	100%	531,049
20	WAO	BUILDINGS	ROOFING	90,309	100%	90,309	100%	90,309
21	WAO	OTHER STRUCTURES AND IMPROVEMENTS	OIL STORAGE TANK	54,257	100%	54,257	100%	54,257
22	WAO	OTHER STRUCTURES AND IMPROVEMENTS	HEATING	475,746	100%	475,746	100%	475,746
23	WAO	STATION EQUIPMENT	AUXILIARY POWER SYSTEM	95,962	100%	95,962	100%	95,962
24	WAO	SCADA COMMUNICATION EQUIPMENT	REMOTE TERMINAL UNIT	12,679	100%	12,679	100%	12,679
25	WAO	SCADA COMMUNICATION EQUIPMENT	SCADA	1,022,154	100%	1,022,154	100%	1,022,154
26	WAO	SCADA COMMUNICATION EQUIPMENT	UNITERRUPTABLE POWER SUPPLY	122,476	100%	122,476	100%	122,476
27	WAO	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	733,679	100%	733,679	100%	733,679
28	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY	35,292	100%	35,292	100%	35,292
29	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY CHARGER	13,959	100%	13,959	100%	13,959
30	WAO	MICROWAVE COMMUNICATION EQUIPMENT		73,162	100%	73,162	100%	73,162
31	WAO	INTEREST DURING CONSTRUCTION	IDC	924	100%	924	100%	924
32	WAO	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	53,112	100%	53,112	100%	53,112
33	WAO	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	184,307	100%	184,307	100%	184,307
34	WAO	SCADA COMMUNICATION EQUIPMENT	SCADA	23,258	100%	23,258	100%	23,258
35	WAO	INTEREST DURING CONSTRUCTION	IDC	294	100%	294	100%	294
36	WAO	FIBER OPTIC EQUIPMENT	CABLE TYPE OPGW	28,885	100%	28,885	100%	28,885
37	WAO	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	41,066	100%	41,066	100%	41,066
38	WAO	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	93,750	100%	93,750	100%	93,750
39	WAO	INTEREST DURING CONSTRUCTION	IDC	2,600	100%	2,600	100%	2,600
40	WAO	BUILDINGS	SERVICE BUILDINGS	1,320,913	100%	1,320,913	100%	1,320,913
41	WAO	INTEREST DURING CONSTRUCTION	IDC	445,915	100%	445,915	100%	445,915
42	WAO	PLANT COMM SYSTEM	PLANT COMM SYSTEM	40,642	100%	40,642	100%	40,642
43	WAO	INTEREST DURING CONSTRUCTION	IDC	577	100%	577	100%	577
44	WAO	SCADA COMMUNICATION EQUIPMENT	SCADA	33,157	100%	33,157	100%	33,157
45	WAO	INTEREST DURING CONSTRUCTION	IDC	1,093	100%	1,093	100%	1,093
46		TOTAL		6,174,392		6,174,392		6,174,392
47	WTO	AIR CONDITIONER	AIR CONDITIONER	146,013	66.7%	97,391	80.8%	117,979
48	WTO	INTEREST DURING CONSTRUCTION	IDC	10,941	66.7%	7,298	80.8%	8,841
49	WTO	ROOFING	ROOFING	676,147	66.7%	450,990	80.8%	546,327
50	WTO	GATE	GATE	67,521	66.7%	45,036	80.8%	54,557
51	WTO	FENCES	FENCES	573,532	66.7%	382,546	80.8%	463,414
52		TOTAL		1,474,154		983,261		1,191,117
53	WTO	FIBER OPTICS EQUIPMENT	PLANT COMM SYSTEM	54,317	100%	54,317	100%	54,317
54	WTO	INTEREST DURING CONSTRUCTION	IDC	20,639	100%	20,639	100%	20,639
55	WTO	FIBER OPTICS EQUIPMENT	PLANT COMM SYSTEM	141,934	100%	141,934	100%	141,934

