

Western-UGP  
Transmission and Ancillary Services  
Rate Calculation

Effective January 1, 2019

2019 Rate Estimate Calculation  
(Update 1 - (12/28/18))

## Western-UGP

### Transmission and Ancillary Services List of Workpapers and Schedules

WAUGP-ATRR 2019 est	Projected ATRR -2019 estimate
WAUGP-AS1 2019 est	Scheduling, System Control and Dispatch Service ATRR - 2019 estimate
FACILITY COST DETAIL 2019 est	Facility Costs - 2019 estimate
FACILITIES - Included per AI	Western-UGP Facilities Included per AI
FACILITIES - Excluded per AI	Western-UGP Facilities Excluded per AI
Facility Changes 2019	List of facility changes
COST DATA 2019 est	Cost Support - 2019 estimate
Annual Costs 2019 est	Annual Costs - 2019 estimate
WAUW-AS3 2019 est	Regulation and Frequency Response ATRR - 2019 estimate
WAUW-AS5&6 2019 est	Reserves ATRR - 2019 estimate
SSCD Facilities - 2019 est	SSCD Facility Costs - 2019 estimate

## Western-UGP Timeline

September 1, 2018 (on or shortly after)	Annual recalculation of prior year (2017) and estimated ATRR for upcoming year (2019) will be available for review/comment on SPP's website and Western's website at <a href="http://www.wapa.gov/ugp/rates/default.htm">www.wapa.gov/ugp/rates/default.htm</a>
October 31, 2018 (on or before)	Western-UGP will provide opportunity to discuss/comment on recalculated (2017) ATRR and estimated ATRR (2019). Western will hold a WebEx and/or at joint meetings with other UMZ Transmission Owners to facilitate discussion. Specific WebEx and/or meeting information will be posted on SPP's website and Western's website at <a href="http://www.wapa.gov/ugp/rates/default.htm">www.wapa.gov/ugp/rates/default.htm</a>
January 1, 2019	Recalculated revenue requirement will go into effect
September 1, 2019 (on or shortly after)	Annual recalculation of prior year (2018) and estimated ATRR for upcoming year (2020) will be available for review/comment on SPP's website and Western's website at <a href="http://www.wapa.gov/ugp/rates/default.htm">www.wapa.gov/ugp/rates/default.htm</a>
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January 1, 2020	Recalculated revenue requirement will go into effect

**Revision History**

<u>Version</u>	<u>Date</u>	<u>Filename</u>	<u>Changes</u>
Original	9/25/2018	WAPA-UGP-Trans-Anc-Service-Rates-Calc-2019-0101.xlsx	Original Version
Rev 1	12/28/2018	WAPA-UGP-Trans-Anc-Service-Rates-Calc-2019-0101(Rev1).xlsx	Correction to COE 2019 New Facility Additions Estimates, Adjustments to Big Bend and Fort Peck COE facilities included/excluded in Transmission System (with corresponding updates to FACILITIES - Included per AI, FACILITIES - Excluded per AI, and FACILITIES Changes worksheets), Break out of individual costs for COE Switchyards in "Facilities 2019 est" worksheet. Corresponding updates to 2017 True-Up for Big Bend and Fort Peck COE facilities. <b>Rates changed due to updates.</b> ATRR and WAUGP-AS1 (SSCD) are reduced from original version. ATRR reduction from original \$137,323,326 to \$135,555,574. WAUW-AS3 (Regulation & Freq Response) and WAUW-ASS&6 (Reserves) are increased from original version.

Western-UGP Revenue Requirement - Non-Levelized Utilizing Financial Statement Results of Operations 12 Months Ending 09/30/2019 ESTIMATE (Update 1)						
Line No.	(1)	REFERENCE (2)	COMPANY TOTAL (3)	ALLOCATOR	(4)	TRANSMISSION ALLOCATED AMOUNT (5)
1	GROSS REVENUE REQUIREMENT	(line 76)				\$ 154,119,059
	REVENUE CREDITS	(Note R)				
2	Short-Term Firm Point-to-Point Transmission Service Credit		5,937,730	NA	1.00000	5,937,730
3	Non-Firm Point-to-Point Transmission Service Credit		1,110,084	NA	1.00000	1,110,084
4	Revenue from Existing Transmission Agreements		1,134,757	NA	1.00000	1,134,757
5	Scheduling, System Control, and Dispatch Service Credit		12,441,896	NA	1.00000	12,441,896
6	Account No. 454	(line 115)	77,160	TP	1.00000	77,160
7	Account No. 456	(line 119)	0	TP	1.00000	0
8	TOTAL REVENUE CREDITS					20,701,627
9	PRIOR PERIOD TRUE-UP (Under-collection)					2,138,142
10	Portion of ATRR eligible for SPP region-wide cost sharing					0
11	NET REVENUE REQUIREMENT	(line 1 - line 8 + line 9 + line 10)				\$ 135,555,574
	<b>RATE BASE:</b>					(Col 3 times Col 4)
	GROSS PLANT IN SERVICE	(Note A)				
12	Production	Schedule 1A Total	1,064,808,178	NA		
13	Transmission	Schedule 1A Total	1,512,649,198	TP	1.00000	1,512,649,198
14	Distribution	Schedule 1A Total	46,780,716	NA		
		Bal Sheet - Other Assets - SGL				
15	General & Intangible	175002	-	W/S	1.00000	0
16	Common		-	CE	0.00000	0
17	TOTAL GROSS PLANT	(sum lines 12 to 16)	2,624,238,092	GP=	57.641%	1,512,649,198
	ACCUMULATED DEPRECIATION					
18	Production	Schedule 4	542,501,356	NA		
19	Transmission	Schedule 4	751,157,521	TP	1.00000	751,157,521
20	Distribution	Schedule 4	23,172,499	NA		
		Bal Sheet - Other Assets - SGL				
21	General & Intangible	175902	0	W/S	1.00000	0
22	Common		0	CE	0.00000	0
23	TOTAL ACCUM. DEPRECIATION	(sum lines 18 to 22)	1,316,831,376			751,157,521
	NET PLANT IN SERVICE					
24	Production	(line 12 - line 18)	522,306,822			
25	Transmission	(line 13 - line 19)	761,491,677			761,491,677
26	Distribution	(line 14 - line 20)	23,608,217			
27	General & Intangible	(line 15 - line 21)	0			0
28	Common	(line 16 - line 22)	0			0
29	TOTAL NET PLANT	(sum lines 24 to 28)	1,307,406,717	NP=	58.244%	761,491,677
	ADJUSTMENTS TO RATE BASE	(Note B)				
30	Account No. 281	(enter negative)	0		0.00000	0
31	Account No. 282	(enter negative)	0	NP	0.58244	0
32	Account No. 283	(enter negative)	0	NP	0.58244	0
33	Account No. 190	(enter negative)	0	NP	0.58244	0
34	Account No. 255	(enter negative)	0	NP	0.58244	0
35	TOTAL ADJUSTMENTS	(sum lines 30 to 34)	0			0
36	LAND HELD FOR FUTURE USE	(Note C)	0	TP	1.00000	0
37	WORKING CAPITAL	(Note D)				
	CWC	calculated	23,348,188			0
		Bal Sheet - Other Assets - SGL				
38	Materials & Supplies	151191 (Note C)	0	TE	0.00000	0
39	Prepayments	Bal Sheet Other Assets	0	GP	0.57641	0
40	TOTAL WORKING CAPITAL	(sum lines 37 to 39)	23,348,188			0
41	RATE BASE	(sum lines 29, 35, 36, 40)	1,330,754,905			761,491,677
	O&M					
	Transmission	Schedule 11 (Note E)				
42	Western-UGP		61,067,089	PTP/UGP	0.95412	58,265,409
43	Western-RMR		49,394,313	PTP/RMR	0.00933	460,894
44	COE	COE Financial Stmt	48,576,331	PTP/COE	0.11689	5,677,943
45	Less Account 565	(Note E)	0	NA	1.00000	0
	A&G	Schedule 11 (Note F)				
46	Western-UGP		20,321,911	PTP/UGP	0.95412	19,389,568
47	Western-RMR		7,425,862	PTP/RMR	0.00933	69,290
48	Less FERC Annual Fees		0	W/S	1.00000	0
49	Less EPRI & Reg. Comm. Exp. & Non-safety Ad	(Note G)	0	W/S	1.00000	0
50	Plus Transmission Related Reg. Comm. Exp	(Note G)	0	TE	0.00000	0
51	Common		0	CE	0.00000	0
52	Transmission Lease Payments		0	NA	1.00000	0
		(sum lines 42, 43, 44, 46, 47, 50, 51 less 45, 48, 49)	186,785,506			83,863,104
53	TOTAL O&M					
	DEPRECIATION EXPENSE					
	Transmission	Schedule 4				
55	Western-UGP		33,684,952	PTP/UGP	0.95412	32,139,530
56	Western-RMR		18,138,747	PTP/RMR	0.00933	169,251
57	COE		11,151,845	PTP/COE	0.11689	1,303,506
58	General		0	W/S	1.00000	0
59	Common		0	CE	0.00000	0
60	TOTAL DEPRECIATION	(sum lines 54 to 59)	62,975,544			33,612,287
	TAXES OTHER THAN INCOME TAXES	(Note H)				
	LABOR RELATED					
61	Payroll		0	W/S	1.00000	0
62	Highway and vehicle		0	W/S	1.00000	0
	PLANT RELATED					
63	Property		0	GP	0.57641	0
64	Gross Receipts		0		0.00000	0
65	Other		0	GP	0.57641	0
66	Payments in lieu of taxes		0	GP	0.57641	0
67	TOTAL OTHER TAXES	(sum lines 61 to 66)	0			0
	INCOME TAXES	(Note I)				
68	T=1 - [(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p) =		0.00%			
69	CIT=(T/1-T) * (1-(WCLTD/R)) = where WCLTD= (line 107) and R= (line 109) and FIT, SIT & p are as given in footnote I.		0.00%			
70	1 / (1 - T) = (from line 68)		0.0000			
71	Amortized Investment Tax Credit	(enter negative)	0			0
72	Income Tax Calculation	(line 69 * line 75)	0	NA		0
73	ITC adjustment	(line 70 * line 71)	0	NP	0.58244	0
74	Total Income Taxes	(line 72 + line 73)	0			0
75	RETURN [ Rate Base * Rate of Return]	(line 41 * line 106)	64,037,131	NA		36,643,669
76	REV. REQUIREMENT	(sum lines 53, 60, 67, 74, 75)	313,798,181			154,119,059

