



Western Area
Power Administration

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

Effective January 1, 2021
(Revision 1)

WAPA-UGP 2019 Rate True-up Calculation

(Rate Order No. WAPA-188)

WAPA-UGP

Transmission and Ancillary Services List of Workpapers and Schedules

Worksheet Tab Label

Summary-TrueUp
WS1-RateBase
WS2-AllocFactor
WS3-RevCredits
WS4-CostData
WS5-BPUz
WS6-BPUr
WS7-BPUFac
WS8-TransFac
WS9-AI-Inc
WS10-AI-Excl
WS11-FacChanges
WS12-SSCD
WS13-SSCDFac
WS14-Reg
WS15-Res

Worksheet Tab Description

[Worksheet "Summary-TrueUp" -- Calculation of True-ups](#)
[Worksheet 1 -- Calculation of Rate Base](#)
[Worksheet 2 -- Allocation Factors](#)
[Worksheet 3 -- Revenue Credit detail](#)
[Worksheet 4 -- Cost Support Data](#)
[Worksheet 5 -- SPP Base Plan Upgrades \(BPU\) - Zonal](#)
[Worksheet 6 -- SPP Base Plan Upgrades \(BPU\) - Regional](#)
[Worksheet 7 -- SPP Base Plan Upgrades \(BPU\) - Facilities](#)
[Worksheet 8 -- Transmission Facilities](#)
[Worksheet 9 -- WAPA-UGP Facilities Included per SPP Tariff Attachment A1](#)
[Worksheet 10 -- WAPA-UGP Facilities Excluded per SPP Tariff Attachment A1](#)
[Worksheet 11 -- Facility Changes Detail](#)
[Worksheet 12 -- Scheduling, System Control and Dispatch Service \(SSCD\) ARR](#)
[Worksheet 13 -- Scheduling, System Control and Dispatch Service \(SSCD\) Facilities](#)
[Worksheet 14 -- Regulation and Frequency Response ARR](#)
[Worksheet 15 -- Reserves ARR](#)

Date	Worksheet	Reference Cell(s)	Change From	Change To	Description
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11/1/2020

Summary of incremental changes (Rev1): thru 11/1/2020 -- New filename: WAPA-UGP-Trans-Anc-Service-Rates-TrueUp-Templates-Rev1.xlsx; **Rates changed due to updates:** (1) ATRRs and Ancillaries generally decreased due to updates to HFD Schedule 21X and 21RX source data unless other impacts; and (2) Operating Reserves increased due to WS15-Res correction noted below that increased the WAUW Max Generation value.

11/1/2020	Cover Sheets	A9			Added "(Revision 1)" to Workbook Title
11/1/2020	Cover Sheets	B26			Corrected link to subject worksheet tab
11/1/2020	WS14-Reg	B16			Corrected footnote (2), added reference to source data
11/1/2020	WS14-Reg	D11			Corrected footnote reference to (2)
10/29/2020	WS8-TransFac	D509			Updated description for clarification
10/29/2020	WS8-TransFac	F509	\$ -	\$ 106,921,172	Moved values to new cell for clarification
10/29/2020	WS8-TransFac	I509	\$ -	\$ 1,483,247,961	Moved values to new cell for clarification
10/29/2020	WS8-TransFac	F511	\$ 106,921,172	\$ -	Moved values to new cell for clarification
10/29/2020	WS8-TransFac	I511	\$ 1,483,247,961	\$ -	Moved values to new cell for clarification
10/29/2020	WS8-TransFac	D510			Moved existing footnote down one cell
10/29/2020	WS8-TransFac	D512			Added footnote reference for clarification
10/29/2020	WS8-TransFac	D513			Added footnote reference for clarification
10/29/2020	WS8-TransFac	D514			Added footnote reference for clarification
10/29/2020	WS8-TransFac	D515			Continuation of new footnote reference for clarification
10/29/2020	WS12-SSCD	B20			Updated description for clarification
10/29/2020	WS12-SSCD	D20			Update cell reference
10/21/2020	WS8-TransFac	F499	\$ (22,541,797)	\$ (22,577,642)	Updated equation
10/21/2020	WS8-TransFac	G499	\$ (55,070)	\$ (55,070)	Updated equation
10/21/2020	WS14-Reg	B16			Updated footnote
10/21/2020	WS14-Reg	C11			Updated footnote
10/21/2020	WS15-Res	C12	85,000	92,000	Updated value
10/21/2020	WS8-TransFac	D511			Moved existing footnote down one cell
10/14/2020	WS2-AllocFactor	F4			Added footnote reference for clarification
10/14/2020	WS2-AllocFactor	G4			Added footnote reference for clarification
10/14/2020	WS2-AllocFactor	B38			Added footnote reference for clarification
10/14/2020	WS5-BPUz	B4			Added footnote reference for clarification
10/14/2020	WS5-BPUz	B20			Added footnote reference for clarification
10/14/2020	WS6-BPUr	B4			Added footnote reference for clarification
10/14/2020	WS6-BPUr	B20			Added footnote reference for clarification
10/14/2020	WS7-BPUFac	C4			Added footnote reference for clarification
10/14/2020	WS7-BPUFac	A22			Added footnote reference for clarification
9/24/2020	WS4-CostData	C57	\$ 875,855,578	\$ 868,928,781	HFD Schedule 21X and 21RX source data updated
9/24/2020	WS4-CostData	E57	\$ 436,601,675	\$ 362,568,804	HFD Schedule 21X and 21RX source data updated
9/24/2020	WS4-CostData	G57	\$ 556,434,650	\$ 716,044,977	HFD Schedule 21X and 21RX source data updated
9/24/2020	WS4-CostData	I57	\$ 276,471,705	\$ 213,871,288	HFD Schedule 21X and 21RX source data updated

WAPA-UGP 2019 Rate True-up Calculation
 Summary-TrueUp
 12 Months Ending 09/30/2019 True-up

[Back to Worksheet Links](#)

**Western-UGP
 True-up Summary**

Line No.	Description	Reference	SPP		Allocation	Western-UGP 2019 Difference
			January - December 2019 Estimate	January - December 2019 Actual		Annual
1	Gross Zonal Revenue Requirement-Sch 9	WS1-RateBase C5L1	\$ 154,119,059	\$ 160,830,919		\$ 6,711,860
2	Firm Point-to-Point Transmission Service Credit/1	WS3-RevCredits C5L14+L28	\$ (5,937,730)	\$ (4,412,895)	100%	\$ 1,524,835
3	Non-Firm Point-to-Point Transmission Service Credit	WS3-RevCredits C5L42	\$ (1,110,084)	\$ (2,884,834)	100%	\$ (1,774,750)
4	Revenue from Existing Transmission Agreements	WS3-RevCredits C5L56+L70	\$ (1,134,757)	\$ (1,170,682)	100%	\$ (35,925)
5	Scheduling, System Control, and Dispatch Service Credit	WS12-SSCD C2L11	\$ (12,441,896)	\$ (11,577,626)	100%	\$ 864,270
6	Account No. 454	WS3-RevCredits C5L98	\$ (77,160)	\$ (78,071)	100%	\$ (911)
7	Z2 Nonfirm Point-to-Point Revenue Credit		\$ -	\$ -	100%	\$ -
8	Total Revenue Credits	Subtotal	\$ (20,701,627)	\$ (20,124,109)		\$ 577,518
9	Prior Year True Up	WS1-RateBase C5L3	\$ 2,138,142	\$ 2,138,142		\$ -
10	2019 Net Revenue Requirement-Sch 9	Subtotal	\$ 135,555,574	\$ 142,844,952		\$ 7,289,378
11	2019 Network Revenue (estimated/received)	WS3-RevCredits C5L112	\$ (135,555,574)	\$ (135,555,575)		\$ (1)
12	Total 2019 True-up (to WS1-RateBase, Line 3, 2021 est)		\$ -	\$ 7,289,377		\$ 7,289,377
13						
14	SPP Upgrades - Zonal Gross Revenue Requirement-Sch 11	WS5-BPUz C12L14		\$ -		
15	Point-to-Point Revenue Credit	WS3-RevCredits C5L168		\$ -		
16	TOTAL ZONAL REVENUE CREDIT	Allocator		\$ -		
17	TRUE-UP ADJUSTMENT					
18	Net Revenue Requirement SPP Upgrades - Zonal	Subtotal L14-L15-L17				
19						
20	SPP Upgrades - Regional Gross Revenue Requirement	WS6-BPUr C12L14		\$ -		
21	Point-to-Point Revenue Credit	WS3-RevCredits C5L182		\$ -		
22	TOTAL REGIONAL REVENUE CREDIT	Allocator		\$ -		
23	TRUE-UP ADJUSTMENT					
24	Net Revenue Requirement SPP Upgrades - Regional	Subtotal L20-L21-L22				
25						
26	Total Schedule 11 Revenue Requirement	Total L18+L24				
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37	2019 Actual SSCD Revenue Requirement	WS12-SSCD C2L13		\$ 10,743,043		
38	2019 Revenue received for SSCD service	WS3-RevCredits C5L84		\$ (10,627,131)		
39	Total true-up to include in 2021 estimate (to WS12-SSCD, Line 13, 2021 est)	Subtotal L37+L38		\$ 115,912		
40	2019 Actual Regulation & Frequency Response Revenue Requirement	WS14-Reg C2L9		\$ 347,765		
41	2019 Revenue received (Western-UGP Ancillary Billing Summary)	WS3-RevCredits C5L154		\$ (236,826)		
42	Total true-up to include in 2021 estimate (to WS14-Reg, Line 2, 2021 est)	Subtotal L40+L41		\$ 110,939		
43	2019 Actual Reserves Revenue Requirement	WS15-Res C2L11		\$ 361,053		
44	2019 Revenue received (Western-UGP Ancillary Billing Summary)	WS3-RevCredits C5L126+L140		\$ (225,284)		
45	Total true-up to include in 2021 estimate (to WS15-Res, Line 11, 2021 est)	Subtotal L43+L44		\$ 135,769		
46	1/ Short-Term Firm Point-to-Point Transmission Service Credit reduced by Z2 claw-back total for 2019					

Line No.	REFERENCE (2)	COMPANY TOTAL (3)	ALLOCATOR (4)	TRANSMISSION ALLOCATED AMOUNT (5)
1	GROSS REVENUE REQUIREMENT (L70)			\$ 160,830,919
2	REVENUE CREDITS (Note R)			(20,124,109)
3	PRIOR PERIOD TRUE-UP			2,138,142
4	Total Schedule 11 Revenue Requirement			0
5	NET REVENUE REQUIREMENT ((L1 + L2 + L3 + L4)			\$ 142,844,952
RATE BASE:				
GROSS PLANT IN SERVICE (Note A)				
6	Production WS4-CostData L4 C2+C3+C4	1,174,124,314	NA	
7	Transmission WS4-CostData L3 C2+C3+C4	1,487,044,002	TP 1.00000	1,487,044,002
8	Distribution WS4-CostData C2 L2-L3-L4	49,794,206	NA	
9	General & Intangible 175002	0	W/S 1.00000	0
10	Common	0	CE 0.00000	0
11	TOTAL GROSS PLANT (sum L6 : 10)	2,710,962,522	GP= 54.853%	1,487,044,002
ACCUMULATED DEPRECIATION				
12	Production WS4-CostData L11 C2+C3+C4	589,173,122	NA	
13	Transmission WS4-CostData L10 C2+C3+C4	729,967,048	TP 1.00000	729,967,048
14	Distribution WS4-CostData C2 L9-L10-L11	24,404,667	NA	
15	General & Intangible 175902	0	W/S 1.00000	0
16	Common	0	CE 0.00000	0
17	TOTAL ACCUM. DEPRECIATION (sum L12 : 16)	1,343,544,837		729,967,048
NET PLANT IN SERVICE				
18	Production (L6 - L12)	584,951,192		
19	Transmission (L7 - L13)	757,076,954		757,076,954
20	Distribution (L8 - L14)	25,389,539		
21	General & Intangible (L9 - L15)	0		0
22	Common (L10 - L16)	0		0
23	TOTAL NET PLANT (sum L18 : 22)	1,367,417,685	NP= 55.365%	757,076,954
ADJUSTMENTS TO RATE BASE (Note B)				
24	Account No. 281 (enter negative)	0	0.00000	0
25	Account No. 282 (enter negative)	0	NP 0.55365	0
26	Account No. 283 (enter negative)	0	NP 0.55365	0
27	Account No. 190	0	NP 0.55365	0
28	Account No. 255 (enter negative)	0	NP 0.55365	0
29	TOTAL ADJUSTMENTS (sum L24 : 28)	0		0
30	LAND HELD FOR FUTURE USE (Note C)	0	TP 1.00000	0
WORKING CAPITAL (Note D)				
31	CWC calculated	24,766,059		0
32	Materials & Supplies Bal Sheet - Other Assets - SGL	0	TE 0.00000	0
33	Prepayments 151191 (Note C)	0	GP 0.54853	0
34	TOTAL WORKING CAPITAL (sum L31 : 33)	24,766,059		0
35	RATE BASE (sum L 23, 29, 30, 34)	1,392,183,744		757,076,954
O&M				
Transmission ROOs Schedule 11 (Note E)				
36	Western-UGP WS4-CostData L106 C2	69,852,234	PTP/UGP 0.95584	66,767,469
37	Western-RMR WS4-CostData L106 C3	46,756,707	PTP/RMR 0.00903	422,169
38	COE WS4-CostData L106 C4	48,758,210	PTP/COE 0.07231	3,525,624
39	Less Account 565 (Note E)	0	NA 1.00000	0
A&G ROOs Schedule 11 (Note F)				
40	Western-UGP WS4-CostData L82 C2	20,621,202	PTP/UGP 0.95584	19,710,543
41	Western-RMR WS4-CostData L82 C3	12,140,119	PTP/RMR 0.00903	109,614
42	Less FERC Annual Fees	0	W/S 1.00000	0
43	Less EPRI & Reg. Comm. Exp. & Non-safety Ad (Note G)	0	W/S 1.00000	0
44	Plus Transmission Related Reg. Comm. Exp (Note G)	0	TE 0.00000	0
45	Common	0	CE 0.00000	0
46	Transmission Lease Payments	0	NA 1.00000	0
47	TOTAL O&M (sum L 36, 37, 38, 40, 41, 44, 45 less 39, 42, 43)	198,128,471		90,535,418
DEPRECIATION EXPENSE				
Transmission ROOs Schedule 4				
49	Western-UGP WS4-CostData L30 C2	32,628,636	PTP/UGP 0.95584	31,187,713
50	Western-RMR WS4-CostData L30 C3	18,370,894	PTP/RMR 0.00903	165,872
51	COE WS4-CostData L30 C4	18,534,819	PTP/COE 0.07231	1,340,222
52	General	0	W/S 1.00000	0
53	Common	0	CE 0.00000	0
54	TOTAL DEPRECIATION (sum L48 : 53)	69,534,349		32,693,806
TAXES OTHER THAN INCOME TAXES (Note H)				
LABOR RELATED				
55	Payroll	0	W/S 1.00000	0
56	Highway and vehicle	0	W/S 1.00000	0
PLANT RELATED				
57	Property	0	GP 0.54853	0
58	Gross Receipts	0	0.00000	0
59	Other	0	GP 0.54853	0
60	Payments in lieu of taxes	0	GP 0.54853	0
61	TOTAL OTHER TAXES (sum L 55 : 60)	0		0
INCOME TAXES (Note I)				
62	$T=1 - \{[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)\} =$	0.00%	NA	
63	$CIT=(T/1-T) * (1-(WCLTD/R)) =$ where WCLTD= (line 101) and R= (line 103) and FIT, SIT & p are as given in footnote I.	0.00%		
64	$1 / (1 - T) =$ (from line 62)	0.0000		
65	Amortized Investment Tax Credit (enter negative)	0		0
66	Income Tax Calculation (L63 * L69)	0	NA	0
67	ITC adjustment (L64 * L65)	0	NP	0
68	Total Income Taxes (L66 + L67)	0	0.55365	0
69	RETURN [Rate Base * Rate of Return] (L35 * L103)	69,145,504	NA	37,601,694
70	REV. REQUIREMENT (sum L47, 54, 61, 68, 69)	336,808,324		160,830,919