56	WTO	INTEREST DURING CONSTRUCTION	IDC	3,902	100%	3,902	100%	3,902
57	WTO	SCADA COMMUNICATION EQUIPMENT	SCADA	61,037	100%	61,037	100%	61,037
58	WTO	INTEREST DURING CONSTRUCTION	IDC	771	100%	771	100%	771
59	WTO	INTEREST DURING CONSTRUCTION	IDC	2,878	100%	2,878	100%	2,878
60	WTO	REMOTE TERMINAL UNIT	REMOTE TERMINAL UNIT	16,161	100%	16,161	100%	16,161
61	WTO	SCADA COMMUNICATION EQUIPMENT	SCADA	8,953	100%	8,953	100%	8,953
62	WTO	INTEREST DURING CONSTRUCTION	IDC	1,212	100%	1,212	100%	1,212
63		TOTAL		311,803		311,803		311,803
64	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP PART 2 OF 2	TERMINATION EQUIPMENT	134,174	100%	134,174	100%	134,174
65	WTO F	ADD DROP MULTIPLEXER (PART 2 OF 2)	ADD DROP MULTIPLEXER	59,005	100%	59,005	100%	59,005
66	WTO F	POWER SYSTEM DISPATCH CONSOLES	SCADA	119,667	100%	119,667	100%	119,667
67	WTO F	REMOTE TERMINAL UNIT	REMOTE TERMINAL UNIT	39,790	100%	39,790	100%	39,790
68	WTO F	IDC	IDC	1,601	100%	1,601	100%	1,601
69	WTO F	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	53,165	100%	53,165	100%	53,165
70	WTO F	FIBER OPTIC EQUIPMENT	ADD DROP MULTIPLEXER	307,465	100%	307,465	100%	307,465
71	WTO F	FIBER OPTIC EQUIPMENT	TERMINATION EQUIPMENT	12,820	100%	12,820	100%	12,820
72	WTO F	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	415,983	100%	415,983	100%	415,983
73	WTO F	IDC	IDC	146,435	100%	146,435	100%	146,435
74	WTO F	IDC	IDC	2,533	100%	2,533	100%	2,533
75	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	31,658	100%	31,658	100%	31,658
76	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	85,009	100%	85,009	100%	85,009
77	WTO F	FIBER OPTICS EQUIPMENT	ADD DROP MULTIPLEXER	108,685	100%	108,685	100%	108,685
78	WTO F	FIBER OPTICS EQUIPMENT	CHANNEL BANK EQUIPMENT	1,934	100%	1,934	100%	1,934
79	WTO F	FIBER OPTICS EQUIPMENT	FIBER OPTICS EQUIPMENT	38,123	100%	38,123	100%	38,123
80	WTO F	IDC	IDC	23,486	100%	23,486	100%	23,486
81	WTO F	MULTIPLEXER EXPANDED CAPABILITY ASSET 166934 - PRO	ADD DROP MULTIPLEXER	25,032	100%	25,032	100%	25,032
82	WTO F	IDC - ASSET 166934 MULTIPLEXER EXPANSION (PART 2)	IDC	514	100%	514	100%	514
83	WTO F	IDC	IDC	18,650	100%	18,650	100%	18,650
84	WTO F	ADD DROP MULTIPLEXER (PART 1 OF 2)	TERMINATION EQUIPMENT	2,850	100%	2,850	100%	2,850
85	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 1 OF 2)	TERMINATION EQUIPMENT	6,625	100%	6,625	100%	6,625
86	WTO F	SCADA COMMUNICATION EQUIPMENT	SCADA	(8,953)	100%	(8,953)	100%	(8,953)
87	WTO F	IDC	IDC	(1,212)	100%	(1,212)	100%	(1,212)
88	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	226,333	100%	226,333	100%	226,333
89	WTO F	IDC	IDC	13,471	100%	13,471	100%	13,471
90	WTO F	TELEPHONE SYSTEM - 40 CHANNEL RECORDER & CRASH K	TELEPHONE SYSTEM	70,115	100%	70,115	100%	70,115
91	WTO F	IDC	IDC	1,421	100%	1,421	100%	1,421
92	WTO F	VOICE RECORDER SYSTEM	TELEPHONE SYSTEM	61,005	100%	61,005	100%	61,005
93	WTO F	SCADA SYSTEM HISTORIAN SOFTWARE	SCADA	202,050	100%	202,050	100%	202,050
94	WTO F	IDC	IDC	6,761	100%	6,761	100%	6,761
95	WTO F	SCADA	UNITERRUPTABLE POWER SUPPLY	121,027	100%	121,027	100%	121,027
96	WTO F	IDC	IDC	2,484	100%	2,484	100%	2,484
97	WTO F	AUX PWR SYS - BACKUP GENERATOR	AUXILIARY POWER SYSTEM	454,504	100%	454,504	100%	454,504
98	WTO F	IDC	IDC	12,877	100%	12,877	100%	12,877
99	WTO F	(5) DIGITAL VOICE RECORDERS - WTO F	SCADA	20,217	100%	20,217	100%	20,217
100	WTO F	IDC	IDC	1,979	100%	1,979	100%	1,979
101	WTO F	BATTERY BANK FOR UPS	BATTERY	36,320	100%	36,320	100%	36,320
102	WTO F	IDC	IDC	631	100%	631	100%	631
103	WTO F	DIGITAL TRANS & REC EQUIP	SCADA	23,847	100%	23,847	100%	23,847
104	WTO F	FREQUENCY CONTROL ADDITIONS	LOAD AND FREQUENCY CONTROL EQU	57,731	100%	57,731	100%	57,731
105	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	144,190	100%	144,190	100%	144,190
106	WTO F	PLANT COMM SYSTEM	PLANT COMM SYSTEM	167,020	100%	167,020	100%	167,020
107	WTO F	IDC	IDC	2,373	100%	2,373	100%	2,373
108	WTO F	ADD DROP MULTIPLEXER	ADD DROP MULTIPLEXER	267,249	100%	267,249	100%	267,249
109	WTO F	IDC	IDC	16,354	100%	16,354	100%	16,354
110	WTO F	SCADA COMMUNICATION EQUIPMENT	SCADA	24,732	100%	24,732	100%	24,732
111	WTO F	IDC	IDC	312	100%	312	100%	312
112	WTO F	TELEPHONE SYSTEM	TELEPHONE SYSTEM	559,892	100%	559,892	100%	559,892
113	WTO F	IDC	IDC	33,280	100%	33,280	100%	33,280
114	WTO F	SCADA	SCADA	1,215,754	100%	1,215,754	100%	1,215,754
115	WTO F	IDC	IDC	15,473	100%	15,473	100%	15,473
116		TOTAL		5,384,440		5,384,440		5,384,440
117	WTO F	WATERTOWN OPERATIONS BUILDING	CONTROL BUILDING	636,802	66.7%	424,747	80.8%	514,536
118	WTO F	RESURFACE PARKING LOT AT WATERTOWN OPS OFFICE	OFFICE BUILDING	152,204	66.7%	101,520	80.8%	122,981