**SUPPORTING CALCULATIONS AND NOTES**

TRANSMISSION PLANT INCLUDED IN UMZ RATES									
77	Total transmission plant	(line 13, column 3)							1,512,649,198
78	Less transmission plant excluded from UMZ rates	(Note K)							0
79	Less transmission plant included in OATT Ancillary Services	(Note L)							0
80	Transmission plant included in UMZ rates	(line 77 less line 78 and 79)							1,512,649,198
81	Percentage of transmission plant included in UMZ Rates	(line 80 / line 77)				TP=			1.00000
TRANSMISSION EXPENSES									
82	Total transmission expenses	(sum lines 42 to 44, column 3)							0
83	Less transmission expenses included in OATT Ancillary Services	(Note J)							0
84	Included transmission expenses	(line 82 - line 83)							0
85	Percentage of transmission expenses after adjustment (line 8 divided by line 6)	(line 84/ line 82)							0.00000
86	Percentage of transmission plant included in UMZ Rates	(line 81)				TP			1.00000
87	Percentage of transmission expenses included in UMZ Rates	(line 86 * line 85)				TE=			0.00000
WAGES & SALARY ALLOCATOR (W&S)									
			\$		TP		Allocation		
88	Production		0	0.00			0		
89	Transmission		22,760,814	1.00			22,760,814		
90	Distribution		0	0.00			0		W&S Allocator
91	Other		0	0.00			0		(\$ / Allocation)
92	Total	(sum lines 88 to 91)	22,760,814				22,760,814	=	1.00000
PERCENTAGE OF TOTAL PLANT ALLOCATOR PTP									
93	Transmission Plant in Service Western-UGP		1,366,892,262						
94	Total Plant in Service Western-UGP		1,432,618,988						
95	UGP Percentage of Transmission Plant to Total Plant	(line 93 / line 94)				PTP/UGP		=	0.95412
96	Transmission Plant in Service Western-RMR		7,328,766						
97	Total Plant in Service Western-RMR		785,428,386						
98	RMR Percentage of Transmission Plant to Total Plant	(line 96 / line 97)				PTP/RMR		=	0.00933
99	Transmission Plant in Service COE		138,428,170						
100	Total Plant in Service COE		1,184,290,338						
101	COE Percentage of Transmission Plant to Total Plant	(line 99 / line 100)				PTP/COE		=	0.11689
COMMON PLANT ALLOCATOR (CE)									
			\$			% Electric		Labor Ratio =	CE 0.00000
102	Electric		0			(line 102 / line 105)		(line 92)	
103	Gas		0			0.00000	*	1.00000	
104	Water		0						
105	Total	(sum lines 102 to 104)	0						
RETURN (R)									
106	Long Term Interest Schedule 5		\$44,123,729						
			\$		%	Cost (Note O)		Weighted	=WCLTD
107	Long Term Debt	HFD Sch's 21RX & 21X Col 8 Lines	916,934,728	100%		0.0481		0.0481	=R
108	Proprietary Capital	23,25,26,29,30	0	0%		0.1238		0.0000	
109	Total (sum lines 31-32)	(sum lines 107 to 108)	916,934,728	100%				0.0481	
110								Proprietary Capital Cost Rate =	12.38%
111								TIER =	1.00
REVENUE CREDITS									
ACCOUNT 447 (SALES FOR RESALE)									
112	a. Bundled Non-RQ Sales for Resale	(Note P)							0
113	b. Bundled Sales for Resale included in Divisor on page 1								0
114	Total of (a)-(b)								0
115	ACCOUNT 454 (RENT FROM ELECTRIC PROPERTY)	(Note Q)							77,160
116	ACCOUNT 456 (OTHER ELECTRIC REVENUES)								0
117	a. Transmission charges for all transmission transactions								0
118	b. Transmission charges for all transmission transactions included in Divisor on page 1								0
119	Total of (a)-(b)								0

**Note Letter** General Note: References to Results of Operations in this revenue requirement template indicate the Financial Statement Results of Operations (ROOs) Schedule where data is located. To the extent the references to ROOs data are missing, the entity will include a "Notes" section to provide this data.

**A** Combines plant data for both the Western-Upper Great Plains Region (Western-UGP) and Western-Rocky Mountain Region (Western-RMR).

**B** Does not apply to Western. For others, the balances in Accounts 190, 281, 282 and 283, as adjusted by any contra accounts identified as regulatory assets amounts in or liabilities related to FASB 106 or 109. Balance of Account 255 is reduced by prior flow throughs and excluded if the utility chose to utilize amortization of tax credits against taxable income as discussed in Note K. Account 281 is not allocated.

**C** Transmission related only.

**D** Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission at line 53 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 as Total O&M from Results of Operations less Purchase Power, Transmission Service Provided by Others (FERC 565), O&M Expense Fort Peck Powerhouse, Prior Year Adjustments, A&G Expense from Schedule 11 plus CME and Warehouse Interest from Schedule 5. Depreciation Expense from Results of Operations Schedule 4.