SUPPORTING CALCULATIONS AND NOTES

TRANSMISSION PLANT INCLUDED IN UMZ RATES									
71	Total transmission plant	(L7, C3)							1,487,044,002
72	Less transmission plant excluded from UMZ rates	(Note K)							0
73	Less transmission plant included in OATT Ancillary Services	(Note L)							0
74	Transmission plant included in UMZ rates	(L71 less L72 and L73)							1,487,044,002
75	Percentage of transmission plant included in UMZ Rates	(L74 / L71)				TP=			1.00000
TRANSMISSION EXPENSES									
76	Total transmission expenses	(sum L36 to L38, C3)							0
77	Less transmission expenses included in OATT Ancillary Services	(Note J)							0
78	Included transmission expenses	(L76 - L77)							0
79	Percentage of transmission expenses after adjustment (line 8 divided by line 6)	(L78/ L76)							0.00000
80	Percentage of transmission plant included in UMZ Rates	(L75)				TP			1.00000
81	Percentage of transmission expenses included in UMZ Rates	(L80 * L79)				TE=			0.00000
WAGES & SALARY ALLOCATOR (W&S)									
			\$		TP	Allocation			
82	Production		0	0.00		0			
83	Transmission		19,710,543	1.00		19,710,543			
84	Distribution		0	0.00		0			W&S Allocator
85	Other		0	0.00		0			(\$ / Allocation)
86	Total	(sum L82 to L85)	19,710,543			19,710,543	=		1.00000
PERCENTAGE OF TOTAL PLANT ALLOCATOR PTP									
			\$						
87	Transmission Plant in Service Western-UGP		1,389,284,819						
88	Total Plant in Service Western-UGP		1,453,472,034						
89	UGP Percentage of Transmission Plant to Total Plant	(L87 / L88)				PTP/UGP	=		0.95584
90	Transmission Plant in Service Western-RMR		7,364,690						
91	Total Plant in Service Western-RMR		815,665,206						
92	RMR Percentage of Transmission Plant to Total Plant	(L90 / L91)				PTP/RMR	=		0.00903
93	Transmission Plant in Service COE		90,394,493						
94	Total Plant in Service COE		1,250,125,798						
95	COE Percentage of Transmission Plant to Total Plant	(L93 / L94)				PTP/COE	=		0.07231
COMMON PLANT ALLOCATOR (CE)									
			\$			% Electric		Labor Ratio =	CE
96	Electric		0			(L96 / L99)		(L86)	0.00000
97	Gas		0						
98	Water		0			0.00000	*	1.00000	
99	Total	(sum L96 to L98)	0						
RETURN (R)									
			\$			Cost			=WCLTD
100	Long Term Interest ROOs Schedule 5		\$43,985,309			(Note O)		Weighted	
			\$		%				
101	Long Term Debt	HFD Sch's 21RX & 21X Col 8 L	885,605,419	100%		0.0497		0.0497	=R
102	Proprietary Capital	23,25,26,29,30	0	0%		0.1238		0.0000	
103	Total (sum lines 31-32)	(sum L101 to L102)	885,605,419	100%				0.0497	
104								12.38%	
105						Proprietary Capital Cost Rate =		1.00	
REVENUE CREDITS									
ACCOUNT 447 (SALES FOR RESALE)									
106	a. Bundled Non-RQ Sales for Resale	(Note P)						0	
107	b. Bundled Sales for Resale included in Divisor on page 1							0	
108	Total of (a)-(b)							0	
109	ACCOUNT 454 (RENT FROM ELECTRIC PROPERTY)	(Note Q)						78,071	
110	ACCOUNT 456 (OTHER ELECTRIC REVENUES)							0	
111	a. Transmission charges for all transmission transactions							0	
112	b. Transmission charges for all transmission transactions included in Divisor on page 1							0	
113	Total of (a)-(b)							0	

Note 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

Letter 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 47 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 43 - EPRI Annual Membership Dues, all Regulatory Commission Expenses, and non-safety related advertising. Line 44 - Regulatory Commission Expenses directly related to transmission service, ISO filings, or transmission siting.

H Includes only FICA, unemployment, highway, property, gross receipts, and other assessments charged in the current year. Taxes related to income are excluded. Gross receipts taxes are not included in transmission revenue requirement in the Rate Formula Template, since they are recovered elsewhere.

I Western is not subject to Federal or State Income Tax.

Inputs Required:

FIT =	0.00%	
SIT=	0.00%	(State Income Tax Rate or Composite SIT)
p =	0.00%	(percent of federal income tax deductible for state purposes)

J Removes dollar amount of transmission expenses included in the OATT ancillary services rates, including Acct No. 561. Western does not include transmission expenses in ancillary service rates.

K Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until RUS 12 balances are adjusted to reflect application of seven-factor test).

L Removes dollar amount of transmission plant included in the development of OATT ancillary services rates and generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no through-flow when the generator is shut down.

M Percentage of Total Plant Allocators are developed separately for Western-UGP and Western-RMR to allocate O&M, A&G, and Depreciation Expenses between Transmission and Generation.

N Western does not have Common Plant.

O Debt cost rate = long-term interest (line 100) / long term debt (line 101). 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 106 must equal zero since all short-term power sales must be unbundled and the transmission component reflected in Account No. 456 and all other uses are to be included in the divisor.

Q Includes income related only to transmission facilities, such as pole attachments, rentals and special use.

R The revenues credited shall include only the amounts received directly reflecting the Transmission Owner's integrated transmission facilities. They do not include revenues associated with FERC annual charges, gross receipts taxes, facilities not included in this template (e.g., direct assignment facilities and GSUs) which are not recovered under this Revenue Requirement Template.

Line No.	DESCRIPTION (1)	TRANSMISSION (2)	GENERATION (3)	COE GENERATION (4)	BASE PLAN UPGRADES- REGIONAL/1 (4)	BASE PLAN UPGRADES- ZONAL/1 (5)	REFERENCE (5)
1	A. Operation and Maintenance Expense						
2	O&M Expense	\$70,715,262	\$89,046,408	\$45,232,586	\$0	\$0	WS4-CostData (O&M Expenses Worksheet)
3	Transmission of Electricity by Others	\$0	\$0	\$0	\$0	\$0	
4	Total O&M Expense	\$70,715,262	\$89,046,408	\$45,232,586	\$0	\$0	L2 + L3
5	Net Plant Investment	\$757,076,954	\$747,679,864	\$577,612,349	\$0	\$0	WS4-CostData (Net Plant Investment Worksheet)
6	O&M as % of Net Plant Investment	9.341%	11.910%	7.831%	#DIV/0!	#DIV/0!	L4/L5
7	B. A&G Expense						
8	A&G Expense	\$19,820,156	\$204,201	\$0	\$0	\$0	WS4-CostData (A&G Expenses Worksheet)
9	Net Plant Investment	\$757,076,954	\$747,679,864	\$577,612,349	\$0	\$0	L5
10	A&G as % of Net Plant Investment	2.618%	0.027%	0.000%	#DIV/0!	#DIV/0!	L8/L9
11	C. Depreciation Expense						
12	Depreciation Expense	\$32,693,806	\$21,770,581	\$17,194,597	\$0	\$0	WS4-CostData (Depreciation Expense Worksheet)
13	Net Plant Investment	\$757,076,954	\$747,679,864	\$577,612,349	\$0	\$0	L5
14	Depreciation as a % of Net Plant Investment	4.318%	2.912%	2.977%	#DIV/0!	#DIV/0!	L12/L13
15	D. Taxes Other than Income Taxes for Transmission						
16	Not applicable.						
17	E. Allocation of General Plant						
18	No General Plant identified at this time, all plant is identified as either generation or transmission related.						
19	F. Cost of Capital						
20	Weighted Transmission Composite Interest Rate	4.964%	3.712%	3.712%	4.964%	4.964%	WS4-CostData (Cost of Capital Worksheet)
21	G. Fixed Charge Rate						
22	Operation and Maintenance Expense	9.341%	11.910%	7.831%	#DIV/0!	#DIV/0!	L6
23	A&G Expense	2.618%	0.027%	0.000%	#DIV/0!	#DIV/0!	L10
24	Depreciation Expense	4.318%	2.912%	2.977%	#DIV/0!	#DIV/0!	L14
25	Taxes Other than Income Taxes	0.000%	0.000%	0.000%	0.000%	0.000%	
26	Allocation of General Plant to Transmission	0.000%	0.000%	0.000%	0.000%	0.000%	
27	Cost of Capital	4.964%	3.712%	3.712%	4.964%	4.964%	L20
28	Total	21.241%	18.561%	14.520%	#DIV/0!	#DIV/0!	
29	H. Revenue Requirement						
30	Fixed Charge Rate	21.241%	18.561%	14.520%	#DIV/0!	#DIV/0!	L28
31	Net Plant Investment	\$757,076,954	\$747,679,864	\$577,612,349	\$0	\$0	L5
32	Annual Western-UGPR Cost	\$160,807,328	\$138,777,726	\$83,870,207	#DIV/0!	#DIV/0!	L30 * L31
33	1/ No Base Plan Upgrades for FY2019						

WAPA-UGP 2019 Rate True-up Calculation

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Worksheet 3 - Revenue Credit Calculation

12 Months Ending 09/30/2019 True-up

Line No.	ACCOUNT	MONTH (1)	REFERENCE (2)	COMPANY TOTAL		TRANSMISSION	
				ALLOCATOR	LOCATION	ALLOCATED	AMOUNT
				(3)	(4)	(5)	
1	Z2 Sch 7/8	Jan-19	Z2	20,266	NA	100%	20,266
2	Z2 Sch 7/8	Feb-19	Z2	17,560	NA	100%	17,560
3	Z2 Sch 7/8	Mar-19	Z2	19,087	NA	100%	19,087
4	Z2 Sch 7/8	Apr-19	Z2	19,945	NA	100%	19,945
5	Z2 Sch 7/8	May-19	Z2	18,889	NA	100%	18,889
6	Z2 Sch 7/8	Jun-19	Z2	19,486	NA	100%	19,486
7	Z2 Sch 7/8	Jul-19	Z2	17,466	NA	100%	17,466
8	Z2 Sch 7/8	Aug-19	Z2	21,603	NA	100%	21,603
9	Z2 Sch 7/8	Sep-19	Z2	21,531	NA	100%	21,531
10	Z2 Sch 7/8	Oct-19	Z2	21,063	NA	100%	21,063
11	Z2 Sch 7/8	Nov-19	Z2	20,291	NA	100%	20,291
12	Z2 Sch 7/8	Dec-19	Z2	20,282	NA	100%	20,282
13	Z2 Sch 7/8	Adjustments	Z2	-		100%	0
14	Subtotal			237,468			237,468
15	Schedule 7	Jan-19	FIRM PTP	(327,463)	TP	100%	(327,463)
16	Schedule 7	Feb-19	FIRM PTP	(370,225)	TP	100%	(370,225)
17	Schedule 7	Mar-19	FIRM PTP	(338,011)	TP	100%	(338,011)
18	Schedule 7	Apr-19	FIRM PTP	(264,702)	TP	100%	(264,702)
19	Schedule 7	May-19	FIRM PTP	(263,669)	TP	100%	(263,669)
20	Schedule 7	Jun-19	FIRM PTP	(440,560)	TP	100%	(440,560)
21	Schedule 7	Jul-19	FIRM PTP	(469,797)	TP	100%	(469,797)
22	Schedule 7	Aug-19	FIRM PTP	(476,388)	TP	100%	(476,388)
23	Schedule 7	Sep-19	FIRM PTP	(431,337)	TP	100%	(431,337)
24	Schedule 7	Oct-19	FIRM PTP	(373,261)	TP	100%	(373,261)
25	Schedule 7	Nov-19	FIRM PTP	(402,469)	TP	100%	(402,469)
26	Schedule 7	Dec-19	FIRM PTP	(492,481)	TP	100%	(492,481)
27	Schedule 7	Adjustments	FIRM PTP	-		100%	0
28	Subtotal			(4,650,363)			(4,650,363)
29	Schedule 8	Jan-19	NONFIRM PTP	(185,543)	TP	100%	(185,543)
30	Schedule 8	Feb-19	NONFIRM PTP	(307,103)	TP	100%	(307,103)
31	Schedule 8	Mar-19	NONFIRM PTP	(366,867)	TP	100%	(366,867)
32	Schedule 8	Apr-19	NONFIRM PTP	(207,034)	TP	100%	(207,034)
33	Schedule 8	May-19	NONFIRM PTP	(179,352)	TP	100%	(179,352)
34	Schedule 8	Jun-19	NONFIRM PTP	(221,404)	TP	100%	(221,404)
35	Schedule 8	Jul-19	NONFIRM PTP	(201,646)	TP	100%	(201,646)
36	Schedule 8	Aug-19	NONFIRM PTP	(195,573)	TP	100%	(195,573)
37	Schedule 8	Sep-19	NONFIRM PTP	(258,897)	TP	100%	(258,897)
38	Schedule 8	Oct-19	NONFIRM PTP	(262,404)	TP	100%	(262,404)
39	Schedule 8	Nov-19	NONFIRM PTP	(342,980)	TP	100%	(342,980)
40	Schedule 8	Dec-19	NONFIRM PTP	(156,031)	TP	100%	(156,031)
41	Schedule 8	Adjustments	NONFIRM PTP	-		100%	0
42	Subtotal			(2,884,834)			(2,884,834)
43	Sch 7/8/11	Jan-19	MISO SEAMS	(98,200)	TP	100%	(98,200)
44	Sch 7/8/11	Feb-19	MISO SEAMS	(98,845)	TP	100%	(98,845)
45	Sch 7/8/11	Mar-19	MISO SEAMS	(76,879)	TP	100%	(76,879)
46	Sch 7/8/11	Apr-19	MISO SEAMS	(96,304)	TP	100%	(96,304)
47	Sch 7/8/11	May-19	MISO SEAMS	(98,984)	TP	100%	(98,984)
48	Sch 7/8/11	Jun-19	MISO SEAMS	(98,984)	TP	100%	(98,984)
49	Sch 7/8/11	Jul-19	MISO SEAMS	(91,362)	TP	100%	(91,362)
50	Sch 7/8/11	Aug-19	MISO SEAMS	(101,525)	TP	100%	(101,525)
51	Sch 7/8/11	Sep-19	MISO SEAMS	(98,984)	TP	100%	(98,984)
52	Sch 7/8/11	Oct-19	MISO SEAMS	(98,801)	TP	100%	(98,801)
53	Sch 7/8/11	Nov-19	MISO SEAMS	(98,801)	TP	100%	(98,801)
54	Sch 7/8/11	Dec-19	MISO SEAMS	(98,801)	TP	100%	(98,801)
55	Sch 7/8/11	Adjustments	MISO SEAMS	-		100%	0
56	Subtotal			(1,156,472)			(1,156,472)
57	Sch 11	Jan-19	ZONAL PTP ADJUSTMENTS	(936)	BP		(936)
58	Sch 11	Feb-19	ZONAL PTP ADJUSTMENTS	(324)	BP		(324)
59	Sch 11	Mar-19	ZONAL PTP ADJUSTMENTS	1,380	BP		1,380
60	Sch 11	Apr-19	ZONAL PTP ADJUSTMENTS	(4,268)	BP		(4,268)
61	Sch 11	May-19	ZONAL PTP ADJUSTMENTS	(2,514)	BP		(2,514)
62	Sch 11	Jun-19	ZONAL PTP ADJUSTMENTS	(535)	BP		(535)
63	Sch 11	Jul-19	ZONAL PTP ADJUSTMENTS	(1,435)	BP		(1,435)
64	Sch 11	Aug-19	ZONAL PTP ADJUSTMENTS	(1,763)	BP		(1,763)
65	Sch 11	Sep-19	ZONAL PTP ADJUSTMENTS	(885)	BP		(885)
66	Sch 11	Oct-19	ZONAL PTP ADJUSTMENTS	(1,451)	BP		(1,451)
67	Sch 11	Nov-19	ZONAL PTP ADJUSTMENTS	(956)	BP		(956)
68	Sch 11	Dec-19	ZONAL PTP ADJUSTMENTS	(522)	BP		(522)
69	Sch 11	Adjustments	ZONAL PTP ADJUSTMENTS	-			0
70	Subtotal			(14,210)			(14,210)
71	7088	Feb-19	SSCD	(1,015,423)	NA	100%	(1,015,423)
72	7088	Mar-19	SSCD	(998,722)	NA	100%	(998,722)
73	7088	Apr-19	SSCD	(962,760)	NA	100%	(962,760)
74	7088	May-19	SSCD	(776,987)	NA	100%	(776,987)
75	7088	Jun-19	SSCD	(737,817)	NA	100%	(737,817)
76	7088	Jul-19	SSCD	(835,002)	NA	100%	(835,002)
77	7088	Aug-19	SSCD	(868,315)	NA	100%	(868,315)
78	7088	Sep-19	SSCD	(861,033)	NA	100%	(861,033)
79	7088	Oct-19	SSCD	(835,679)	NA	100%	(835,679)
80	7088	Nov-19	SSCD	(881,928)	NA	100%	(881,928)
81	7088	Dec-19	SSCD	(917,851)	NA	100%	(917,851)
82	7088	Jan-20	SSCD	(935,614)	NA	100%	(935,614)
83	7088	Adjustments	SSCD	-		100%	0
84	Subtotal			(10,627,131)			(10,627,131)
85	45420	Jan-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)
86	45420	Feb-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)