119	WTO F	WALLS	WALLS	276,284	66.7%	184,281	80.8%	223,237
120	WTO F	IDC	IDC	2,835	66.7%	1,891	80.8%	2,291
121	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	SYNC UNIT	20,893	66.7%	13,936	80.8%	16,882
122	WTO F	IDC	IDC	405,078	66.7%	270,187	80.8%	327,303
123	WTO F	VEHICLE/STORAGE BUILDING	GARAGE	651,816	66.7%	434,761	80.8%	526,667
124	WTO F	IDC	IDC	39,508	66.7%	26,352	80.8%	31,923
125	WTO F	SIDEWALKS	SIDEWALKS	153,428	66.7%	102,336	80.8%	123,970
126	WTO F	IDC	IDC	2,052	66.7%	1,368	80.8%	1,658
127	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	146,115	66.7%	97,458	80.8%	118,061
128	WTO F	IDC - REPLACEMENTS	IDC	1,845	66.7%	1,231	80.8%	1,491
129	WTO F	IDC - ADDITIONS	IDC	3,845	66.7%	2,564	80.8%	3,106
130	WTO F	PSOO-WATER SYSTEM	METER EQUIPMENT	219,050	66.7%	146,106	80.8%	176,993
131	WTO F	IDC	IDC	285,734	66.7%	190,585	80.8%	230,873
132	WTO F	PWR SYS OPERATIONS OFFICE BUILDING (Part 1 of 2)	STORAGE BUILDING	1,929,776	66.7%	1,287,161	80.8%	1,559,259
133	WTO F	WATERTOWN OPS BLDG EXPANSION (PSOO)	STORAGE BUILDING	303,096	66.7%	202,165	80.8%	244,902
134	WTO F	WATERTOWN OPS BLDG EXPANSION	STORAGE BUILDING	1,362,395	66.7%	908,717	80.8%	1,100,815
135		TOTAL		6,592,755		4,397,368		5,326,946