**F** Totals of Results of Operations Schedule 11A Object Classes 1411, 1412, 1415, 1416, 1421, 1422, 1425, 1426, 1431, 1432, 1441, 1442

**G** Line 49 - EPRI Annual Membership Dues, all Regulatory Commission Expenses, and non-safety related advertising. Line 50 - 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 Act 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 106) / long term debt (line 107). 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 112 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 in lines 2-5 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.

Western-UGP 2019 Estimate (**Update 1**)

Scheduling, System Control, and Dispatch Service

Line No.	DESCRIPTION (1)	SSCD (2)	REFERENCE (3)
1	<b>A. Operation and Maintenance Expense</b>	\$11,679,921	O&M Expenses Worksheet
2	<b>B. A&amp;G Expense</b>	\$174,768	A&G Expenses Worksheet
3	<b>C. Depreciation Expense</b>	\$289,689	Depreciation Expense Worksheet
4	<b>D. Taxes Other than Income Taxes for Transmission</b>	\$0	Not Applicable
5	<b>E. Allocation of General Plant</b>	\$0	No General Plant identified at this time, all plant is identified as either generation or transmission related
6	<b>F. Cost of Capital</b>		
7	Weighted Transmission Composite Interest Rate	4.785%	Cost of Capital Worksheet
8	Net Plant Investment	\$6,217,612	
9	Cost of Capital	\$297,518	L7*L8
10	<b>H. Revenue Requirement</b>		
11	Annual Western-UGPR Cost	\$12,441,896	L1+L2+L3+L9
12	<b>Estimated SSCD Revenue from non-Transmission facilities</b>	\$ 582,885	
13	<b>Prior Year True-Up</b>	\$ (1,759,781)	
14	<b>Revenue Requirement for SSCD for Transmission facilities</b>	\$10,099,229	L11-L12+L13

Western-UGP

2019 Estimated Facility Costs (Update 1)

		(1)	(2)	(3)	(4)	(5)	(6)
		FACILITY TOTALS	ADD/REPL/RE	FACILITY TOTAL	ATTACHMEN	ADJUSTMENT	FY2019 EST SPP
Line No.	DESCRIPTION	(\$)	TIRE (\$)	(\$)	T AI	S (\$)	TOTALS (\$)
1	TL AURORA- BROOKINGS 115-KV T/L	133,158		133,158	-	-	133,158
2	TL AURORA-FLANDREAU 115-KV T/L	96,623		96,623	-	-	96,623
3	TL BAKER-HETTINGER	459,778		459,778	-	-	459,778
4	TL BEULAH-GARRISON	357,454		357,454	-	-	357,454
5	TL BISMARCK-GLENHAM	5,076,897		5,076,897	-	-	5,076,897
6	TL BISMARCK-JAMESTOWN NO. 1	7,077,933		7,077,933	-	-	7,077,933
7	TL BISMARCK-JAMESTOWN NO. 2	4,229,572		4,229,572	-	-	4,229,572
8	TL BISMARCK-MEDORA	15,472,112	-	15,472,112	-	-	15,472,112
9	TL BROOKINGS-SIOUX FALLS	2,067,611		2,067,611	-	-	2,067,611
10	TL BROOKINGS-WATERTOWN NO. 1	1,718,240		1,718,240	-	-	1,718,240
11	TL BROOKINGS-WATERTOWN NO. 2	3,318,558		3,318,558	-	-	3,318,558
12	TL BROOKINGS-WHITE 115/230KV	2,952,237		2,952,237	-	-	2,952,237
13	TL CANYON FERRY-EAST HELENA "A"	141,044		141,044	-	-	141,044
14	TL CANYON FERRY-EAST HELENA "B"	141,044		141,044	-	-	141,044
15	TL CARRINGTON-JAMESTOWN	1,259,668		1,259,668	-	-	1,259,668
16	TL CHARLIE CREEK - WATFORD CITY	13,451,446		13,451,446	-	-	13,451,446
17	TL CHARLIE CREEK-BELFIELD	14,513,308		14,513,308	-	-	14,513,308
18	TL CONRAD-SHELBY #2	5,804,318		5,804,318	-	-	5,804,318
19	TL CRESTON-MARYVILLE	1,366,481		1,366,481	-	-	1,366,481
20	TL DAWSON COUNTY - MILES CITY	2,605,678		2,605,678	-	-	2,605,678
21	TL DAWSON-GLENDIVE	553,800		553,800	-	-	553,800
22	TL DAWSON-MEDORA	3,026,142		3,026,142	-	-	3,026,142
23	TL DAWSON-O'FALLON CREEK	918,676		918,676	-	-	918,676
24	TL DAWSON-WILLISTON	1,258,900		1,258,900	-	-	1,258,900
25	TL DENISON-CRESTON	20,977,731		20,977,731	-	-	20,977,731
26	TL DEVILS LAKE-CARRINGTON	7,672,600		7,672,600	-	-	7,672,600
27	TL DEVILS LAKE-LAKOTA	1,872,142		1,872,142	-	-	1,872,142
28	TL EDGELEY-FORMAN	375,316		375,316	-	-	375,316
29	TL EDGELEY-GROTON	771,572		771,572	-	-	771,572
30	TL ELK CREEK-NEWELL-MAURINE 115	60,704		60,704	-	-	60,704
31	TL FARGO-GRAND FORKS	2,369,098		2,369,098	-	-	2,369,098
32	TL FARGO-MORRIS	7,305,876		7,305,876	-	-	7,305,876
33	TL FORMAN-SUMMIT (BISMARCK)	922,098		922,098	-	-	922,098
34	TL FORMAN-SUMMIT (HURON)	4,465,037		4,465,037	-	-	4,465,037
35	TL FORT PECK-DAWSON 1	302,165		302,165	-	-	302,165
36	TL FORT PECK-DAWSON 2	8,301,710		8,301,710	-	-	8,301,710
37	TL FORT PECK-HAVRE	28,806,330		28,806,330	-	-	28,806,330
38	TL FORT PECK-WHATELY	157,876		157,876	-	-	157,876
39	TL FORT PECK-WILLISTON	10,096,097		10,096,097	-	-	10,096,097