87	45420	Mar-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)
88	45420	Apr-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)
89	45420	May-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)
90	45420	Jun-19	RENT FROM ELECTRIC PROPERTY	(6,208)	TP	100%	(6,208)
91	45420	Jul-19	RENT FROM ELECTRIC PROPERTY	(6,292)	TP	100%	(6,292)
92	45420	Aug-19	RENT FROM ELECTRIC PROPERTY	(6,292)	TP	100%	(6,292)
93	45420	Sep-19	RENT FROM ELECTRIC PROPERTY	(9,361)	TP	100%	(9,361)
94	45420	Oct-19	RENT FROM ELECTRIC PROPERTY	(6,292)	TP	100%	(6,292)
95	45420	Nov-19	RENT FROM ELECTRIC PROPERTY	(6,292)	TP	100%	(6,292)
96	45420	Dec-19	RENT FROM ELECTRIC PROPERTY	(6,292)	TP	100%	(6,292)
97	45420	Adjustments	RENT FROM ELECTRIC PROPERTY	-	TP	100%	-
98		Subtotal		(78,071)			(78,071)
99	45643	Feb-19	REVENUE FROM TRANS.	(11,296,300)	TP	100%	(11,296,300)
100	45643	Mar-19	REVENUE FROM TRANS.	(11,296,300)	TP	100%	(11,296,300)
101	45643	Apr-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
102	45643	May-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
103	45643	Jun-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
104	45643	Jul-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
105	45643	Aug-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
106	45643	Sep-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
107	45643	Oct-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
108	45643	Nov-19	REVENUE FROM TRANS.	(11,296,298)	TP	100%	(11,296,298)
109	45643	Dec-19	REVENUE FROM TRANS.	(11,296,296)	TP	100%	(11,296,296)
110	45643	Jan-20	REVENUE FROM TRANS.	(11,296,296)	TP	100%	(11,296,296)
111	45643	Adjustments	REVENUE FROM TRANS.	-	TP	100%	0
112		Subtotal		(135,555,575)			(135,555,575)
113	7080	Feb-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
114	7080	Mar-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
115	7080	Apr-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
116	7080	May-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
117	7080	Jun-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
118	7080	Jul-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
119	7080	Aug-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
120	7080	Sep-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
121	7080	Oct-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
122	7080	Nov-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
123	7080	Dec-19	RESRV-SUPPLEMENTAL	(10,240)	NA	100%	(10,240)
124	7080	Jan-20	RESRV-SUPPLEMENTAL	-	NA	100%	0
125	7080	Adjustments	RESRV-SUPPLEMENTAL	-	NA	100%	0
126		Subtotal		(112,642)			(112,642)
127	7089	Feb-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
128	7089	Mar-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
129	7089	Apr-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
130	7089	May-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
131	7089	Jun-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
132	7089	Jul-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
133	7089	Aug-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
134	7089	Sep-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
135	7089	Oct-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
136	7089	Nov-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
137	7089	Dec-19	RESRV-SPIN	(10,240)	NA	100%	(10,240)
138	7089	Jan-20	RESRV-SPIN	-	NA	100%	0
139	7089	Adjustments	RESRV-SPIN	-	NA	100%	0
140		Subtotal		(112,642)			(112,642)
141	7091	Feb-19	REGULATION	(21,530)	NA	100%	(21,530)
142	7091	Mar-19	REGULATION	(21,530)	NA	100%	(21,530)
143	7091	Apr-19	REGULATION	(21,530)	NA	100%	(21,530)
144	7091	May-19	REGULATION	(21,530)	NA	100%	(21,530)
145	7091	Jun-19	REGULATION	(21,530)	NA	100%	(21,530)
146	7091	Jul-19	REGULATION	(21,530)	NA	100%	(21,530)
147	7091	Aug-19	REGULATION	(21,530)	NA	100%	(21,530)
148	7091	Sep-19	REGULATION	(21,530)	NA	100%	(21,530)
149	7091	Oct-19	REGULATION	(21,530)	NA	100%	(21,530)
150	7091	Nov-19	REGULATION	(21,530)	NA	100%	(21,530)
151	7091	Dec-19	REGULATION	(21,530)	NA	100%	(21,530)
152	7091	Jan-20	REGULATION	-	NA	100%	0
153	7091	Adjustments	REGULATION	-	NA	100%	0
154		Subtotal		(236,826)			(236,826)
155	Sch 11	Feb-19	BPU-ZONAL	-	NA	100%	0
156	Sch 11	Mar-19	BPU-ZONAL	-	NA	100%	0
157	Sch 11	Apr-19	BPU-ZONAL	-	NA	100%	0
158	Sch 11	May-19	BPU-ZONAL	-	NA	100%	0
159	Sch 11	Jun-19	BPU-ZONAL	-	NA	100%	0
160	Sch 11	Jul-19	BPU-ZONAL	-	NA	100%	0
161	Sch 11	Aug-19	BPU-ZONAL	-	NA	100%	0
162	Sch 11	Sep-19	BPU-ZONAL	-	NA	100%	0
163	Sch 11	Oct-19	BPU-ZONAL	-	NA	100%	0
164	Sch 11	Nov-19	BPU-ZONAL	-	NA	100%	0
165	Sch 11	Dec-19	BPU-ZONAL	-	NA	100%	0
166	Sch 11	Dec-19	BPU-ZONAL	-	NA	100%	0
167	Sch 11	Adjustments	BPU-ZONAL	-	NA	100%	0
168		Subtotal		-			0
169	Sch 11	Feb-19	BPU-REGIONAL	-	NA	100%	0
170	Sch 11	Mar-19	BPU-REGIONAL	-	NA	100%	0
171	Sch 11	Apr-19	BPU-REGIONAL	-	NA	100%	0
172	Sch 11	May-19	BPU-REGIONAL	-	NA	100%	0
173	Sch 11	Jun-19	BPU-REGIONAL	-	NA	100%	0
174	Sch 11	Jul-19	BPU-REGIONAL	-	NA	100%	0
175	Sch 11	Aug-19	BPU-REGIONAL	-	NA	100%	0
176	Sch 11	Sep-19	BPU-REGIONAL	-	NA	100%	0
177	Sch 11	Oct-19	BPU-REGIONAL	-	NA	100%	0

178	Sch 11	Nov-19	BPU-REGIONAL	-	NA	100%	0
179	Sch 11	Dec-19	BPU-REGIONAL	-	NA	100%	0
180	Sch 11	Jan-20	BPU-REGIONAL	-	NA	100%	0
181	Sch 11	Adjustments	BPU-REGIONAL	-	NA	100%	0
182		Subtotal		-			0
183	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 sheet may be updated					
184		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 Invoice as source document.					
185		22 Schedule 7/8 clawbacks					
186		Schedule 7 - Firm PTP Transmission revenues					
187		Schedule 8 - Non-Firm PTP Transmission revenues					
188		Schedule 7/8/11 - MISO's SPP PTP transmission service revenues					
189		Schedule 11 - Zonal PTP adjustment revenues					
190		7088 - Scheduling, System Control and Dispatch Services revenues					
191		45420 - Other Rental revenues					
192		45643 - Firm Network Transmission revenues					
193		7080 - Supplemental Reserves revenues					
194		7089 - Spinning Reserves revenues					
195		7091 - Regulation Service revenues					
196		Schedule 11 Base Plan Upgrade, Zonal and Regional revenues					

WAPA-UGP 2019 Rate True-up Calculation
Worksheet 4 - Cost Support Data
12 Months Ending 09/30/2019 True-up

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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	1,453,472,034	1/	815,665,206	2/	1,250,125,798	3/	533,467,055	12/	4,052,730,093
3	PS-ED Transmission Plant-in-Service	1,389,284,819	4/	7,364,690	5/	90,394,493	6/	0		1,487,044,002
4	PS-ED Generation Plant-in-Service	14,393,009	7/	0		1,159,731,305	L2-L3	533,467,055	L2-L3	1,707,591,370
5	PS-ED SSCD Plant-in-Service	16,816,728	8/							
6	Generation Plant to Total Plant	0.00990	L4/L2	0.00000	L4/L2	0.92769	L4/L2	1.00000	L4/L2	
7	Transmission Plant to Total Plant	0.95584	L3/L2	0.00903	L3/L2	0.07231	L3/L2	0.00000	L3/L2	
8	SSCD Plant to Total Plant	0.01157	L5/L2							
9	PS Accumulated Depreciation	712,362,013	9/	408,789,968	10/	627,491,835	11/	370,738,383	12/	2,119,382,199
10	PS-ED Trans. Accumulated Depreciation	680,903,180	L7*L9	3,690,989	L7*L9	45,372,879	L7*L9	0	L7*L9	729,967,048
11	PS-ED Gen. Accumulated Depreciation	7,054,166	L6*L9	0	L6*L9	582,118,956	L9-L10	370,738,383	L6*L9	959,911,505
12	PS-ED SSCD Accumulated Depreciation	8,242,056	L8*L9							8,242,056
13	PS-ED Net Transmission Plant	708,381,639	L3-L10	3,673,701	L3-L9	45,021,614	L3-L10	0	L3-L10	757,076,954
14	PS-ED Net Generation Plant	7,338,843	L4-L11	0	L4-L10	577,612,349	L4-L11	162,728,672	L4-L11	747,679,864
15	PS-ED Net SSCD Plant	8,574,672	L5-L12							8,574,672
16	1/ Transmission Facility Worksheet, C1L504									
17	2/ RMCSR - Pick-Sloan Missouri River Basin Results of Operations (ROOs), Schedule 1									
18	3/ Corps of Engineers (COE) Financial Statements, Electric and Power Multi-Purpose Plant in Service									
19	4/ Transmission Facility Worksheet, C5L504									
20	5/ Transmission Facility Worksheet, C5L495									
21	6/ Transmission Facility Worksheet, C5L502									
22	7/ Transmission Facility Worksheet, C3L504									
23	8/ SSCD Plant-in-Service is based on a percentage of Watertown Operations Centers cost, based on FTE									
24	9/ UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
25	10/ RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
26	11/ Corps of Engineers Financial Statements, Statement of Assets and Liabilities									
27	12/ Combined Financial Statements, Combining Schedules of Revenues and Expenses Data by Agency									
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WAPA-UGP 2019 Rate True-up Calculation										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
29	Depreciation Worksheet									
30	PS Depreciation Expense	32,628,636	1/	18,370,894	2/	18,534,819	3/	4,252,879	4/	73,787,228
31	PS-ED Transmission Depreciation 5/	31,187,713		165,872		1,340,222		0		32,693,806
32	PS-ED Generation Depreciation 6/	323,105		0		17,194,597		4,252,879		21,770,581
33	PS-ED SSCD Depreciation 7/	377,515								377,515
34	1/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
35	2/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
36	3/ FY Corps of Engineers Statement of Revenues and Expenses									
37	4/ Combined Financial Statements, Detail by Agency									
38	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,									
39	calculated on L7 of the Net Plant Investment Worksheet									
40	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									
41	on L6 of the Net Plant Investment Worksheet. COE generation depreciation is COE total depreciation less transmission depreciation									
42	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 L8 of the Net Plant									
43	Investment Worksheet									

WAPA-UGP 2019 Rate True-up Calculation										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
44	Cost of Capital Worksheet									
45	Long Term Debt:									
46	FY Balances	868,928,781	1/	362,568,804	1/	716,044,977	1/	213,871,288	1/	2,161,413,850
47	Interest Expenses:									
48	FY Interest	44,132,105	2/	22,810,770	2/	22,074,580	2/	10,787,676	2/	99,805,131
49	Average Interest Rate	5.079%	L47/L45	6.291%	L47/L45	3.083%	L47/L45	5.044%	L47/L45	
50	Transmission Plant Factor	0.9343	3/	0.0050	4/	0.0608	5/	0.0000	6/	
51	Weighted Trans. Composite Rate									4.964% 7/
52	Generation Plant Factor	0.0084	8/	0.0000	9/	0.6792	10/	0.3124	11/	
53	Weighted Gen. Composite Rate									3.712% 12/
54	1/ Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedules 21X and 21RX									
55	2/ Interest from Combined Financial Statements, Detail By Agency/Col M L53									
56	3/ C2L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
57	4/ C3L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
58	5/ C4L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
59	6/ C5L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
60	7/ (C2L48*C2L49)+(C3L48*C3L49)+(C4L48*C4L49)+(C5L48*C5L49)									
61	8/ C2L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
62	9/ C3L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
63	10/ C4L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
64	11/ C5L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
65	12/ (C2L48*C2L49)+(C3L48*C3L49)+(C4L48*C4L49)+(C5L48*C5L49)									
66										