WAPA-UGP 2022 Rate True-up Calculation (Rev 1)
(Back to Worksheet Links)
Worksheet 14 - Rate for Regulation and Frequency Response
12 Months Ending 09/30/2022 True-up

	(1)	(2)	(3)
Line No.	**DESCRIPTION**	**REGULATION and FREQUENCY RESPONSE**	**REFERENCE**
1	Fixed Charge Rate	13.87%	WS2-AllocFactor C4 L30
2	Corps Generation Net Plant Costs ($)	$623,311,750	WS2-AllocFactor C4 L31
3	Annual Corps Generation Cost ($)	$86,430,601	L1*L2
4	Plant Capacity (kW)	2,438,000	(1)
5	Cost/kW ($/kW)	$35.45	L3/L4
6	Capacity Used for Regulation (kW)	8,861	(2)
7	Regulation Revenue Requirement ($) - Capacity	$314,135	L5*L6
8	Regulation Revenue Requirement ($) - Purchases	$0	(3)
9	Total Regulation Revenue Requirement ($)	$314,135	
(1)	WAPA Annual Report plant capacity		
(2)	WAUW capacity used for regulation		
(3)	Cost of Purchases Required to Regulate for Intermittent Resources		

WAPA-UGP 2022 Rate True-up Calculation (Rev 1) (Back to Worksheet Links)

Worksheet 15 - Rate for Reserves

12 Months Ending 09/30/2022 True-up

	(1)	(2)	(3)
Line No.	**DESCRIPTION**	**RESERVES**	**REFERENCE**
1	Fixed Charge Rate	13.9%	WS2-AllocFactor C4 L30
2	Corps Generation Net Plant Costs ($)	$623,311,750	WS2-AllocFactor C4 L31
3	Annual Corps Generation Cost ($)	$86,430,601	L1*L2
4	Plant Capacity (kW)	2,438,000	(1)
5	Cost/kW ($/kW-Yr)	$35.45	L3/L4
7	Western's Maximum Load in WAUW Control Area (kW)	167,000	(2)
8	Maximum Generation in WAUW Control Area (kW)	93,000	(3)
9	Capacity used for Reserves (kW) -- 3% Load + 3% Gen	7,800	L8*3% + L9*3% (4)
10	Annual Reserve Sharing Group Cost	$42,587	(5)
11	Annual Reserves Revenue Requirement	$319,108	L10*L5 + L11

(1) WAPA Annual Report plant capacity

(2) WAUW maximum load 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