40	TL	FORT PECK-WOLF POINT #2	7,554,492		7,554,492	-	-	7,554,492
41	TL	FORT RANDALL-FORT THOMPSON	7,782,247		7,782,247	-	-	7,782,247
42	TL	FORT RANDALL-GAVIN'S POINT	2,354,242		2,354,242	-	-	2,354,242
43	TL	FORT RANDALL-GREGORY	777,327		777,327	-	-	777,327
44	TL	FORT RANDALL-MT VERNON	1,232,511		1,232,511	-	-	1,232,511
45	TL	FORT RANDALL-O'NEILL	679,540		679,540	-	-	679,540
46	TL	FORT RANDALL-SIOUX CITY 1&2	11,019,006		11,019,006	-	-	11,019,006
47	TL	FORT THOMPSON-GRAND ISLAND	16,397,505		16,397,505	-	-	16,397,505
48	TL	FORT THOMPSON-HURON 230-KV	6,788,951	471,477	7,260,428	-	-	7,260,428
49	TL	FORT THOMPSON-SIOUX FALLS 1&	10,455,917		10,455,917	-	-	10,455,917
50	TL	GARRISON-BISMARCK 230KV 1&2	10,713,977		10,713,977	-	-	10,713,977
51	TL	GARRISON-JAMESTOWN	4,763,399		4,763,399	-	-	4,763,399
52	TL	GARRISON-MALLARD	1,948,079		1,948,079	-	-	1,948,079
53	TL	GARRISON-WM. J. NEAL	1,521,174		1,521,174	-	-	1,521,174
54	TL	GAVINS POINT-BELDEN	455,727		455,727	-	-	455,727
55	TL	GAVINS POINT-SIOUX FALLS	3,361,449		3,361,449	-	-	3,361,449
56	TL	GRANITE FALLS- MORRIS	3,279,089		3,279,089	-	-	3,279,089
57	TL	GRANITE FALLS-MINNESOTA VALLI	156,778		156,778	-	-	156,778
58	TL	GREAT FALLS-CONRAD	12,744,945		12,744,945	-	-	12,744,945
59	TL	GREGORY-MISSION	10,110,752		10,110,752	-	-	10,110,752
60	TL	GROTON-HURON	1,212,199		1,212,199	-	-	1,212,199
61	TL	GROTON-SUMMIT	3,255,847		3,255,847	-	-	3,255,847
62	TL	HAVRE-RAINBOW	8,681,332		8,681,332	-	-	8,681,332
63	TL	HAVRE-SHELBY#2	5,561,905		5,561,905	-	-	5,561,905
64	TL	HESKETT-DEVAUL	3,647,666		3,647,666	-	-	3,647,666
65	TL	HETTINGER-NEW UNDERWOOD	11,263,708		11,263,708	-	-	11,263,708
66	TL	HURON-MT VERNON	617,623		617,623	-	-	617,623
67	TL	HURON-WATERTOWN 230KV 1&3	6,319,622		6,319,622	-	-	6,319,622
68	TL	JAMESTOWN-EDGELEY	324,360		324,360	-	-	324,360
69	TL	JAMESTOWN-FARGO NO. 1	4,941,649		4,941,649	-	-	4,941,649
70	TL	JAMESTOWN-FARGO NO. 2	3,155,850		3,155,850	-	-	3,155,850
71	TL	JAMESTOWN-GRAND FORKS	26,728,586		26,728,586	-	-	26,728,586
72	TL	JAMESTOWN-VALLEY CITY	1,055,414		1,055,414	-	-	1,055,414
73	TL	LEEDS-DEVILS LAKE	8,982,948		8,982,948	-	-	8,982,948
74	TL	LEEDS-ROLLA	5,842,404		5,842,404	-	-	5,842,404
75	TL	MALLARD-RUGBY	1,089,083		1,089,083	-	-	1,089,083
76	TL	MARTIN-MISSION	1,816,904		1,816,904	-	-	1,816,904
77	TL	MARTIN-PHILIP	1,790,108		1,790,108	-	-	1,790,108
78	TL	MAURINE-RAPID CITY	6,346,265		6,346,265	-	-	6,346,265
79	TL	MILES CITY-BAKER	10,569,338		10,569,338	-	-	10,569,338
80	TL	MILES CITY-CUSTER	3,750,704		3,750,704	-	-	3,750,704
81	TL	NEW UNDERWOOD-PHILIP	2,915,316		2,915,316	-	-	2,915,316
82	TL	NEW UNDERWOOD-RAPID CITY NC	1,132,486		1,132,486	-	-	1,132,486



83	TL	NEW UNDERWOOD-RAPID CITY NC	309,991		309,991	-	-	309,991
84	TL	NEW UNDERWOOD-STEGALL (HUF	2,651,860		2,651,860	-	-	2,651,860
85	TL	OAHE-FORT THOMPSON 230KV 18	3,973,416		3,973,416	-	-	3,973,416
86	TL	OAHE-FORT THOMPSON 230KV 38	5,563,296		5,563,296	-	-	5,563,296
87	TL	OAHE-GLENHAM	5,949,648		5,949,648	-	-	5,949,648
88	TL	OAHE-MAURINE	1,967,901		1,967,901	-	-	1,967,901
89	TL	OAHE-NEW UNDERWOOD	6,683,770		6,683,770	-	-	6,683,770
90	TL	OAHE-PIERRE	388,816		388,816	-	-	388,816
91	TL	O'FALLON CREEK-MILES CITY	2,488,318		2,488,318	-	-	2,488,318
92	TL	PIERRE-PHILIP	2,140,436		2,140,436	-	-	2,140,436
93	TL	RAPID CITY-DRY CREEK	9,269,194		9,269,194	-	-	9,269,194
94	TL	RAPID CITY-ELK CREEK 115-kv T/L	52,064		52,064	-	-	52,064
95	TL	RUGBY-LEEDS	2,235,655		2,235,655	-	-	2,235,655
96	TL	SHELBY-SHELBY #2	576,090		576,090	(576,090)	-	-
97	TL	SIOUX CITY-DENISON	6,094,716		6,094,716	-	-	6,094,716
98	TL	SIOUX CITY-SPENCER	1,938,353		1,938,353	-	-	1,938,353
99	TL	SIOUX FALLS- SIOUX CITY	3,217,192		3,217,192	-	-	3,217,192
100	TL	SIOUX FALLS-VIRGIL FODNESS 230I	277,897		277,897	-	-	277,897
101	TL	SUMMIT-WATERTOWN	6,743,203		6,743,203	-	-	6,743,203
102	TL	TIBER TAP-TIBER	1,084,858		1,084,858	-	-	1,084,858
103	TL	UTICA JCT-SIOUX FALLS	3,485,236		3,485,236	-	-	3,485,236
104	TL	VALLEY CITY-FORMAN	1,527,895		1,527,895	-	-	1,527,895
105	TL	VERONA GREAT FALLS 161-kv LINE	5,110,115		5,110,115	-	-	5,110,115
106	TL	VIRGIL FODNESS-UTICA JUNCTION	312,931		312,931	-	-	312,931
107	TL	WATERTOWN-GRANITE FALLS 1&2	7,488,154		7,488,154	-	-	7,488,154
108	TL	WATERTOWN-SIOUX CITY	26,924,889		26,924,889	-	-	26,924,889
109	TL	WATFORD CITY-BEULAH	349,954		349,954	-	-	349,954
110	TL	WILLISTON-WATFORD CITY	17,627,868		17,627,868	-	-	17,627,868
111	TL	WOLF POINT-CIRCLE	10,963,800		10,963,800	-	-	10,963,800
112	TL	WM. J. NEAL-RUGBY	4,629,316		4,629,316	-	-	4,629,316
113	TL	YELLOWTAIL-CUSTER	2,265,163		2,265,163	-	-	2,265,163
114	<b>TL Total</b>	<b>TRANSMISSION LINES</b>	<b>561,847,449</b>	<b>471,477</b>	<b>562,318,926</b>	<b>(576,090)</b>	<b>-</b>	<b>561,742,836</b>
115	SUB	ANITA	6,259		6,259	-	-	6,259
116	SUB	APPELDORN SUBSTATION	5,878,984		5,878,984	-	-	5,878,984
117	SUB	ARMOUR SUBSTATION	2,397,544		2,397,544	(787,024)	-	1,610,520
118	SUB	ASH SUBSTATION	63,325		63,325	-	-	63,325
119	SUB	ASSINNIBOINE	35,005		35,005	(35,005)	-	-
120	SUB	AURORA SUBSTATION	2,899,881		2,899,881	(124,344)	-	2,775,537
121	SUB	BAKER	295,410		295,410	-	-	295,410
122	SUB	BELDEN SUBSTATION	164,986		164,986	-	-	164,986
123	SUB	BELFIELD SUBSTATION	13,779,308		13,779,308	(163,836)	-	13,615,472
124	SUB	BERESFORD SUBSTATION	4,706,447		4,706,447	(230,493)	-	4,475,954
125	SUB	BISBEE SUBSTATION	272,529		272,529	(217,774)	-	54,755