WAPA-UGP 2019 Rate True-up Calculation						
Line No.	(1)	WESTERN-UGP (2)	WESTERN RMR (3)	COE (4)	BOR (5)	TOTAL (6)
67	A&G Expenses Worksheet					
68	Object Class	WESTERN UGPR 1/	WESTERN RMR 2/	COE 3/	BOR 3/	Total
69	1411	11,245,252	7,292,404	0	0	18,537,655
70	1412	6,901,579	3,552,375	0	0	10,453,954
71	1415	563,897	375,254	0	0	939,151
72	1416	(502,752)	97,444	0	0	(405,308)
73	1421	1,304,371	835,395	0	0	2,139,765
74	1422	1,126,086	2,298	0	0	1,128,384
75	1425	(18,393)	(15,542)	0	0	(33,935)
76	1426	(184)	492	0	0	308
77	1431	0	0	0	0	0
78	1432	874	0	0	0	874
79	1441	0	0	0	0	0
80	1442	206	0	0	0	206
81	1444	267	0	0	0	267
82	PS Total A&G	20,621,202	12,140,119	0	0	32,761,320
83	PS-ED Transmission A&G 4/	19,710,543	109,614	0	0	19,820,156
84	PS-ED Generation A&G 5/	204,201	0	0	0	204,201
85	PS-ED SSCD A&G 6/	238,588	0	0	0	238,588
86	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					
87	2/ Western RMR A&G Expenses are from the RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11A					
88	3/ A&G Expenses for COE and BOR are unavailable. All COE and BOR A&G expenses are included in O&M Expenses					
89	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 L7 of the Net Plant Investment Worksheet					
91	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 L6 of the Net Plant Investment Worksheet					
92	Investment Worksheet					
93	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 L8 of the Net Plant Investment Worksheet					

WAPA-UGP 2019 Rate True-up Calculation						
Line No.	(1)	WESTERN-UGP (2)	WESTERN RMR (3)	COE (4)	BOR (5)	TOTAL (6)
94	O&M Expenses Worksheet					
95		WESTERN-UGP 1/	WESTERN-RMR 2/	COE 3/	BOR 4/	Total
96	Total Electric Operating Expense	201,786,387	82,348,335	48,758,210	43,122,110	376,015,043
97	Less:					
98	Other Power Supply Expenses	112,213,590	23,929,998			136,143,588
99	A&G Expenses	20,621,202	12,140,119			32,761,320
100	Prior Year Adjustments	90,313	0			90,313
101	Annual Reserve Sharing Group Cost	0	0			0
102	Plus:					
103	Moveable Property Interest	871,304	407,662			1,278,966
104	Warehouse Stores Interest	119,647	70,827			190,474
105	Scheduling, System Control & Dispatch	10,535,913	0			10,535,913
106	PS Total O&M	69,852,234	46,756,707	48,758,210	43,122,110	208,489,262
107	PS-ED Transmission O&M 5/	66,767,469	422,169	3,525,624	0	70,715,262
108	PS-ED Generation O&M 6/	691,712	0	45,232,586	43,122,110	89,046,408
109	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					
110	Moveable Property and Warehouse Stores Interest, which are from Schedule 5					
111	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					
112	Stores Interest, which are from Schedule 5					
113	3/ Total Corps O&M Expenses are from the Corps of Engineers Financial Statements					
114	4/ Total BOR O&M Expenses are from the Combined Financial Statements					
115	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 L7 of the					
116	Net Plant Investment Worksheet					
117	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 L6 of the					
118	Net Plant Investment Worksheet					

WAPA-UGP 2019 Rate True-up Calculation
 Worksheet 5 - Zonal SPP Upgrade Calculations
 12 Months Ending 09/30/2019 True-up

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

Line No.	Project Name and #/1 (1)	Type (2)	Project Gross Plant (Zonal Allocation) (3)	Allocation Factor % (4)	Project Accumulated Depreciation (5)	Allocation for Transmission O&M (6)	Allocation for General Plant Depreciation (7)	Allocation for A&G (8)	Cost of Capital (9)	Project Net Plant (10)	Cost of Capital (11)	Project ATRR (12)	Revenue Credit Allocation (13)	Net ATRR (14)
1		TL	0								\$ -	\$ -	\$ -	\$ -
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13	Revenue Credit Total													
14	Total			100%										
15	1/ No Base Plan Projects for FY 2019													

WAPA-UGP 2019 Rate True-up Calculation [\(Back to Worksheet Links\)](#)

Worksheet 6 - Base Plan Upgrades-Regional

12 Months Ending 09/30/2019 True-up

Line No.	Project Name and # /1 (1)	Type (2)	Project Gross Plant (Regional Allocation) (3)	Allocation Factor % (4)	Project Accumulated Depreciation (5)	Allocation for Transmission O&M (6)	Allocation for General Plant Depreciation (7)	Allocation for A&G (8)	Cost of Capital (9)	Project Net Plant (10)	Cost of Capital (11)	Project ATRR (12)	Revenue Credit Allocation (13)	Net ATRR (14)
1											\$ -	\$ -	\$ -	\$ -
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13	Revenue Credit Total													
14	Total			100%										
15	1/ No Base Plan Projects for FY 2019													

WAPA-UGP 2019 Rate True-up Calculation
Worksheet 8 - Transmission Facilities
12 Months Ending 09/30/2019 True-up

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

Line No.	FID	DESCRIPTION	(1) PRIOR YEAR FACILITY TOTALS (\$)	(2) ATTACHMENT AI ADJUSTMENTS	(3) GENERATION ADJUSTMENTS	(4) OTHER ADJUSTMENTS	(5) FY2019 ACT SPP TOTALS (\$)
1	TL	AUR BR	AURORA- BROOKINGS 115-KV T/L	133,158	-	-	133,158
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	5,076,897	-	-	5,076,897
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	12,764,457	-	-	12,764,457
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	2,952,237	-	-	2,952,237
13	TL	CF EH A	CANYON FERRY-EAST HELENA "A"	141,044	-	-	141,044
14	TL	CF EH B	CANYON FERRY-EAST HELENA "B"	141,044	-	-	141,044
15	TL	CA JT	CARRINGTON-JAMESTOWN	1,259,668	-	-	1,259,668
16	TL	WC BU	CHARLIE CREEK - WATFORD CITY	13,451,446	-	-	13,451,446
17	TL	CCRBEF	CHARLIE CREEK-BELFIELD	14,513,308	-	-	14,513,308
18	TL	CR DC	CIRCLE-DAWSON COUNTY 2/	2,417,703	-	-	2,417,703
19	TL	CONSH2	CONRAD-SHELBY #2	6,735,890	-	-	6,735,890
20	TL	CS MY	CRESTON-MARYVILLE	1,366,481	-	-	1,366,481
21	TL	DC MC	DAWSON COUNTY - MILES CITY	2,605,678	-	-	2,605,678
22	TL	DC GL	DAWSON-GLENDIVE	553,800	-	-	553,800
23	TL	DC MDR	DAWSON-MEDORA	3,464,064	-	-	3,464,064
24	TL	DC OF	DAWSON-O'FALLON CREEK	918,676	-	-	918,676
25	TL	DC WN	DAWSON-WILLISTON	1,258,900	-	-	1,258,900
26	TL	DN CS	DENISON-CRESTON	20,977,731	-	-	20,977,731
27	TL	DL CA	DEVILS LAKE-CARRINGTON	9,358,003	-	-	9,358,003
28	TL	DL LA	DEVILS LAKE-LAKOTA	1,872,142	-	-	1,872,142
29	TL	ED FO	EDGELEY-FORMAN	375,316	-	-	375,316
30	TL	ED GR	EDGELEY-GROTON	771,572	-	-	771,572
31	TL	ELCMA	ELK CREEK-NEWELL-MAURINE 115-kv T/L	60,704	-	-	60,704
32	TL	FA GK	FARGO-GRAND FORKS	2,369,098	-	-	2,369,098
33	TL	FA MO	FARGO-MORRIS	7,305,876	-	-	7,305,876
34	TL	FO SU D	FORMAN-SUMMIT (BISMARCK)	922,098	-	-	922,098
35	TL	FO SU C	FORMAN-SUMMIT (HURON)	4,465,037	-	-	4,465,037
36	TL	FP DC 1	FORT PECK-DAWSON 1	261,417	-	-	261,417
37	TL	FP DC 2	FORT PECK-DAWSON 2	8,301,710	-	-	8,301,710
38	TL	FP HV	FORT PECK-HAVRE	28,806,330	-	-	28,806,330
39	TL	FP WH	FORT PECK-WHATELY	157,876	-	-	157,876
40	TL	FP WN	FORT PECK-WILLISTON	13,298,531	-	-	13,298,531
41	TL	FP WP 2	FORT PECK-WOLF POINT #2	7,554,492	-	-	7,554,492
42	TL	FR FT D	FORT RANDALL-FORT THOMPSON 1&2	7,782,247	-	-	7,782,247
43	TL	FR GP	FORT RANDALL-GAVIN'S POINT	2,319,939	-	-	2,319,939
44	TL	FR GY	FORT RANDALL-GREGORY	777,327	-	-	777,327
45	TL	FR MV	FORT RANDALL-MT VERNON	1,308,562	-	-	1,308,562
46	TL	FR ON	FORT RANDALL-O'NEILL	679,540	-	-	679,540

47	TL	FR SC D	FORT RANDALL-SIOUX CITY 1&2	11,019,006	-	-	11,019,006
48	TL	FT GI	FORT THOMPSON-GRAND ISLAND	17,876,166	-	-	17,876,166
49	TL	FT HU D	FORT THOMPSON-HURON 230-KV 1&2	6,788,951	-	-	6,788,951
50	TL	FT SF D	FORT THOMPSON-SIOUX FALLS 1&2	10,455,917	-	-	10,455,917
51	TL	GA BS D	GARRISON-BISMARCK 230KV 1&2	10,713,977	-	-	10,713,977
52	TL	GA JT	GARRISON-JAMESTOWN	5,097,353	-	-	5,097,353
53	TL	GA ML	GARRISON-MALLARD	1,948,079	-	-	1,948,079
54	TL	GA WJ	GARRISON-WM. J. NEAL	1,521,174	-	-	1,521,174
55	TL	GP BN	GAVINS POINT-BELDEN	455,727	-	-	455,727
56	TL	GP SF	GAVINS POINT-SIOUX FALLS	3,361,449	-	-	3,361,449
57	TL	GF MO	GRANITE FALLS- MORRIS	3,279,089	-	-	3,279,089
58	TL	GF MNV	GRANITE FALLS-MINNESOTA VALLEY	156,778	-	-	156,778
59	TL	GTFCON	GREAT FALLS-CONRAD	12,744,945	-	-	12,744,945
60	TL	GY MS	GREGORY-MISSION	10,110,752	-	-	10,110,752
61	TL	GR HU	GROTON-HURON	1,270,645	-	-	1,270,645
62	TL	GR SU	GROTON-SUMMIT	3,255,847	-	-	3,255,847
63	TL	HV RB	HAVRE-RAINBOW	8,681,332	-	-	8,681,332
64	TL	HV SH2	HAVRE-SHELBY#2	5,561,905	-	-	5,561,905
65	TL	HE DV	HESKETT-DEVAUL	6,450,033	-	-	6,450,033
66	TL	HETNU	HETTINGER-NEW UNDERWOOD	11,263,708	-	-	11,263,708
67	TL	HU MV	HURON-MT VERNON	617,623	-	-	617,623
68	TL	HU WT D	HURON-WATERTOWN 230KV 1&3	6,319,622	-	-	6,319,622
69	TL	JT ED	JAMESTOWN-EDGELEY	1,189,520	-	-	1,189,520
70	TL	JT FA 1	JAMESTOWN-FARGO NO. 1	4,941,649	-	-	4,941,649
71	TL	JT FA 2	JAMESTOWN-FARGO NO. 2	3,155,850	-	-	3,155,850
72	TL	JT GK	JAMESTOWN-GRAND FORKS	28,856,299	-	-	28,856,299
73	TL	JT VC	JAMESTOWN-VALLEY CITY	1,055,414	-	-	1,055,414
74	TL	LE DL	LEEDS-DEVILS LAKE	8,982,948	-	-	8,982,948
75	TL	LE RL	LEEDS-ROLLA	6,738,649	-	-	6,738,649
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	1,790,108	-	-	1,790,108
79	TL	MA RC	MAURINE-RAPID CITY	6,346,265	-	-	6,346,265
80	TL	MC BK	MILES CITY-BAKER	10,569,338	-	-	10,569,338
81	TL	MC CU	MILES CITY-CUSTER	3,750,704	-	-	3,750,704
82	TL	NU PL	NEW UNDERWOOD-PHILIP	2,915,316	-	-	2,915,316
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	PI PL	PIERRE-PHILIP	2,140,436	-	-	2,140,436
94	TL	RC DRY	RAPID CITY-DRY CREEK	9,269,194	-	-	9,269,194
95	TL	ELCRC	RAPID CITY-ELK CREEK 115-KV T/L	52,064	-	-	52,064
96	TL	RG LE	RUGBY-LEEDS	2,235,655	-	-	2,235,655
97	TL	SH SH2	SHELBY-SHELBY #2	576,090	(576,090)	-	(0)

98	TL	SC DN	SIOUX CITY-DENISON	9,038,247	-	-	9,038,247
99	TL	SC SP	SIOUX CITY-SPENCER	1,938,353	-	-	1,938,353
100	TL	SC SF	SIOUX FALLS- SIOUX CITY	3,217,192	-	-	3,217,192
101	TL	SF VFO	SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE	277,897	-	-	277,897
102	TL	SU WT	SUMMIT-WATERTOWN	6,743,203	-	-	6,743,203
103	TL	TT TI	TIBER TAP-TIBER	1,084,858	-	-	1,084,858
104	TL	UJ SF	UTICA JCT-SIOUX FALLS	3,485,236	-	-	3,485,236
105	TL	VC FO	VALLEY CITY-FORMAN	2,428,606	-	-	2,428,606
106	TL	VR GTF	VERONA GREAT FALLS 161-kV LINE	5,110,115	-	-	5,110,115
107	TL	UJ VFO	VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/RASMUS	312,931	-	-	312,931
108	TL	WT GF D	WATERTOWN-GRANITE FALLS 1&2	7,488,154	-	-	7,488,154
109	TL	WT SC	WATERTOWN-SIOUX CITY	26,924,889	-	-	26,924,889
110	TL	WC BU	WATFORD CITY-BEULAH	349,954	-	-	349,954
111	TL	WN WC	WILLISTON-WATFORD CITY	17,627,868	-	-	17,627,868
112	TL	WP CR	WOLF POINT-CIRCLE	11,035,514	-	-	11,035,514
113	TL	WJ RG	WM. J. NEAL-RUGBY	4,629,316	-	-	4,629,316
114	TL	YT CU	YELLOWTAIL-CUSTER	2,265,163	-	-	2,265,163
115	TL Total		TRANSMISSION LINES	583,030,189	(576,090)	-	582,454,099
116	SUB	AN	ANITA	6,259	-	-	6,259
117	SUB	APD	APPELDORN SUBSTATION	5,878,984	-	-	5,878,984
118	SUB	AR	ARMOUR SUBSTATION	2,318,295	(800,024)	-	1,518,272
119	SUB	AHS	ASH SUBSTATION	63,325	-	-	63,325
120	SUB	AB	ASSINNIBOINE	35,005	(35,005)	-	-
121	SUB	AUR	AURORA SUBSTATION	2,899,881	(124,344)	-	2,775,537
122	SUB	BK	BAKER	279,691	-	-	279,691
123	SUB	BN	BELDEN SUBSTATION	298,522	-	-	298,522
124	SUB	BEF	BELFIELD SUBSTATION	13,779,308	(163,836)	-	13,615,472
125	SUB	BE	BERESFORD SUBSTATION	4,771,588	(231,321)	-	4,540,267
126	SUB	BB	BISBEE SUBSTATION	272,529	(218,122)	-	54,408
127	SUB	BS	BISMARCK SUBSTATION	17,834,753	(187,218)	-	17,647,535
128	SUB	BI	BISON	12,472	-	-	12,472
129	SUB	BOL	BOLE SUB	2,997,082	(630,455)	-	2,366,627
130	SUB	BO	BONESTEEL SUBSTATION	3,398,446	(1,226,623)	-	2,171,823
131	SUB	BR	BROOKINGS SUBSTATION	4,460,377	-	-	4,460,377
132	SUB	CBC	CAMPBELL COUNTY SWITCHING STATION/1	-	-	-	-
133	SUB	CF	CANYON FERRY	45,210	-	-	45,210
134	SUB	CRP	CARPENTER SUBSTATION	2,463,312	-	-	2,463,312
135	SUB	CA	CARRINGTON SUBSTATION	3,824,594	(1,007,873)	-	2,816,720
136	SUB	CCR	CHARLIE CREEK	1,376,076	-	-	1,376,076
137	SUB	CR	CIRCLE SUBSTATION	9,139,054	(2,140,670)	-	6,998,384
138	SUB	CON	CONRAD SUB	5,416,038	(315,045)	-	5,100,993
139	SUB	CS	CRESTON SUBSTATION	8,453,084	-	-	8,453,084
140	SUB	CRO	CROSSOVER SUB	12,152,103	-	-	12,152,103
141	SUB	CQE	CULBERTSON EAST SWITCHING STATION	2,390,851	-	-	2,390,851
142	SUB	CU	CUSTER SUBSTATION	4,678,069	(346,142)	-	4,331,927
143	SUB	CT	CUSTER TRAIL SUBSTATION	1,583,038	(1,484,722)	-	98,316
144	SUB	DC	DAWSON COUNTY SUBSTATION	10,478,271	(2,305)	-	10,475,967
145	SUB	DNT	DENBIGH TAP	848,872	(109,673)	-	739,200
146	SUB	DN	DENISON SUBSTATION	16,188,021	(183,385)	-	16,004,636
147	SUB	DV	DEVAUL SUBSTATION	1,602,554	(1,602,554)	-	0
148	SUB	DL	DEVILS LAKE SUBSTATION	2,918,979	(81,504)	-	2,837,475