126	SUB	BISMARCK SUBSTATION	17,762,642	4,338,955	22,101,597	(180,705)	-	21,920,892
127	SUB	BISON	12,472		12,472	-	-	12,472
128	SUB	BOLE SUB	2,997,082		2,997,082	(630,455)	-	2,366,627
129	SUB	BONESTEEL SUBSTATION	3,398,446		3,398,446	(1,226,624)	-	2,171,822
130	SUB	BROOKINGS SUBSTATION	4,460,377	9,024,920	13,485,297	-	-	13,485,297
131	SUB	CAMPBELL COUNTY SWITCHING ST	-	4,765,826	4,765,826	-	-	4,765,826
132	SUB	CANYON FERRY	45,210		45,210	-	-	45,210
133	SUB	CARPENTER SUBSTATION	2,463,312		2,463,312	-	-	2,463,312
134	SUB	CARRINGTON SUBSTATION	3,819,873		3,819,873	(1,007,873)	-	2,812,000
135	SUB	CHARLIE CREEK	1,376,076		1,376,076	-	-	1,376,076
136	SUB	CIRCLE SUBSTATION	9,139,054		9,139,054	(2,140,670)	-	6,998,384
137	SUB	CONRAD SUB	5,569,097		5,569,097	(315,045)	-	5,254,052
138	SUB	CRESTON SUBSTATION	8,453,084		8,453,084	-	-	8,453,084
139	SUB	CROSSOVER SUB	11,176,976		11,176,976	-	-	11,176,976
140	SUB	CULBERTSON EAST SWITCHING ST.	2,390,851		2,390,851	-	-	2,390,851
141	SUB	CUSTER SUBSTATION	4,633,608		4,633,608	(346,142)	-	4,287,466
142	SUB	CUSTER TRAIL SUBSTATION	1,484,722		1,484,722	(1,484,722)	-	-
143	SUB	DAWSON COUNTY SUBSTATION	10,640,460		10,640,460	(2,305)	-	10,638,155
144	SUB	DENBIGH TAP	848,872		848,872	(109,673)	-	739,199
145	SUB	DENISON SUBSTATION	16,188,021		16,188,021	(183,385)	-	16,004,636
146	SUB	DEVAUL SUBSTATION	1,602,554		1,602,554	(1,602,554)	-	-
147	SUB	DEVILS LAKE SUBSTATION	2,926,792		2,926,792	(81,504)	-	2,845,288
148	SUB	DICKINSON	23,704		23,704	-	-	23,704
149	SUB	E. J. MANNING	49,112		49,112	-	-	49,112
150	SUB	EAGLE	66,108		66,108	-	-	66,108
151	SUB	EAGLE BUTTE SUBSTATION	1,347,433		1,347,433	(351,323)	-	996,110
152	SUB	EDGELEY SUBSTATION	6,569,979		6,569,979	(1,197,122)	-	5,372,857
153	SUB	ELK CREEK SUBSTATION	2,099,907		2,099,907	(17,147)	-	2,082,760
154	SUB	ELLENDALE SUBSTATION	579		579	(579)	-	-
155	SUB	ELLIOTT SWITCHING STATION	3,440,172		3,440,172	(41,652)	-	3,398,520
156	SUB	ENDERLIN TAP STATION	749,768		749,768	(247,423)	-	502,345
157	SUB	EXIRA SWITCHING STATION	5,500,776		5,500,776	(164,229)	-	5,336,547
158	SUB	FAIRVIEW WEST SWITCHING STATI	4,296,873		4,296,873	-	-	4,296,873
159	SUB	FAITH SUBSTATION	1,224,932		1,224,932	(572,275)	-	652,657
160	SUB	FARGO SUBSTATION	27,393,037	1,411,015	28,804,052	-	-	28,804,052
161	SUB	FLANDREAU SUBSTATION	4,266,040		4,266,040	(40,435)	-	4,225,605
162	SUB	FORMAN SUBSTATION	6,895,095		6,895,095	(359,356)	-	6,535,739
163	SUB	FORSYTH	130,348		130,348	-	-	130,348
164	SUB	FORT RANDALL	253,710		253,710	-	-	253,710
165	SUB	FORT THOMPSON #2	10,793,612		10,793,612	-	-	10,793,612
166	SUB	FORT THOMPSON SUBSTATION	17,173,846	1,892,000	19,065,846	(163,144)	-	18,902,702
167	SUB	GLENDIVE SUBSTATION	1,725,310		1,725,310	-	-	1,725,310
168	SUB	GRAND FORKS SUBSTATION	10,396,362		10,396,362	-	-	10,396,362

169	SUB	GRAND ISLAND SUBSTATION	17,087,483	-	17,087,483	-	-	17,087,483
170	SUB	GRAND PRAIRIE SUBSTATION /1	253,720		253,720	-	-	253,720
171	SUB	GRANITE FALLS SUBSTATION	23,908,615		23,908,615	(2,205,360)	-	21,703,255
172	SUB	GREAT FALLS SUB	8,439,044		8,439,044	-	-	8,439,044
173	SUB	GREGORY SUBSTATION	1,698,687		1,698,687	(43,752)	-	1,654,935
174	SUB	GROTON SUBSTATION	5,207,479	-	5,207,479	(326,877)	-	4,880,602
175	SUB	GROTON SOUTH SUBSTATION	-	9,626,000	9,626,000	-	-	9,626,000
176	SUB	HARLEM	98,534		98,534	-	-	98,534
177	SUB	HAVRE SUBSTATION	11,822,560		11,822,560	(62,475)	-	11,760,085
178	SUB	HEBRON SUBSTATION /1	-	6,841,034	6,841,034	-	-	6,841,034
179	SUB	HETTINGER	10,832		10,832	-	-	10,832
180	SUB	HILKEN SUSTATION	3,894,020		3,894,020	(143,716)	-	3,750,304
181	SUB	HURON SUBSTATION	11,333,098		11,333,098	(320,531)	-	11,012,567
182	SUB	JAMESTOWN SUBSTATION	19,416,839	3,152,063	22,568,902	(1,913,899)	-	20,655,003
183	SUB	KILLDEER SUBSTATION	7,144,766	551,423	7,696,189	(1,134,051)	-	6,562,138
184	SUB	LAKOTA SUBSTATION	2,796,418		2,796,418	(1,307,837)	-	1,488,581
185	SUB	LEEDS SUBSTATION	3,943,917		3,943,917	(158,722)	-	3,785,195
186	SUB	LETCHER SUBSTATION	11,108,748		11,108,748	-	-	11,108,748
187	SUB	MALLARD	29,969		29,969	-	-	29,969
188	SUB	MALTA	340,848		340,848	-	-	340,848
189	SUB	MANDAN SUBSTATION	19,476		19,476	-	-	19,476
190	SUB	MARTIN SUBSTATION	1,829,481	3,928,000	5,757,481	(1,134,120)	-	4,623,361
191	SUB	MAURINE SUBSTATION	7,925,435		7,925,435	(246,914)	-	7,678,521
192	SUB	MIDLAND SUBSTATION	836,212		836,212	(154,097)	-	682,115
193	SUB	MILES CITY SUB #2	6,744,074		6,744,074	-	-	6,744,074
194	SUB	MILES CITY SUB #3	1,895,702		1,895,702	-	-	1,895,702
195	SUB	MILES CITY SUBSTATION	1,202,100		1,202,100	-	-	1,202,100
196	SUB	MINGUSVILLE	5,807,276	-	5,807,276	-	-	5,807,276
197	SUB	MISSION SUBSTATION	3,473,710		3,473,710	(586,992)	-	2,886,718
198	SUB	MORRIS SUBSTATION	7,229,447		7,229,447	(1,095,435)	-	6,134,012
199	SUB	MT VERNON SUBSTATION	2,030,824		2,030,824	(139,236)	-	1,891,588
200	SUB	NASHUA SUB	72,368		72,368	(72,368)	-	-
201	SUB	NELSON SUBSTATION	1,944,817		1,944,817	(33,744)	-	1,911,073
202	SUB	NEW UNDERWOOD SUBSTATION	18,333,139	-	18,333,139	(41,135)	-	18,292,004
203	SUB	NEWELL SUBSTATION	1,152,964	1,827,144	2,980,108	(287,497)	-	2,692,611
204	SUB	O'FALLON CREEK SUBSTATION	3,264,302		3,264,302	(58,595)	-	3,205,707
205	SUB	O'NEILL SUB (NPP)	180,660		180,660	-	-	180,660
206	SUB	PENN TAP	890,607		890,607	(108,485)	-	782,122
207	SUB	PHILIP SUBSTATION	2,037,148		2,037,148	(209,290)	-	1,827,858
208	SUB	PIERRE SUBSTATION	4,284,664		4,284,664	(699,890)	-	3,584,774
209	SUB	PLEASANT LAKE TAP	992,415		992,415	(101,191)	-	891,224
210	SUB	RAINBOW SUBSTATION	250,629		250,629	(250,629)	-	-
211	SUB	RAPID CITY SUBSTATION	5,739,051		5,739,051	(556,793)	-	5,182,258

212	SUB	RICHLAND SUBSTATION	1,733,528		1,733,528	(1,733,528)	-	-
213	SUB	ROLLA SUBSTATION	623,513		623,513	-	-	623,513
214	SUB	RUDYARD SUBSTATION	3,163,391		3,163,391	(1,380,449)	-	1,782,942
215	SUB	RUGBY SUBSTATION	8,722,780		8,722,780	(569,611)	-	8,153,169
216	SUB	SAVAGE SUB	74,403		74,403	-	-	74,403
217	SUB	SHELBY SUBSTATION	861,699		861,699	(861,699)	-	-
218	SUB	SHELBY SUBSTATION #2	5,302,756		5,302,756	(169,696)	-	5,133,060
219	SUB	SHIRLEY TAP	22,102		22,102	-	-	22,102
220	SUB	SIOUX CITY #2	13,019,488	2,251,474	15,270,962	-	-	15,270,962
221	SUB	SIOUX CITY SUBSTATION	17,232,686	2,409,316	19,642,002	-	-	19,642,002
222	SUB	SIOUX FALLS SUBSTATION	14,637,620		14,637,620	(516,513)	-	14,121,107
223	SUB	SPENCER	3,755,590	3,413,767	7,169,357	(245,264)	-	6,924,093
224	SUB	STANLEY	49,735		49,735	-	-	49,735
225	SUB	SULLY BUTTES	74,428		74,428	-	-	74,428
226	SUB	SUMMIT SUBSTATION	2,827,058		2,827,058	(373,848)	-	2,453,210
227	SUB	TERRY TAP	606,044		606,044	(103,121)	-	502,923
228	SUB	TIBER TAP	166,306		166,306	-	-	166,306
229	SUB	TOWNER SUBSTATION	-	5,014,000	5,014,000	-	-	5,014,000
230	SUB	TYNDALL SUBSTATION	931,157		931,157	(125,594)	-	805,563
231	SUB	UTICA JCT.	12,974,150		12,974,150	-	-	12,974,150
232	SUB	V. T. HANLON	5,553	5,700,000	5,705,553	-	-	5,705,553
233	SUB	VALLEY CITY SUBSTATION	6,819,468		6,819,468	(176,541)	-	6,642,927
234	SUB	VERONA	108,751		108,751	-	-	108,751
235	SUB	VETAL TAP	232,375		232,375	-	-	232,375
236	SUB	VIRGIL FODNESS SUBSTATION	3,206,763		3,206,763	-	-	3,206,763
237	SUB	WANBLEE TAP	-	2,300,000	2,300,000	-	-	2,300,000
238	SUB	WALL SUBSTATION	1,571,437		1,571,437	(654,299)	-	917,138
239	SUB	WARD SUBSTATION	3,453,847	1,060,000	4,513,847	(1,105,361)	-	3,408,486
240	SUB	WASHBURN SUBSTATION	2,071,165		2,071,165	(939,495)	-	1,131,670
241	SUB	WATERTOWN #2	2,900,981		2,900,981	-	-	2,900,981

242	SUB	WATERTOWN STATIC VAR SYSTEM	11,778,775		11,778,775	-	-	11,778,775
243	SUB	WATERTOWN SUBSTATION	16,065,056		16,065,056	-	-	16,065,056
244	SUB	WATFORD CITY SUB	7,600,294		7,600,294	(108,365)	-	7,491,929
245	SUB	WESSINGTON SPRINGS SUBSTATIC	5,141,440		5,141,440	(181,071)	-	4,960,369
246	SUB	WHATELY (NORTHERN)	40,860		40,860	-	-	40,860
247	SUB	WHATELY SUBSTATION	109,910		109,910	(54,247)	-	55,663
248	SUB	WHITE 345/115 SUB	11,022,034		11,022,034	-	-	11,022,034
249	SUB	WICKSVILLE SUBSTATION	831,304		831,304	(58,608)	-	772,696
250	SUB	WILLISTON 2 SUBSTATION	15,594,604		15,594,604	-	-	15,594,604
251	SUB	WILLISTON SUBSTATION	8,198,987		8,198,987	(97,320)	-	8,101,667
252	SUB	WINNER SUBSTATION	3,234,614		3,234,614	(101,869)	-	3,132,745
253	SUB	WM. J. NEAL	156,417		156,417	-	-	156,417
254	SUB	WOLF POINT SUBSTATION	7,181,905		7,181,905	(1,346,899)	-	5,835,006
255	SUB	WOONSOCKET SUBSTATION	2,775,992		2,775,992	(1,057,734)	-	1,718,258
256	SUB	YANKTON JCT.	76,396		76,396	-	-	76,396
257	SUB	YANKTON SUBSTATION	43,844		43,844	(43,844)	-	-
258	<b>SUB Total SUBSTATIONS</b>		<b>649,959,246</b>	<b>69,506,937</b>	<b>719,466,183</b>	<b>(39,423,425)</b>	-	<b>680,042,758</b>
259	O&M	ARMOUR O&M SER. CEN.	3,488,667		3,488,667	-	-	3,488,667
260	O&M	BISMARCK O&M SER. CEN.	9,917,899		9,917,899	-	-	9,917,899
261	O&M	DAWSON SER. CEN.	6,845,966		6,845,966	-	-	6,845,966
262	O&M	DEVILS LAKE O&M SER. CEN.	3,852,064		3,852,064	-	-	3,852,064
263	O&M	FARGO LINE MAINTENANCE FACILI	2,040,287		2,040,287	-	-	2,040,287
264	O&M	FARGO O&M SER. CEN.	794,673		794,673	-	-	794,673
265	O&M	FORT PECK SER. CEN.	6,234,802		6,234,802	-	-	6,234,802
266	O&M	FORT THOMPSON O&M S. C.	467,191		467,191	-	-	467,191
267	O&M	HAVRE SERVICE CENTER	520,501		520,501	-	-	520,501
268	O&M	HURON O&M SER. CEN.	2,756,992		2,756,992	-	-	2,756,992
269	O&M	JAMESTOWN O&M SER. CEN.	3,841,398		3,841,398	-	-	3,841,398
270	O&M	MILES CITY MTCE FAC.	1,025,254		1,025,254	-	-	1,025,254
271	O&M	NEW UNDERWOOD SER. CEN.	96,884		96,884	-	-	96,884
272	O&M	PHILIP O&M SER. CENT.	1,679,674		1,679,674	-	-	1,679,674
273	O&M	PIERRE O&M SER. CEN.	1,051,383		1,051,383	-	-	1,051,383
274	O&M	RAPID CITY GARAGE & STOR.	2,221,967		2,221,967	-	-	2,221,967
275	O&M	SIoux CITY O&M SER. CEN.	3,007,882		3,007,882	-	-	3,007,882
276	O&M	SIoux FALLS O&M SER. CEN.	239,920		239,920	-	-	239,920
277	O&M	WATERTOWN MAINT. CEN.	7,292,575		7,292,575	-	-	7,292,575
278	<b>O&amp;M Total O&amp;M SERVICE &amp; MAINT. CENTERS</b>		<b>57,375,979</b>	-	<b>57,375,979</b>	-	-	<b>57,375,979</b>
279	OPS	WATERTOWN ALTERNATE OPERAT	6,006,058		6,006,058	-	(1,785,601)	4,220,457
280	OPS	WATERTOWN OPERATIONS CENT	1,311,373		1,311,373	-	(442,699)	868,674
281	OPS	WATERTOWN OPER CTR (BFPS)	12,647,186		12,647,186	-	(4,147,409)	8,499,777
282	<b>OPS Total OPERATION CENTERS</b>		<b>19,964,617</b>	-	<b>19,964,617</b>	-	<b>(6,375,709)</b>	<b>13,588,908</b>