149	SUB	DK	DICKINSON	23,704	-	-	23,704
150	SUB	EJ	E. J. MANNING	49,112	-	-	49,112
151	SUB	EA	EAGLE	66,108	-	-	66,108
152	SUB	EB	EAGLE BUTTE SUBSTATION	1,347,433	(351,323)	-	996,111
153	SUB	ED	EDGELEY SUBSTATION	6,791,632	(1,197,122)	-	5,594,510
154	SUB	ELC	ELK CREEK SUBSTATION	2,099,907	(17,147)	-	2,082,760
155	SUB	EL	ELLEDALE SUBSTATION	579	(579)	-	0
156	SUB	ELI	ELLIOTT SWITCHING STATION	3,507,129	(41,652)	-	3,465,476
157	SUB	END	ENDERLIN TAP STATION	749,768	(247,423)	-	502,344
158	SUB	EXI	EXIRA SWITCHING STATION	5,508,746	(164,229)	-	5,344,517
159	SUB	FVW	FAIRVIEW WEST SWITCHING STATION	4,296,873	-	-	4,296,873
160	SUB	FH	FAITH SUBSTATION	1,235,034	(541,181)	-	693,853
161	SUB	FA	FARGO SUBSTATION	27,616,496	-	-	27,616,496
162	SUB	FL	FLANDREAU SUBSTATION	4,266,040	(40,435)	-	4,225,605
163	SUB	FO	FORMAN SUBSTATION	7,438,835	(1,030,790)	-	6,408,045
164	SUB	FR	FORT RANDALL	253,710	-	-	253,710
165	SUB	FT2	FORT THOMPSON #2	10,808,617	-	-	10,808,617
166	SUB	FT	FORT THOMPSON SUBSTATION	17,933,245	(163,144)	-	17,770,101
167	SUB	GL	GLENDIVE SUBSTATION	1,725,310	-	-	1,725,310
168	SUB	GK	GRAND FORKS SUBSTATION	10,557,730	-	-	10,557,730
169	SUB	GI	GRAND ISLAND SUBSTATION	17,411,531	-	-	17,411,531
170	SUB	GRP	GRAND PRAIRIE SUBSTATION /1	12,220,371	-	-	12,220,371
171	SUB	GF	GRANITE FALLS SUBSTATION	23,855,781	(2,224,203)	-	21,631,578
172	SUB	GTF	GREAT FALLS SUB	8,439,044	-	-	8,439,044
173	SUB	GY	GREGORY SUBSTATION	1,522,398	(43,752)	-	1,478,646
174	SUB	GR	GROTON SUBSTATION	6,180,011	(326,877)	-	5,853,134
175	SUB	GSO	GROTON SOUTH SUBSTATION	8,552,324	-	-	8,552,324
176	SUB	HA	HARLEM	98,534	-	-	98,534
177	SUB	HV	HAVRE SUBSTATION	11,862,454	(62,475)	-	11,799,979
178	SUB	HBN	HEBRON SUBSTATION/1	-	-	-	-
179	SUB	HET	HETTINGER	10,832	-	-	10,832
180	SUB	HLK	HILKEN SUBSTATION	3,894,020	(143,716)	-	3,750,303
181	SUB	HU	HURON SUBSTATION	11,727,891	(362,525)	-	11,365,366
182	SUB	JT	JAMESTOWN SUBSTATION	23,673,902	(2,381,748)	-	21,292,155
183	SUB	KD	KILLDEER SUBSTATION	7,092,854	(1,180,480)	-	5,912,374
184	SUB	LA	LAKOTA SUBSTATION	2,837,121	(1,307,837)	-	1,529,284
185	SUB	LE	LEEDS SUBSTATION	3,943,917	(158,722)	-	3,785,195
186	SUB	LET	LETCHER SUBSTATION	11,108,748	-	-	11,108,748
187	SUB	ML	MALLARD	29,969	-	-	29,969
188	SUB	MT	MALTA	340,848	-	-	340,848
189	SUB	MDN	MANDAN SUBSTATION	19,476	-	-	19,476
190	SUB	MR	MARTIN SUBSTATION	1,829,481	(1,134,120)	-	695,361
191	SUB	MA	MAURINE SUBSTATION	8,607,538	(593,801)	-	8,013,737
192	SUB	MD	MIDLAND SUBSTATION	889,967	(154,097)	-	735,870
193	SUB	MC2	MILES CITY SUB #2	6,839,121	-	-	6,839,121
194	SUB	MC3	MILES CITY SUB #3	1,895,702	-	-	1,895,702
195	SUB	MC	MILES CITY SUBSTATION	1,202,099	-	-	1,202,099
196	SUB	MGV	MINGUSVILLE SUBSTATION	5,351,152	-	-	5,351,152
197	SUB	MS	MISSION SUBSTATION	3,473,710	(586,992)	-	2,886,718
198	SUB	MO	MORRIS SUBSTATION	7,446,005	(1,095,435)	-	6,350,569
199	SUB	MV	MT VERNON SUBSTATION	2,030,824	(139,934)	-	1,890,890

200	SUB	NA	NASHUA SUB	72,368	(72,368)	-	(0)
201	SUB	NEL	NELSON SUBSTATION	1,944,817	(33,744)	-	1,911,073
202	SUB	NU	NEW UNDERWOOD SUBSTATION	18,333,139	-	-	18,333,139
203	SUB	NL	NEWELL SUBSTATION	4,116,914	(287,497)	-	3,829,418
204	SUB	OF	O'FALLON CREEK SUBSTATION	3,242,234	(58,595)	-	3,183,639
205	SUB	ON	O'NEILL SUB (NPP)	180,660	-	-	180,660
206	SUB	PET	PENN TAP	890,607	(108,485)	-	782,122
207	SUB	PL	PHILIP SUBSTATION	2,037,148	(209,290)	-	1,827,858
208	SUB	PI	PIERRE SUBSTATION	4,347,185	(699,890)	-	3,647,295
209	SUB	PLL	PLEASANT LAKE TAP	992,415	(101,191)	-	891,223
210	SUB	RB	RAINBOW SUBSTATION	250,629	(250,629)	-	(0)
211	SUB	RC	RAPID CITY SUBSTATION	5,739,051	(556,793)	-	5,182,257
212	SUB	RH	RICHLAND SUBSTATION	1,733,528	(1,733,528)	-	(0)
213	SUB	RL	ROLLA SUBSTATION	623,513	-	-	623,513
214	SUB	RY	RUDYARD SUBSTATION	3,160,305	(1,380,449)	-	1,779,856
215	SUB	RG	RUGBY SUBSTATION	8,727,498	(570,712)	-	8,156,786
216	SUB	SA	SAVAGE SUB	74,403	-	-	74,403
217	SUB	SH	SHELBY SUBSTATION	861,699	(861,699)	-	0
218	SUB	SH2	SHELBY SUBSTATION #2	5,557,388	(169,696)	-	5,387,692
219	SUB	SL	SHIRLEY TAP	22,102	-	-	22,102
220	SUB	SC2	SIOUX CITY #2	13,019,488	-	-	13,019,488
221	SUB	SC	SIOUX CITY SUBSTATION	16,760,099	-	-	16,760,099
222	SUB	SF	SIOUX FALLS SUBSTATION	14,898,451	(516,513)	-	14,381,938
223	SUB	SP	SPENCER	8,022,741	(254,683)	-	7,768,058
224	SUB	SNY	STANLEY	49,735	-	-	49,735
225	SUB	SB	SULLY BUTTES	74,428	-	-	74,428
226	SUB	SU	SUMMIT SUBSTATION	2,851,689	(373,848)	-	2,477,841
227	SUB	TR	TERRY TAP	606,044	(103,121)	-	502,923
228	SUB	TT	TIBER TAP	166,306	-	-	166,306
229	SUB	TN	TOWNER	5,204,626	-	-	5,204,626
230	SUB	TY	TYNDALL SUBSTATION	937,621	(125,594)	-	812,027
231	SUB	UJ	UTICA JCT.	12,974,150	-	-	12,974,150
232	SUB	VH	V. T. HANLON	12,197,585	-	-	12,197,585
233	SUB	VC	VALLEY CITY SUBSTATION	6,819,468	(176,541)	-	6,642,927
234	SUB	VR	VERONA	108,751	-	-	108,751
235	SUB	VE	VETAL TAP	232,375	-	-	232,375
236	SUB	VFO	VIRGIL FODNESS SUBSTATION	3,206,763	-	-	3,206,763
237	SUB	WL	WALL SUBSTATION	1,571,437	(654,299)	-	917,138
238	SUB	WNB	WANBLEE TAP 3/	-	-	-	-
239	SUB	WDD	WARD SUBSTATION	3,453,847	(45,361)	-	3,408,486
240	SUB	WB	WASHBURN SUBSTATION	2,072,439	(942,356)	-	1,130,083
241	SUB	WT2	WATERTOWN #2	3,223,563	-	-	3,223,563
242	SUB	WTS	WATERTOWN STATIC VAR SYSTEM	11,778,775	-	-	11,778,775
243	SUB	WT	WATERTOWN SUBSTATION	16,150,539	-	-	16,150,539
244	SUB	WC	WATFORD CITY SUB	7,600,294	(108,365)	-	7,491,928
245	SUB	WSG	WESSINGTON SPRINGS SUBSTATION	5,141,440	(181,849)	-	4,959,591
246	SUB	WH2	WHATELY (NORTHERN)	40,860	-	-	40,860
247	SUB	WH	WHATELY SUBSTATION	109,910	(54,083)	-	55,827
248	SUB	WHT	WHITE 345/115 SUB	11,235,762	-	-	11,235,762
249	SUB	WV	WICKSVILLE SUBSTATION	831,304	(250,593)	-	580,710
250	SUB	WN2	WILLISTON 2 SUBSTATION	15,594,604	-	-	15,594,604

251	SUB	WN	WILLISTON SUBSTATION	8,198,987	(97,320)	-	8,101,667
252	SUB	WI	WINNER SUBSTATION	3,234,614	(101,869)	-	3,132,746
253	SUB	WJ	WM. J. NEAL	183,222	-	-	183,222
254	SUB	WP	WOLF POINT SUBSTATION	7,279,212	(1,346,899)	-	5,932,313
255	SUB	WO	WOONSOCKET SUBSTATION	2,775,992	(1,579,680)	-	1,196,312
256	SUB	YJ	YANKTON JCT.	76,396	-	-	76,396
257	SUB	YA	YANKTON SUBSTATION	2,935	-	-	2,935
258	SUB Total		SUBSTATIONS	705,122,335	(40,590,100)	-	664,532,236
259	O&M	ARC	ARMOUR O&M SER. CEN.	3,488,667	-	-	3,488,667
260	O&M	BSM	BISMARCK O&M SER. CEN.	9,917,899	-	-	9,917,899
261	O&M	DCF	DAWSON SER. CEN.	6,853,289	-	-	6,853,289
262	O&M	DLM	DEVILS LAKE O&M SER. CEN.	3,852,064	-	-	3,852,064
263	O&M	FAO	FARGO LINE MAINTENANCE FACILITY	2,104,871	-	-	2,104,871
264	O&M	FAM	FARGO O&M SER. CEN.	794,673	-	-	794,673
265	O&M	FPM	FORT PECK SER. CEN.	8,407,259	-	-	8,407,259
266	O&M	FTM	FORT THOMPSON O&M S. C.	2,209,623	-	-	2,209,623
267	O&M	HVM	HAVRE SERVICE CENTER	493,999	-	-	493,999
268	O&M	HUM	HURON O&M SER. CEN.	2,709,639	-	-	2,709,639
269	O&M	JTM	JAMESTOWN O&M SER. CEN.	3,874,657	-	-	3,874,657
270	O&M	MCM	MILES CITY MTCE FAC.	1,025,254	-	-	1,025,254
271	O&M	NUM	NEW UNDERWOOD SER. CEN.	96,884	-	-	96,884
272	O&M	PLM	PHILIP O&M SER. CENT.	1,736,226	-	-	1,736,226
273	O&M	PIM	PIERRE O&M SER. CEN.	1,051,383	-	-	1,051,383
274	O&M	RCM	RAPID CITY GARAGE & STOR.	2,221,967	-	-	2,221,967
275	O&M	SCM	SIOUX CITY O&M SER. CEN.	7,099,422	-	-	7,099,422
276	O&M	SFC	SIOUX FALLS O&M SER. CEN.	239,920	-	-	239,920
277	O&M	WTM	WATERTOWN MAINT. CEN.	7,452,151	-	-	7,452,151
278	O&M Total		O&M SERVICE & MAINT. CENTERS	65,629,846	-	-	65,629,846
279	OPS	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,006,058	-	-	6,006,058
280	OPS	WTO	WATERTOWN OPERATIONS CENT	1,549,110	-	(265,348)	1,283,763
281	OPS	WTO F	WATERTOWN OPER CTR (BFPS)	12,069,072	-	(1,190,999)	10,878,073
282	OPS Total		OPERATION CENTERS	19,624,240	-	(1,456,346)	18,167,894
283	MOB	MOBW2	MOB 115KV SWITCH TRAILER	69,741	-	-	69,741
284	MOB	MOBT13	MOB TRANSF 111KV 15MVA	213,000	-	-	213,000
285	MOB	MOBT2	MOB TRANSF 115KV 10MVA	218,493	-	-	218,493
286	MOB	MOBT12	MOB TRANSF 115KV 25MVA	814,665	-	-	814,665
287	MOB	MOBT4	MOB TRANSF 115KV 40MVA	526,201	-	-	526,201
288	MOB	MOBT6	MOB TRANSF 230KV 1-33MVA	170,278	-	-	170,278
289	MOB	MOBB2	MOBILE BY PASS KIT (BISMARCK)	35,071	-	-	35,071
290	MOB	MOBB1	MOBILE BY PASS KIT (HURON)	163,695	-	-	163,695
291	MOB	MOBC4	MOBILE CAPACITOR BANK	19,075	-	-	19,075
292	MOB	MOBS6	MOBILE SUB 110KV	127,144	-	-	127,144
293	MOB	MOBS9	MOBILE SUB 115KV 20MVA	404,166	-	-	404,166
294	MOB	MOBS7	MOBILE SUB 41.8 KV	192,498	(192,498)	-	0
295	MOB	MOBS5	MOBILE SUB 69KV	71,118	-	-	71,118
296	MOB	MOBR2	MOB SH.REACTOR	179,328	-	-	179,328
297	MOB Total		MOBILE EQUIPMENT	3,204,472	(192,498)	-	3,011,974
298	GEN	BG FT L	BIG BEND-FORT THOMPSON (LOW VOLTAGE)	81,944	-	(81,944)	-
299	GEN	FP	FORT PECK POWERPLANT (COE)	64,611	-	(64,611)	0
300	GEN	FT BG 1	FORT THOMPSON-BIG BEND NO. 1	922,164	-	-	922,164
301	GEN	FT BG 2	FORT THOMPSON-BIG BEND NO. 2	690,735	-	-	690,735

302	GEN Total		TRANSMISSION-RELATED GEN. FACILITIES	1,759,454	-	(146,555)	1,612,899
303	COM	ATC	ATLANTIC COMMUNICATION SITE	17,199	-	(5,452)	11,747
304	COM	BK2	BAKER RELAY	264,163	-	(83,740)	180,424
305	COM	BTY	BANTRY	423,147	-	(134,138)	289,009
306	COM	BAE	BARRETT	99,835	-	(31,648)	68,187
307	COM	BMW	BATTLE MT. MICROWAVE	324,151	-	(102,756)	221,395
308	COM	BPR	BELLE PRAIRIE	273,290	-	(86,633)	186,657
309	COM	BET	BENEDICT	196,601	-	(62,323)	134,279
310	COM	BU	BEULAH	10,679	-	(3,385)	7,294
311	COM	BG	BIG BEND	113,362	-	(35,936)	77,426
312	COM	BJR	BIJOU REPEATER	568,562	-	(180,234)	388,328
313	COM	BAO	BILLINGS AREA OFFICE	158,946	-	(136,495)	22,451
314	COM	BSR	BISMARCK REPEATER	412,803	-	(130,859)	281,945
315	COM	BIR	BISON REPEATER	227,955	-	(72,262)	155,693
316	COM	BON	BOLE NORTH REPEATER	149,228	-	(47,305)	101,923
317	COM	BRI	BRINSMADE	147,129	-	(46,640)	100,489
318	COM	BSL	BRISTOL	11,441	-	(3,627)	7,814
319	COM	BRV	BRUNSVILLE REPEATER	92,595	-	(29,353)	63,243
320	COM	BFF	BUFFALO	107,342	-	(34,028)	73,315
321	COM	CAH	CAHOON	212,380	-	(67,325)	145,056
322	COM	CAZ	CARRINGTON REPEATER	709,735	-	(224,986)	484,749
323	COM	CHK	CHARTER OAK REPEATER	15,667	-	(4,966)	10,700
324	COM	CHI F	CHINOOK (BEFP)	284,048	-	(90,043)	194,005
325	COM	CHR	CHINOOK REPEATER	31,664	-	(10,038)	21,627
326	COM	CKR	CLARK MW REPEATER	735,399	-	(233,122)	502,278
327	COM	CLV	CLEVELAND REPEATER, N.D.	66,872	-	(21,199)	45,674
328	COM	CMR	COLEMAN REPEATER	105,281	-	(33,374)	71,907
329	COM	CME	COLOME REPEATER	293,101	-	(92,913)	200,188
330	COM	CBR	CONRAD BUTTE REPEATER	887,627	-	(281,378)	606,249
331	COM	CNN	COTTON	1,399	-	(444)	956
332	COM	CSR	CRESTON REPEATER	11,107	-	(3,521)	7,586
333	COM	CLR	CROW LAKE REPEATER	251,029	-	(79,576)	171,453
334	COM	CBT	CROWN BUTTE	52,565	-	(16,663)	35,902
335	COM	CRR	CULBERTSON RADIO RELAY SITE	1,926	-	(611)	1,315
336	COM	CQR	CULBERTSON REPEATER	20,986	-	(6,652)	14,333
337	COM	CUL	CUSTER LOOKOUT	97,845	-	(31,017)	66,828
338	COM	DAL	DALTON (WES)	63,660	-	(20,180)	43,480
339	COM	DLC	DEVILS LAKE FIBER REGEN	273,047	-	(86,556)	186,491
340	COM	DLZ	DEVILS LAKE REPEATER	535,244	-	(169,672)	365,572
341	COM	DOD	DODSON REPEATER	882,795	-	(279,846)	602,949
342	COM	DO	DOGDEN BUTTE	417,939	-	(132,487)	285,452
343	COM	DRS	DRISCOLL	79,113	-	(25,079)	54,034
344	COM	DU	DUPREE REPEATER	1,821	-	(577)	1,244
345	COM	DUT	DUTTON REPEATER (BEFP)	91,561	-	(29,025)	62,536
346	COM	ERB	EAST RAINY BUTTE	164,501	-	(52,147)	112,354
347	COM	ECK	ECKELSON	231,893	-	(73,510)	158,383
348	COM	EKR	ELKTON	208,139	-	(65,980)	142,159
349	COM	ELZ	ELLENDALE REPEATER	839,614	-	(266,158)	573,456
350	COM	EWA	ELLSWORTH AIR BASE	229,647	-	(72,798)	156,849
351	COM	ERH	ERHARD	99,569	-	(31,563)	68,006
352	COM	EX	EXIRA REPEATER	2,527	-	(801)	1,726

353	COM	FB	F. L. BLAIR	76,407	-	(24,221)	52,186
354	COM	FAP	FAIRPOINT REPEATER	206,550	-	(65,476)	141,073
355	COM	FNR	FALLON REPEATER	230,735	-	(73,143)	157,592
356	COM	FAC	FARGO MICROWAVE	109,866	-	(34,828)	75,039
357	COM	FCS	FERGUS FALLS COMMUNICATIONS SITE	513,516	-	(162,785)	350,731
358	COM	FLW	FLOWING WELLS	68,763	-	(21,798)	46,965
359	COM	FBS	FORBES COMMUNICATION SITE	70,575	-	(22,372)	48,203
360	COM	FTH	FORSYTH	149,663	-	(47,443)	102,220
361	COM	FP1	FORT PECK RELAY (WES)	335,095	-	(106,225)	228,870
362	COM	FPC	FORT PECK COMMUNICATIONS BUILDING	380,212	-	(120,527)	259,685
363	COM	FPR	FORT PECK REPEATER	127,571	-	(40,440)	87,131
364	COM	FPI	FORT PIERRE POLE YARD	785,698	-	(249,066)	536,632
365	COM	FTR	FORT THOMPSON REPEATER	99,223	-	(31,454)	67,769
366	COM	FTP	FORT THOMPSON REPEATER (EAST RIVER)	301,614	-	(95,612)	206,002
367	COM	FCR	FOX CREEK MICROWAVE	423,094	-	(134,121)	288,973
368	COM	FRY	FRYBURG SUB & MICROWAVE	61,204	-	(19,402)	41,802
369	COM	GA	GARRISON	303,954	-	(96,353)	207,600
370	COM	GRR	GARY REPEATER	80,799	-	(25,613)	55,185
371	COM	GP	GAVIN'S POINT	148,752	-	(47,154)	101,598
372	COM	GPR	GAVINS POINT REPEATER	315,049	-	(99,871)	215,179
373	COM	GET	GETTYSBURG REPEATER	368,771	-	(116,900)	251,871
374	COM	GH	GLENHAM	272,857	-	(86,496)	186,362
375	COM	GKM	GRAND FORKS MINNKOTA (MPC)	23,847	-	(7,559)	16,287
376	COM	GWN	GWINNER COMMUNICATIONS SITE	736,184	-	(233,370)	502,814
377	COM	HSB	HAILSTONE BUTTE	92,486	-	(29,318)	63,168
378	COM	HOY	HALLOWAY REPEATER	109,706	-	(34,777)	74,929
379	COM	HRT	HARLEM REPEATER	882,588	-	(279,780)	602,808
380	COM	HTH	HATHAWAY	68,891	-	(21,838)	47,053
381	COM	HMW	HERMOSA MICROWAVE	302,701	-	(95,956)	206,745
382	COM	HLR	HIGHLAND REPEATER	22,884	-	(7,254)	15,630
383	COM	HMR	HIGHMORE REPEATER	145,723	-	(46,194)	99,529
384	COM	HIW	HIGHWOOD	22,896	-	(7,258)	15,638
385	COM	HI	HINSDALE	201,837	-	(63,982)	137,855
386	COM	HIR	HINSDALE REPEATER	85,068	-	(26,966)	58,101
387	COM	HOE	HOPEWELL REPEATER	273,932	-	(86,837)	187,096
388	COM	HNT	HUNTER MICROWAVE	210,227	-	(66,642)	143,585
389	COM	HUD	HURON DISTRICT OFFICE	841,053	-	(266,614)	574,439
390	COM	HYS	HYSHAM	90,227	-	(28,602)	61,625
391	COM	JTR	JAMESTOWN REPEATER	46,981	-	(14,893)	32,088
392	COM	JCK	JONES CREEK	267,395	-	(84,764)	182,631
393	COM	KCK	KELLY CREEK	222,023	-	(70,381)	151,642
394	COM	KDZ	KILLDEER REPEATER	555,780	-	(176,182)	379,597
395	COM	KNE	KNEE HILL MW	941,914	-	(298,587)	643,327
396	COM	LAC	LAC QUI PARLE	751,513	-	(238,229)	513,283
397	COM	LKR	LAKE ANDES REPEATER	723,452	-	(229,334)	494,118
398	COM	LEF	LEFOR	48,470	-	(15,365)	33,105
399	COM	LI	LINDSAY RIDGE	96,865	-	(30,706)	66,159
400	COM	LCS	LINTON COMMUNICATIONS SITE	330,604	-	(104,802)	225,803
401	COM	LMO	LITTLE MISSOURI SUBSTATION	54,516	-	(17,282)	37,235
402	COM	LDP	LODGEPOLE REPEATER	32,445	-	(10,285)	22,160
403	COM	MRP	MALTA REPEATER	811,849	-	(257,356)	554,493

404	COM	MNM	MANDAN MICROWAVE SITE	69,988	-	(22,186)	47,802
405	COM	MPR	MAPLE RIVER	172,792	-	(54,775)	118,017
406	COM	MRR	MARTIN REPEATER	300,728	-	(95,331)	205,397
407	COM	MAV	MAYVILLE	214,547	-	(68,011)	146,536
408	COM	MLR	MIDLAND REPEATER	686,507	-	(217,623)	468,884
409	COM	MOX	MOE REPEATER	15,012	-	(4,759)	10,253
410	COM	MH	MOORHEAD	125,057	-	(39,643)	85,414
411	COM	MSR	MORRIS REPEATER & MICROWAVE	146,583	-	(46,467)	100,116
412	COM	NWC	NEWCASTLE REPEATER	216,330	-	(68,577)	147,753
413	COM	OA	OAHE	577,874	-	(183,186)	394,688
414	COM	OK	O'KREEK REPEATER	367,630	-	(116,539)	251,091
415	COM	OR	ORCHARD REPEATER	2,616,986	-	(829,585)	1,787,401
416	COM	OTO	OTO MICROWAVE	16,445	-	(5,213)	11,232
417	COM	OTW	OTTUMWA ROAD REPEATER SITE	7,685	-	(2,436)	5,249
418	COM	PGE	PAGE N.D.	1,646	-	(522)	1,124
419	COM	PAH	PAHOJA SUB	107,003	-	(33,920)	73,083
420	COM	PEK	PEAK	99,877	-	(31,661)	68,216
421	COM	PLJ	PHILIP JCT. REPEATER	530,459	-	(168,155)	362,303
422	COM	PKT	PICKERT MINNKOTA (MPC)	17,849	-	(5,658)	12,191
423	COM	PIR	PINE RIDGE	206,656	-	(65,510)	141,146
424	COM	PO	POPLAR (MDU)	3,758	-	(1,191)	2,567
425	COM	PRR	PRIMGHAR REPEATER	27,264	-	(8,643)	18,622
426	COM	PUR	PUKWANNA REPEATER	4,772	-	(1,513)	3,259
427	COM	RCR	RAPID CITY REPEATER	393,067	-	(124,602)	268,465
428	COM	RE	RICHARDSON COULEE	161,748	-	(51,274)	110,474
429	COM	RER	RICHARDSON COULEE REPEATER	166,315	-	(52,722)	113,593
430	COM	RHM	RICHLAND MW REPEATER (BEPS)	267,563	-	(84,818)	182,746
431	COM	RRR	ROCKY RIDGE REPEATER	226,934	-	(71,938)	154,996
432	COM	ROG	ROLLAG	172,922	-	(54,816)	118,106
433	COM	RGZ	RUGBY REPEATER	412,994	-	(130,919)	282,075
434	COM	RI	RUTLAND	1,122,799	-	(355,927)	766,871
435	COM	SAO	SACO	1,237	-	(392)	845
436	COM	SNB	SENTINEL BUTTE	105,438	-	(33,424)	72,014
437	COM	SRE	SHEEP COULEE REPEATER	933,275	-	(295,848)	637,427
438	COM	SCQ	SIOUX CITY REPEATER	427,162	-	(135,410)	291,752
439	COM	SFR	SIOUX FALLS REPEATER	330,718	-	(104,838)	225,880
440	COM	SI	SIOUX PASS	1,366	-	(433)	933
441	COM	SNA	SNAKE BUTTE REPEATER	532,435	-	(168,782)	363,653
442	COM	SPN	SPALDING REPEATER	549,514	-	(174,196)	375,318
443	COM	SM	SPIRIT MOUND	295,982	-	(93,826)	202,156
444	COM	STR	STRASBERG	1,853	-	(587)	1,266
445	COM	SMR	SUMMIT REPEATER	50,053	-	(15,867)	34,186
446	COM	TCS	TAPPEN COMMUNICATIONS SITE	502,734	-	(159,367)	343,368
447	COM	TA	TAPPEN REPEATER	475,545	-	(150,748)	324,797
448	COM	TEN	TENNANT COMMUNICATIONS SITE	8,782	-	(2,784)	5,998
449	COM	TOR	TORONTO REPEATER	106,096	-	(33,632)	72,463
450	COM	TFR	TRIPP REPEATER	216,887	-	(68,753)	148,134
451	COM	TU	TURKEY RIDGE REPEATER	588,190	-	(186,456)	401,734
452	COM	TYE	TYLER REPEATER	1,256,065	-	(398,173)	857,893
453	COM	VIC	VICTOR (EREC)	110,425	-	(35,005)	75,421
454	COM	VIA	VIDA	116,388	-	(36,895)	79,493