283	MOB	MOB 115KV SWITCH TRAILER	69,741	69,741	-	-	69,741	
284	MOB	MOB TRANSF 111KV 15MVA	213,000	213,000	-	-	213,000	
285	MOB	MOB TRANSF 115KV 10MVA	218,493	218,493	-	-	218,493	
286	MOB	MOB TRANSF 115KV 25MVA	556,464	556,464	-	-	556,464	
287	MOB	MOB TRANSF 115KV 40MVA	526,201	526,201	-	-	526,201	
288	MOB	MOB TRANSF 230KV 1-33MVA	170,278	170,278	-	-	170,278	
289	MOB	MOBILE BY PASS KIT (BISMARCK)	35,071	35,071	-	-	35,071	
290	MOB	MOBILE BY PASS KIT (HURON)	163,695	163,695	-	-	163,695	
291	MOB	MOBILE CAPACITOR BANK	19,075	19,075	-	-	19,075	
292	MOB	MOBILE SUB 110KV	127,144	127,144	-	-	127,144	
293	MOB	MOBILE SUB 115KV 20MVA	404,166	404,166	-	-	404,166	
294	MOB	MOBILE SUB 41.8 KV	192,498	192,498	(192,498)	-	-	
295	MOB	MOBILE SUB 69KV	71,118	71,118	-	-	71,118	
296	MOB	MOB SH.REACTOR	179,328	179,328	-	-	179,328	
297	<b>MOB Total MOBILE EQUIPMENT</b>		<b>2,946,272</b>	<b>-</b>	<b>2,946,272</b>	<b>(192,498)</b>	<b>-</b>	<b>2,753,774</b>
298	GEN	BIG BEND-FORT THOMPSON (LOW	81,944	81,944	-	(81,944)	-	
299	GEN	FORT PECK POWERPLANT (COE)	64,611	64,611	-	(64,611)	-	
300	GEN	FORT THOMPSON-BIG BEND NO. 1	922,164	922,164	-	-	922,164	
301	GEN	FORT THOMPSON-BIG BEND NO. 2	690,735	690,735	-	-	690,735	
302	<b>GEN Total TRANSMISSION-RELATED GEN. FA</b>		<b>1,759,454</b>	<b>-</b>	<b>1,759,454</b>	<b>(146,555)</b>	<b>1,612,899</b>	
303	COM	ATLANTIC COMMUNICATION SITE	17,199	17,199	-	(5,495)	11,704	
304	COM	BAKER RELAY	262,495	262,495	-	(83,867)	178,628	
305	COM	BANTRY	343,131	343,131	-	(109,630)	233,501	
306	COM	BARRETT	99,835	99,835	-	(31,897)	67,938	
307	COM	BATTLE MT. MICROWAVE	324,151	324,151	-	(103,566)	220,585	
308	COM	BELLE PRAIRIE	208,954	208,954	-	(66,761)	142,193	
309	COM	BENEDICT	311,732	311,732	-	(99,598)	212,134	
310	COM	BEULAH	10,679	10,679	-	(3,412)	7,267	
311	COM	BIG BEND	113,362	113,362	-	(36,219)	77,143	
312	COM	BIJOU REPEATER	568,562	568,562	-	(181,656)	386,906	
313	COM	BILLINGS AREA OFFICE	136,495	136,495	-	(136,495)	-	
314	COM	BISMARCK REPEATER	396,674	396,674	-	(126,737)	269,937	
315	COM	BISON REPEATER	227,955	227,955	-	(72,832)	155,123	
316	COM	BOLE NORTH REPEATER	149,228	149,228	-	(47,678)	101,550	
317	COM	BRINSMADE	147,129	147,129	-	(47,008)	100,121	
318	COM	BRISTOL	11,441	11,441	-	(3,655)	7,786	
319	COM	BRUNSVILLE REPEATER	92,595	92,595	-	(29,584)	63,011	
320	COM	BUFFALO	107,342	107,342	-	(34,296)	73,046	
321	COM	CAHOON	194,709	194,709	-	(62,210)	132,499	
322	COM	CARRINGTON REPEATER	693,236	693,236	-	(221,489)	471,747	
323	COM	CHARTER OAK REPEATER	15,667	15,667	-	(5,006)	10,661	
324	COM	CHINOOK (BEFP)	284,048	284,048	-	(90,753)	193,295	
325	COM	CHINOOK REPEATER	15,293	15,293	-	(4,886)	10,407	