455	COM	WLR	WALL REPEATER	536,444	-	(170,053)	366,391	
456	COM	WTR	WATERTOWN REPEATER	721,884	-	(228,837)	493,047	
457	COM	WS	WAYSIDE	17,781	-	(5,637)	12,144	
458	COM	WSR	WESSINGTON SPGS. REPEATER	682,469	-	(216,343)	466,126	
459	COM	WEF	WESTFIELD	19,003	-	(6,024)	12,979	
460	COM	WSW	WHITE SWAN	91,987	-	(29,160)	62,827	
461	COM	WK C	WHITLOCK (BCPS)	165,594	-	(52,493)	113,101	
462	COM	WRP	WILLISTON REPEATER	19,230	-	(6,096)	13,134	
463	COM	WOB	WOLBACH REPEATER	28,280	-	(8,965)	19,315	
464	COM	YT P	YELLOWTAIL SWITCHYARD (BEPS)	223,367	-	(70,807)	152,559	
465	COM Total		COMMUNICATION FACILITIES	44,496,135	-	(14,191,384)	30,304,751	
466	MCCS	MC4	MILES CITY CONVERTER STATION - BEPS	19,890,752	-	-	19,890,752	
467	MCCS	MC4	MILES CITY CONVERTER STATION - BEFP	3,680,369	-	-	3,680,369	
468	MCCS Total		MILES CITY CONVERTER STATION	23,571,121	-	-	23,571,121	
469	DIST	BFTBP	BUFORD TRENTON TAP - BUFORD TRENTON P.P.	650,001	(650,001)	-	(0)	
470	DIST	BP	BUFORD TRENTON PUMP SUB	184,827	(184,827)	-	0	
471	DIST	FN	FALLON PUMPING PLANT SUB	223,594	(223,594)	-	0	
472	DIST	FE	FALLON RELIFT PUMPING PLANT	171,257	(171,257)	-	(0)	
473	DIST	FN GG	FALLON-GLENDIVE PUMP #4	25,506	(25,506)	-	(0)	
474	DIST	FP WP	FORT PECK-WOLF POINT	295,238	(295,238)	-	-	
475	DIST	FG	FRAZER PUMP SUB	253,597	(253,597)	-	0	
476	DIST	GA SK	GARRISON-SNAKE CREEK	1,079,092	(1,079,092)	-	(0)	
477	DIST	GG	GLENDIVE P.P. #1 SUB	425,706	(425,706)	-	0	
478	DIST	IN	INTAKE SUBSTATION	108,040	(108,040)	-	0	
479	DIST	IN INP	INTAKE-INTAKE PUMP	6,494	(6,494)	-	-	
480	DIST	SV	SAVAGE PUMPING PLANT SUB	102,283	(102,283)	-	(0)	
481	DIST	SY	SHIRLEY PUMP SUBSTATION	1,237,730	(1,237,730)	-	0	
482	DIST	SK	SNAKE CREEK PUMP SUBSTATION	920,941	(920,941)	-	0	
483	DIST	TE	TERRY PUMPING PLANT SWITCH	474,404	(474,404)	-	(0)	
484	DIST	TI	TIBER DAM SUBSTATION	659,368	(659,368)	-	-	
485	DIST	VA	WIOTA SUBSTATION	216,163	(216,163)	-	(0)	
486	DIST Total		DISTRIBUTION FACILITIES	7,034,241	(7,034,242)	-	(0)	
487	RMR	NU SG	NEW UNDERWOOD-STEGALL	287,835	-	-	287,835	
488	RMR	SG	STEGALL SUBSTATION	12,325,568	(12,022,959)	-	302,609	
489	RMR	SG WY	STEGALL-WAYSIDE	2,978,205	-	-	2,978,205	
490	RMR	WY	WAYSIDE	237,296	-	-	237,296	
491	RMR	YT PY	YELLOWTAIL SWITCHYARD-YELLOWTAIL (PPL)	121,495	(91,121)	-	30,374	
492	RMR	PY	YELLOWTAIL (PPL)	692,335	(519,251)	-	173,084	
493	RMR	YT P	YELLOWTAIL SWITCHYARD	13,211,288	(9,908,466)	(55,070)	3,247,752	
494	RMR	YT	YELLOWTAIL SWITCHYARD (YT)	143,380	(35,845)	-	107,535	
495	RMR Total		ROCKY MOUNTAIN REGION FACILITIES	29,997,401	(22,577,642)	(55,070)	7,364,690	
496	COE		BIG BEND	2,370,873	(1,772,523)	-	598,349	
497	COE		FORT PECK	6,346,403	(1,093,580)	-	5,252,823	
498	COE		FORT RANDALL	24,411,946	(2,565,236)	-	21,846,710	
499	COE		GARRISON	85,572,618	(42,517,443)	-	43,055,175	
500	COE		GAVINS POINT	10,079,123	(7,015,929)	-	3,063,194	
501	COE		OAHE	20,141,773	(3,563,531)	-	16,578,241	
502	COE Total		CORPS OF ENGINEERS FACILITIES	148,922,736	(58,528,243)	-	90,394,493	
503	Grand Total		TOTAL FACILITIES	1,632,392,171	(129,498,814)	(14,393,009)	(1,456,346)	1,487,044,002
504			SUBTOTAL WESTERN-UGP ONLY	1,453,472,034	(48,392,929)	14,393,009	1,456,346	1,389,284,819
505			SUBTOTAL for SSCD Ratios /4		106,921,172			1,483,247,961

506 1/ Plant balance does not include customer liability for network upgrades. Investment is only brought into plant balance as WAPA incurs expense
507 (e.g. if transmission credits are provided to customer)
508 2/ Formerly part of the Fort Peck-Dawson County 1 line
509 3/ Included in 2018 True-Up WS11-FacChanges but inadvertently not included in this Tab due to being constructed with contributed funds and having zero plant costs
510 4/ C2 is total Western-UGP Facilities + total COE Facilities; C5 is total Western-UGP Facilities + total COE Facilities + total RMR Facilities dispatched by
511 Western UGP for SSCD. Ref WS12-SSCD.

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

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

651	GETTYSBURG REPEATER						x				
652	GLENHAM						x				
653	GRAND FORKS MINNKOTA (MPC)						x				
654	HAILSTONE BUTTE						x				
655	HALLOWAY REPEATER						x				
656	HARLEM	microwave, RTU					x				
657	HARLEM REPEATER						x				
658	HATHAWAY						x				
659	HERMOSA MICROWAVE						x				
660	HETTINGER	RTU, PTs					x				
661	HIGHLAND REPEATER						x				
662	HIGHMORE REPEATER						x				
663	HIGHWOOD	meters NWMT NITS from Great Falls					x				
664	HINSDALE						x				
665	HINSDALE REPEATER						x				
666	HOPEWELL REPEATER						x				
667	HUNTER MICROWAVE						x				
668	HURON DISTRICT OFFICE						x				
669	HYSHAM						x				
670	JAMESTOWN REPEATER						x				
671	JONES CREEK						x				
672	KELLY CREEK						x				
673	KILLDEER REPEATER						x				
674	KNEE HILL MW						x				
675	LAC QUI PARLE						x				
676	LAKE ANDES REPEATER						x				
677	LEFOR						x				
678	LINDSAY RIDGE						x				
679	LINTON COMMUNICATIONS SITE						x				
680	LITTLE MISSOURI SUBSTATION						x				
681	LODGEPOLE REPEATER						x				
682	MALLARD	RTU, SCADA					x				
683	MALTA	microwave, RTU					x				
684	MALTA REPEATER						x				
685	MDN Mandan	multiplexer					x				
686	MANDAN MICROWAVE SITE						x				
687	MAPLE RIVER						x				
688	MARTIN REPEATER						x				
689	MAYVILLE						x				
690	MIDLAND REPEATER						x				
691	MILES CITY SUB (BEFP)						x				
692	MOE REPEATER						x				
693	MOORHEAD						x				
694	MORRIS REPEATER & MICROWAVE						x				
695	NEWCASTLE REPEATER						x				
696	OAHE						x				
697	O'KREEK REPEATER						x				
698	ORCHARD REPEATER						x				
699	OTO MICROWAVE						x				
700	OTTUMWA ROAD REPEATER SITE						x				
701	PAGE N.D.						x				
702	PAHOJA SUB						x				
703	PEAK						x				
704	PHILIP JCT. REPEATER						x				
705	PINE RIDGE						x				
706	POPLAR (MDU)	antenna, meters for MDU					x				
707	PRIMGHAR REPEATER						x				
708	PUKWANNA REPEATER						x				
709	RAPID CITY REPEATER						x				
710	RICHARDSON COULEE						x				
711	RICHARDSON COULEE REPEATER						x				
712	RICHLAND MW REPEATER (BEPS)						x				
713	ROCKY RIDGE REPEATER						x				
714	ROLLAG						x				
715	RUGBY REPEATER						x				
716	RUTLAND						x				
717	SACO						x				
718	SA SAVAGE	land, steel structure, meter equipment					x				
719	SENTINEL BUTTE						x				
720	SHEEP COULEE REPEATER						x				
721	SIOUX CITY REPEATER						x				
722	SIOUX FALLS REPEATER						x				
723	SIOUX PASS						x				
724	SNAKE BUTTE REPEATER						x				
725	SPALDING REPEATER						x				
726	SPIRIT MOUND						x				
727	STANLEY	meters to MDU					x				
728	STRASBERG						x				
729	SB SULLY BUTTES	fiber termination equipment					x				
730	SUMMIT REPEATER						x				
731	TAPPEN COMMUNICATIONS SITE						x				
732	TAPPEN REPEATER						x				
733	TENNANT COMMUNICATIONS SITE						x				
734	TORONTO REPEATER						x				
735	TRIPP REPEATER						x				
736	TURKEY RIDGE REPEATER						x				
737	TYLER REPEATER						x				
738	VR Verona	comm, multiplex, battery					x				
739	VICTOR (EREC)						x				
740	VIDA						x				
741	V. T. HANLON	SCADA					x				
742	WALL REPEATER						x				
743	WATERTOWN REPEATER						x				
744	WAYSIDE						x				
745	WESSINGTON SPGS. REPEATER						x				
746	WESTFIELD						x				
747	WH2 Whately (Northern)	Instrument Transformer					x				
748	WHITE SWAN						x				
749	WHITLOCK (BCPS)						x				

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

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 K21A 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	DN	Denison	69-kV breaker 2552 and assoc. switches	City of Denison
33	DV	Devaul	All Not Included	
34	DL	Devils Lake	41.8-kV breaker 1442 and assoc. switches	Otter Tail normally open-emergency tie
35			12.5-kV breaker 1122 and assoc. switches	Minnkota
36	EB	Eagle Butte	115/69-kV transformer KY1A and 115-kV interrupter 762	
37			69-kV breaker 1752 and assoc. switches	Moreau Grand
38	ED	Edgeley	115/41.8-kV transformer KY2A	
39			115-kV breaker 362	
40			41.8-kV breaker 2342 and assoc. switches	Otter Tail
41			69-kV breaker 1252 and assoc. switches	
42	ELC	Elk Creek	115-kV ground switch 1160	
43	ELI	Elliot	115-kV interrupter 2063 and assoc. switches, 115-kV switch 369	
44	END	Enderlin Tap	Interrupter 1862 and assoc. switches	
45	EXI	Exira	Switches 169, 369, 569	Generator Lead
46	FH	Faith	115/12.47-kV transformer KY1A and 115-kV interrupter 362	
47			12.47-kV breaker 1022 and assoc. switches	City of Faith
48	FN	Fallon Pumping	All Not Included	
49	FE	Fallon Relift	All Not Included	
50	FL	Flandreau	12.47-kV switches 3121, 3122, 3123, 3129, 3223	City of Flandreau
51	FO	Forman	69-kV breaker 452 and assoc. switches	
52			69/41.8-kV transformer K23A and 69-kV switches 353, 355	
53			115-kV breaker 1662 and assoc. switches	
54			41.8-kV breaker 2142 and assoc. switches	Otter Tail
55			41.8/12.5-kV transformer KX6A and switch 1443	
56			12.5-kV breaker 2222 and assoc. switches	Dakota Valley
57	FR	Fort Randall	115-kV breaker 962 and assoc. switches	
58	FT	Fort Thompson	69-kV breaker 4452 and assoc. switches	West Central
59	FG	Frazer Pumping	All Not Included	
60	GA	Garrison	115-kV breakers 462, 562 and assoc switches	generator leads
61	GP	Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	generator leads
62	GGT	Glendive Pumping No. 1 Tap	All Not Included	
63	GG	Glendive Pumping No. 1	All Not Included	
64	GF	Granite Falls	69-kV breakers 4352, 4452, 4552, 4652 and assoc. switches	GRE normally open and Minn. Valley
65			115/69-kV transformer KY2A	
66			115-kV breakers 2862, 3262 and assoc. switches	
67	GY	Gregory	115-kV Disconnect Switch 463	protection for non-included transformer (transformer not owned by Western)
68			12.47-kV breaker 422 and assoc. switches	
69	GR	Groton	69-kV breaker 1552 and assoc. switches	East River
70	HV	Havre	12.5-kV breaker 822 and assoc. switches	Hill County
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 K23A and switch 645	
87			12.5-kV breaker 624 and assoc. switches	CPEC
88	MR	Martin	115/34.5-kV transformer KY1A and interrupter 962	
89			34.5-kV breaker 1242 and assoc. switches	LaCreek
90	MA	Maurine	115/69-kV transformer KY1A and switches 1263, 1265	
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 interrupter 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 interrupters 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 2019 Rate True-up Calculation	
Worksheet 11 - Facility Changes	
12 Months Ending 09/30/2019 True-up	
Newell	Added 115-kV breakers 1162 and 1362
Fort Randall	Added 115-kV breakers 962, 966, 1556, 1776, 1966 and assoc switches. Added one 230/115-kV transformer.
Oahe	Added 230-kV breakers 2282, 2286, 2482, 2486 and assoc switches. Added 115-kV breakers 1562, 1566 and assoc switches. Added one 230/115-kV transformer.
Watford City	Added 230-kV breaker 982 to the ring bus.

WAPA-UGP 2019 Rate True-up Calculation

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

Worksheet 12 - Scheduling, System Control, and Dispatch Service

12 Months Ending 09/30/2019 True-up

Line No.	DESCRIPTION (1)	SSCD (2)	REFERENCE (3)
1	A. Operation and Maintenance Expense	\$10,535,913	WS4-CostData (O&M Expenses Worksheet)
2	B. A&G Expense	\$238,588	WS4-CostData (A&G Expenses Worksheet)
3	C. Depreciation Expense	\$377,515	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	4.964%	WS4-CostData (C6 L51)
8	Net Plant Investment	\$8,574,672	WS4-CostData (C2 L15)
9	Cost of Capital	\$425,610	L7*L8
10	H. Revenue Requirement		
11	Annual Western-UGPR Cost	\$11,577,626	L1+L2+L3+L9
12	SSCD Revenue from non-Transmission Facilities	\$834,583	L11*L15
13	Revenue Requirement for SSCD for Transmission Facilities	\$10,743,043	L11-L12
14			
15	Total non-SPP facilities dispatched by Western-UGP for SSCD/Total facilities dispatched by Western UGP for SSCD	7.21%	WS8-TranFac (L505 C2/C5)

WAPA-UGP 2019 Rate True-up Calculation
Worksheet 13 - SSCD Facilities
12 Months Ending 09/30/2019 True-up

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

2019 SPP TRUE UP SUMMARY	FID	DESCRIPTION	DATA SOURCE:	PRIOR YEAR FACILITY TOTALS (\$)	ATTACHMENT AI ADJUSTMENTS (\$)	GENERATION ADJUSTMENTS (\$)	FY2019 ACT SPP TOTALS (\$)	
	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	2019 ROOS BALANCE	6,006,058	0	0	6,006,058	
	WTO	WATERTOWN OPERATIONS CENTER	2019 ROOS BALANCE	1,549,110	0	(265,348)	1,283,763	
	WTO F	WATERTOWN OPERATIONS CENTER (BFPs)	2019 ROOS BALANCE	12,069,072	0	(1,190,999)	10,878,073	
				19,624,240	0	(1,456,346)	18,167,894	
2019 SPP DETAIL:	FID	DESCRIPTION	ADDITIONAL:	FID COST DETAIL (\$)	SSCD %	SSCD TOTAL (\$)	TRANS %	TRANS TOTAL (\$)
	WAO	IDC	IDC	299	100%	299	100%	299
	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	9,790	100%	9,790	100%	9,790
	WAO	LAND AT KCR	LAND & LAND RIGHTS	1,539	100%	1,539	100%	1,539
	WAO	MICROWAVE TOWER	ANTENNA TOWER	295,486	100%	295,486	100%	295,486
	WAO	IDC	IDC	57,816	100%	57,816	100%	57,816
	WAO	IDC	PLANT NOT CLASSIFIED	5,246	100%	5,246	100%	5,246
	WAO	ANTENNA	PLANT NOT CLASSIFIED	17,480	100%	17,480	100%	17,480
	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	122,582	100%	122,582	100%	122,582
	WAO	MICROWAVE SYSTEM	MICROWAVE SYSTEM	12,407	100%	12,407	100%	12,407
	WAO	SCADA COMMUNICATION EQUIPMENT	SEQUENTIAL EVENT RECORDING SYST	20,217	100%	20,217	100%	20,217
	WAO	LAND & RIGHTS	LAND & LAND RIGHTS	54,138	100%	54,138	100%	54,138
	WAO	BUILDINGS	SERVICE BUILDINGS	531,049	100%	531,049	100%	531,049
	WAO	BUILDINGS	ROOFING	90,309	100%	90,309	100%	90,309
	WAO	OTHER STRUCTURES AND IMPROVEMENTS	OIL STORAGE TANK	54,257	100%	54,257	100%	54,257
	WAO	OTHER STRUCTURES AND IMPROVEMENTS	HEATING	475,746	100%	475,746	100%	475,746
	WAO	STATION EQUIPMENT	AUXILIARY POWER SYSTEM	95,962	100%	95,962	100%	95,962
	WAO	SCADA COMMUNICATION EQUIPMENT	REMOTE TERMINAL UNIT	12,679	100%	12,679	100%	12,679
	WAO	SCADA COMMUNICATION EQUIPMENT	SCADA	1,022,154	100%	1,022,154	100%	1,022,154
	WAO	SCADA COMMUNICATION EQUIPMENT	UNINTERRUPTABLE POWER SUPPLY	122,476	100%	122,476	100%	122,476
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	733,679	100%	733,679	100%	733,679
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY	35,292	100%	35,292	100%	35,292
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	BATTERY CHARGER	13,959	100%	13,959	100%	13,959
	WAO	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	53,112	100%	53,112	100%	53,112
	WAO	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	184,307	100%	184,307	100%	184,307
	WAO	FIBER OPTIC EQUIPMENT	ADD DROP MULTIPLEXER	97,180	100%	97,180	100%	97,180
	WAO	FIBER OPTIC EQUIPMENT	CABLE TYPE OPGW	28,885	100%	28,885	100%	28,885
	WAO	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	41,066	100%	41,066	100%	41,066
	WAO	BUILDINGS	SERVICE BUILDINGS	1,320,913	100%	1,320,913	100%	1,320,913
	WAO	IDC	IDC	454,813	100%	454,813	100%	454,813
	WAO	PLANT COMM SYSTEM	PLANT COMM SYSTEM	40,642	100%	40,642	100%	40,642
	WAO	IDC	IDC	577	100%	577	100%	577
		TOTAL		6,006,058		6,006,058		6,006,058
	WTO	AIR CONDITIONER	AIR CONDITIONER	146,013	65.3%	95,347	82%	119,731
	WTO	IDC	IDC	10,941	65.3%	7,145	82%	8,972
	WTO	ROOFING	ROOFING	676,147	65.3%	441,524	82%	554,441
	WTO	GATE	GATE	67,521	65.3%	44,091	82%	55,367
	WTO	FENCES	FENCES	573,532	65.3%	374,516	82%	470,296
		TOTAL		1,474,154		962,623		1,208,807
	WTO	FIBER OPTICS EQUIPMENT	PLANT COMM SYSTEM	54,317	100%	54,317	100%	54,317
	WTO	IDC	IDC	20,639	100%	20,639	100%	20,639
		TOTAL		74,956		74,956		74,956
	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP PART 2 OF 2	TERMINATION EQUIPMENT	134,174	100%	134,174	100%	134,174
	WTO F	ADD DROP MULTIPLEXER (PART 2 OF 2)	ADD DROP MULTIPLEXER	59,005	100%	59,005	100%	59,005
	WTO F	POWER SYSTEM DISPATCH CONSOLES	SCADA	119,667	100%	119,667	100%	119,667
	WTO F	MICROWAVE ALARM SYSTEM MASTER STATION	DATA STATION	19,292	100%	19,292	100%	19,292
	WTO F	FIBER OPTIC EQUIPMENT	FIBER OPTICS EQUIPMENT	53,165	100%	53,165	100%	53,165
	WTO F	FIBER OPTIC EQUIPMENT	ADD DROP MULTIPLEXER	307,465	100%	307,465	100%	307,465
	WTO F	FIBER OPTIC EQUIPMENT	TERMINATION EQUIPMENT	12,820	100%	12,820	100%	12,820
	WTO F	FIBER OPTIC EQUIPMENT	CHANNEL BANK EQUIPMENT	415,983	100%	415,983	100%	415,983
	WTO F	IDC	IDC	150,136	100%	150,136	100%	150,136
	WTO F	IDC	IDC	2,533	100%	2,533	100%	2,533
	WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	31,658	100%	31,658	100%	31,658
	WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	85,009	100%	85,009	100%	85,009
	WTO F	FIBER OPTICS EQUIPMENT	ADD DROP MULTIPLEXER	108,685	100%	108,685	100%	108,685
	WTO F	FIBER OPTICS EQUIPMENT	CHANNEL BANK EQUIPMENT	1,934	100%	1,934	100%	1,934
	WTO F	FIBER OPTICS EQUIPMENT	FIBER OPTICS EQUIPMENT	38,123	100%	38,123	100%	38,123
	WTO F	IDC	IDC	23,486	100%	23,486	100%	23,486
	WTO F	MULTIPLEXER EXPANDED CAPABILITY ASSET 166934 - PROJECT WTO 0025C (PART 2)	ADD DROP MULTIPLEXER	25,032	100%	25,032	100%	25,032
	WTO F	IDC - ASSET 166934 MULTIPLEXER EXPANSION (PART 2)	IDC	514	100%	514	100%	514
	WTO F	IDC	IDC	18,650	100%	18,650	100%	18,650
	WTO F	ADD DROP MULTIPLEXER (PART 1 OF 2)	TERMINATION EQUIPMENT	2,850	100%	2,850	100%	2,850
	WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 1 OF 2)	TERMINATION EQUIPMENT	6,625	100%	6,625	100%	6,625
	WTO F	VHF RADIO COMPARATOR	FIXED RADIO COMM EQUIPMENT	98,003	100%	98,003	100%	98,003

WTO F	IDC	IDC	3,248	100%	3,248	100%	3,248
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	MICROWAVE SYSTEM	226,333	100%	226,333	100%	226,333
WTO F	IDC	IDC	13,471	100%	13,471	100%	13,471
WTO F	TELEPHONE SYSTEM - 40 CHANNEL RECORDER & CRASH KIT	TELEPHONE SYSTEM	70,115	100%	70,115	100%	70,115
WTO F	IDC	IDC	1,421	100%	1,421	100%	1,421
WTO F	VOICE RECORDER SYSTEM	TELEPHONE SYSTEM	61,005	100%	61,005	100%	61,005
WTO F	SCADA SYSTEM HISTORIAN SOFTWARE	SCADA	202,050	100%	202,050	100%	202,050
WTO F	IDC	IDC	6,761	100%	6,761	100%	6,761
WTO F	SCADA	UNINTERRUPTABLE POWER SUPPLY	121,027	100%	121,027	100%	121,027
WTO F	IDC	IDC	2,484	100%	2,484	100%	2,484
WTO F	AUX PWR SYS - BACKUP GENERATOR	AUXILIARY POWER SYSTEM	454,504	100%	454,504	100%	454,504
WTO F	IDC	IDC	12,877	100%	12,877	100%	12,877
WTO F	(S) DIGITAL VOICE RECORDERS - WTO F	SCADA	20,217	100%	20,217	100%	20,217
WTO F	IDC	IDC	1,979	100%	1,979	100%	1,979
WTO F	BATTERY BANK FOR UPS	BATTERY	36,320	100%	36,320	100%	36,320
WTO F	IDC	IDC	631	100%	631	100%	631
WTO F	DIGITAL TRANS & REC EQUIP	SCADA	23,847	100%	23,847	100%	23,847
WTO F	FREQUENCY CONTROL ADDITIONS	LOAD AND FREQUENCY CONTROL EQ	57,731	100%	57,731	100%	57,731
WTO F	TELEPHONE COMMUNICATION EQUIPMENT	PLANT COMM SYSTEM	144,190	100%	144,190	100%	144,190
WTO F	PLANT COMM SYSTEM	PLANT COMM SYSTEM	167,020	100%	167,020	100%	167,020
WTO F	IDC	IDC	2,373	100%	2,373	100%	2,373
WTO F	ADD DROP MULTIPLEXER	ADD DROP MULTIPLEXER	267,249	100%	267,249	100%	267,249
WTO F	IDC	IDC	16,354	100%	16,354	100%	16,354
WTO F	TELEPHONE SYSTEM	TELEPHONE SYSTEM	559,892	100%	559,892	100%	559,892
WTO F	IDC	IDC	33,280	100%	33,280	100%	33,280
WTO F	SCADA	SCADA	1,215,754	100%	1,215,754	100%	1,215,754
WTO F	IDC	IDC	15,473	100%	15,473	100%	15,473
	TOTAL		5,452,412		5,452,412		5,452,412
WTO F	WATERTOWN OPERATIONS BUILDING	CONTROL BUILDING	636,802	65.3%	415,832	82%	522,178
WTO F	IDC	IDC	3,422	65.3%	2,235	82%	2,806
WTO F	RESURFACE PARKING LOT AT WATERTOWN OPS OFFICE	OFFICE BUILDING	152,204	65.3%	99,389	82%	124,807
WTO F	WALLS	WALLS	276,284	65.3%	180,413	82%	226,553
WTO F	IDC	IDC	2,835	65.3%	1,851	82%	2,325
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	SYNC UNIT	20,893	65.3%	13,643	82%	17,133
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	REMOTE STATION	20,482	65.3%	13,375	82%	16,795
WTO F	IDC	IDC	405,078	65.3%	264,516	82%	332,164
WTO F	VEHICLE/STORAGE BUILDING	GARAGE	651,816	65.3%	425,636	82%	534,489
WTO F	IDC	IDC	39,508	65.3%	25,799	82%	32,397
WTO F	SIDEWALKS	SIDEWALKS	153,428	65.3%	100,188	82%	125,811
WTO F	IDC	IDC	2,052	65.3%	1,340	82%	1,682
WTO F	TELEPHONE COMMUNICATION EQUIPMENT	TELEPHONE SYSTEM	146,115	65.3%	95,413	82%	119,814
WTO F	IDC - REPLACEMENTS	IDC	1,845	65.3%	1,205	82%	1,513
WTO F	IDC - ADDITIONS	IDC	3,845	65.3%	2,511	82%	3,153
WTO F	PSOO-WATER SYSTEM	METER EQUIPMENT	219,050	65.3%	143,040	82%	179,621
WTO F	IDC	IDC	285,734	65.3%	186,585	82%	234,302
WTO F	PWR SYS OPERATIONS OFFICE BUILDING (Part 1 of 2)	STORAGE BUILDING	1,929,776	65.3%	1,260,144	82%	1,582,417
WTO F	WATERTOWN OPS BLDG EXPANSION (PSOO)	STORAGE BUILDING	303,096	65.3%	197,922	82%	248,539
WTO F	WATERTOWN OPS BLDG EXPANSION	STORAGE BUILDING	1,362,395	65.3%	889,644	82%	1,117,164
	TOTAL		6,616,659		4,320,679		5,425,661

WAPA-UGP 2019 Rate True-up Calculation

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Worksheet 14 - Rate for Regulation and Frequency Response

12 Months Ending 09/30/2019 True-up

Line No.	DESCRIPTION (1)	REGULATION and FREQUENCY RESPONSE (2)	REFERENCE (3)
1	Fixed Charge Rate	14.520%	WS2-AllocFactor C4 L30
2	Corps Generation Net Plant Costs (\$)	\$ 577,612,349	WS2-AllocFactor C4 L31
3	Annual Corps Generation Cost (\$)	\$ 83,870,207	L1*L2
4	Plant Capacity (kW)	2,137,000	(1)
5	Cost/kW (\$/kW)	\$ 39.25	L3/L4
6	Capacity Used for Regulation (kW)	8,861	(2)
7	Regulation Revenue Requirement (\$) - Capacity	\$347,765	L5*L6
8	Regulation Revenue Requirement (\$) - Purchases	\$0	(3)
9	Total Regulation Revenue Requirement (\$)	\$347,765	
(1)	WAPA Annual Report plant capacity		
(2)	WAUW capacity used for regulation (WAUW-Regulation-Requirements.pdf)		
(3)	Cost of Purchases Required to Regulate for Intermittent Resources		

WAPA-UGP 2019 Rate True-up Calculation

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Worksheet 15 - Rate for Reserves

12 Months Ending 09/30/2019 True-up

Line No.	DESCRIPTION (1)	RESERVES (2)	REFERENCE (3)
1	Fixed Charge Rate	14.520%	WS2-AllocFactor C4 L30
2	Corps Generation Net Plant Costs (\$)	\$ 577,612,349	WS2-AllocFactor C4 L31
3	Annual Corps Generation Cost (\$)	\$ 83,870,207	L1*L2
4	Plant Capacity (kW)	2,137,000	(1)
5	Cost/kW (\$/kW-Yr)	\$ 39.25	L3/L4
7	Western's Maximum Load in WAUW Control Area (kW)	159,000	(2)
8	Maximum Generation in WAUW Control Area (kW)	92,000	(3)
9	Capacity used for Reserves (kW) -- 3% Load + 3% Gen	7,530	L8*3% + L9*3% (4)
10	Annual Reserve Sharing Group Cost	\$ 65,525	(5)
11	Annual Reserves Revenue Requirement	\$ 361,053	L10*L5 + L11
(1)	WAPA Annual Report plant capacity		
(2)	WAUW maximum load data		
(3)	WAUW maximum generation data		
(4)	Northwest Power Pool Reserve Sharing System		
(5)	Annual cost associated with Western-UGP's current reserve sharing group membership		