326	COM	CLARK MW REPEATER	735,399	735,399	-	(234,960)	500,439
327	COM	CLEVELAND REPEATER, N.D.	66,872	66,872	-	(21,366)	45,506
328	COM	COLEMAN REPEATER	105,281	105,281	-	(33,637)	71,644
329	COM	COLOME REPEATER	293,101	293,101	-	(93,646)	199,455
330	COM	CONRAD BUTTE REPEATER	455,668	455,668	-	(145,586)	310,082
331	COM	COTTON	1,399	1,399	-	(447)	952
332	COM	CRESTON REPEATER	11,107	11,107	-	(3,549)	7,558
333	COM	CROW LAKE REPEATER	251,029	251,029	-	(80,204)	170,825
334	COM	CROWN BUTTE	52,565	52,565	-	(16,795)	35,770
335	COM	CULBERTSON RADIO RELAY SITE	1,926	1,926	-	(615)	1,311
336	COM	CUSTER LOOKOUT	80,620	80,620	-	(25,758)	54,862
337	COM	DALTON (WES)	63,660	63,660	-	(20,339)	43,321
338	COM	DEVILS LAKE FIBER REGEN	273,047	273,047	-	(87,239)	185,808
339	COM	DEVILS LAKE REPEATER	518,898	518,898	-	(165,788)	353,110
340	COM	DODSON REPEATER	882,795	882,795	-	(282,053)	600,742
341	COM	DOGDEN BUTTE	439,549	439,549	-	(140,436)	299,113
342	COM	DRISCOLL	79,113	79,113	-	(25,277)	53,836
343	COM	DUPREE REPEATER	1,821	1,821	-	(582)	1,239
344	COM	DUTTON REPEATER (BEFP)	75,190	75,190	-	(24,023)	51,167
345	COM	EAST RAINY BUTTE	147,041	147,041	-	(46,980)	100,061
346	COM	ECKELSON	231,893	231,893	-	(74,090)	157,803
347	COM	ELKTON	165,481	165,481	-	(52,871)	112,610
348	COM	ELLEDALE REPEATER	644,579	644,579	-	(205,943)	438,636
349	COM	ELLSWORTH AIR BASE	204,548	204,548	-	(65,353)	139,195
350	COM	ERHARD	99,569	99,569	-	(31,812)	67,757
351	COM	EXIRA REPEATER	2,527	2,527	-	(807)	1,720
352	COM	F. L. BLAIR	76,407	76,407	-	(24,412)	51,995
353	COM	FAIRPOINT REPEATER	206,550	206,550	-	(65,993)	140,557
354	COM	FALLON REPEATER	212,944	212,944	-	(68,036)	144,908
355	COM	FERGUS FALLS COMMUNICATIONS	485,567	485,567	-	(155,139)	330,428
356	COM	FLOWING WELLS	68,763	68,763	-	(21,970)	46,793
357	COM	FORBES COMMUNICATION SITE	45,316	45,316	-	(14,478)	30,838
358	COM	FORT PECK RELAY (WES)	326,153	326,153	-	(104,206)	221,947
359	COM	FORT PECK COMMUNICATIONS BL	380,212	380,212	-	(121,478)	258,734
360	COM	FORT PECK REPEATER	109,069	109,069	-	(34,848)	74,221
361	COM	FORT THOMPSON REPEATER	99,223	99,223	-	(31,702)	67,521
362	COM	FORT THOMPSON REPEATER (EAST)	301,614	301,614	-	(96,366)	205,248
363	COM	FOX CREEK MICROWAVE	423,094	423,094	-	(135,179)	287,915
364	COM	FRYBURG SUB & MICROWAVE	61,204	61,204	-	(19,555)	41,649
365	COM	GARRISON	350,713	350,713	-	(112,053)	238,660
366	COM	GARY REPEATER	80,799	80,799	-	(25,815)	54,984
367	COM	GAVIN'S POINT	148,752	148,752	-	(47,526)	101,226
368	COM	GAVINS POINT REPEATER	315,049	315,049	-	(100,658)	214,391

369	COM	GETTYSBURG REPEATER	368,771	368,771	-	(117,822)	250,949
370	COM	GLENHAM	309,680	309,680	-	(98,943)	210,737
371	COM	GRAND FORKS MINNKOTA (MPC)	23,847	23,847	-	(7,619)	16,228
372	COM	GWINNER COMMUNICATIONS SITI	749,741	749,741	-	(239,542)	510,199
373	COM	HAILSTONE BUTTE	74,835	74,835	-	(23,910)	50,925
374	COM	HALLOWAY REPEATER	109,706	109,706	-	(35,051)	74,655
375	COM	HARLEM REPEATER	882,588	882,588	-	(281,987)	600,601
376	COM	HATHAWAY	68,891	68,891	-	(22,011)	46,880
377	COM	HERMOSA MICROWAVE	302,701	302,701	-	(96,713)	205,988
378	COM	HIGHLAND REPEATER	22,884	22,884	-	(7,311)	15,573
379	COM	HIGHMORE REPEATER	145,723	145,723	-	(46,558)	99,165
380	COM	HIGHWOOD	22,896	22,896	-	(7,315)	15,581
381	COM	HINSDALE	201,837	201,837	-	(64,487)	137,350
382	COM	HINSDALE REPEATER	66,495	66,495	-	(21,245)	45,250
383	COM	HOPEWELL REPEATER	231,172	231,172	-	(73,859)	157,313
384	COM	HUNTER MICROWAVE	210,227	210,227	-	(67,168)	143,059
385	COM	HURON DISTRICT OFFICE	768,139	768,139	-	(245,420)	522,719
386	COM	HYSHAM	90,227	90,227	-	(28,828)	61,399
387	COM	JAMESTOWN REPEATER	46,981	46,981	-	(15,010)	31,971
388	COM	JONES CREEK	267,395	267,395	-	(85,433)	181,962
389	COM	KELLY CREEK	202,226	202,226	-	(64,611)	137,615
390	COM	KILLDEER REPEATER	536,504	536,504	-	(171,413)	365,091
391	COM	KNEE HILL MW	471,997	471,997	-	(150,803)	321,194
392	COM	LAC QUI PARLE	751,513	751,513	-	(240,108)	511,405
393	COM	LAKE ANDES REPEATER	723,452	723,452	-	(231,143)	492,309
394	COM	LEFOR	48,470	48,470	-	(15,486)	32,984
395	COM	LINDSAY RIDGE	79,074	79,074	-	(25,264)	53,810
396	COM	LINTON COMMUNICATIONS SITE	350,612	350,612	-	(112,021)	238,591
397	COM	LITTLE MISSOURI SUBSTATION	54,516	54,516	-	(17,418)	37,098
398	COM	LODGEPOLE REPEATER	32,445	32,445	-	(10,366)	22,079
399	COM	MALTA REPEATER	793,844	793,844	-	(253,633)	540,211
400	COM	MANDAN MICROWAVE SITE	69,988	69,988	-	(22,361)	47,627
401	COM	MAPLE RIVER	172,792	172,792	-	(55,207)	117,585
402	COM	MARTIN REPEATER	300,728	300,728	-	(96,083)	204,645
403	COM	MAYVILLE	196,624	196,624	-	(62,821)	133,803
404	COM	MIDLAND REPEATER	516,515	516,515	-	(165,027)	351,488
405	COM	MOE REPEATER	129,266	129,266	-	(41,300)	87,966



406	COM	MOORHEAD	125,057	125,057	-	(39,956)	85,101
407	COM	MORRIS REPEATER & MICROWAVE	128,242	128,242	-	(40,973)	87,269
408	COM	NEWCASTLE REPEATER	216,330	216,330	-	(69,117)	147,213
409	COM	OAHE	577,874	577,874	-	(184,631)	393,243
410	COM	O'KREEK REPEATER	367,630	367,630	-	(117,458)	250,172
411	COM	ORCHARD REPEATER	578,066	578,066	-	(184,692)	393,374
412	COM	OTO MICROWAVE	16,445	16,445	-	(5,254)	11,191
413	COM	OTTUMWA ROAD REPEATER SITE	7,685	7,685	-	(2,455)	5,230
414	COM	PAGE N.D.	1,646	1,646	-	(526)	1,120
415	COM	PAHOJA SUB	107,003	107,003	-	(34,187)	72,816
416	COM	PEAK	83,844	83,844	-	(26,788)	57,056
417	COM	PHILIP JCT. REPEATER	530,459	530,459	-	(169,482)	360,977
418	COM	PINE RIDGE	186,735	186,735	-	(59,662)	127,073
419	COM	POPLAR (MDU)	3,758	3,758	-	(1,201)	2,557
420	COM	PRIMGHAR REPEATER	27,264	27,264	-	(8,711)	18,553
421	COM	PUKWANNA REPEATER	4,772	4,772	-	(1,525)	3,247
422	COM	RAPID CITY REPEATER	340,932	340,932	-	(108,928)	232,004
423	COM	RICHARDSON COULEE	161,748	161,748	-	(51,678)	110,070
424	COM	RICHARDSON COULEE REPEATER	166,315	166,315	-	(53,138)	113,177
425	COM	RICHLAND MW REPEATER (BEPS)	267,563	267,563	-	(85,486)	182,077
426	COM	ROCKY RIDGE REPEATER	226,934	226,934	-	(72,505)	154,429
427	COM	ROLLAG	172,922	172,922	-	(55,249)	117,673
428	COM	RUGBY REPEATER	396,722	396,722	-	(126,753)	269,969
429	COM	RUTLAND	999,140	999,140	-	(319,225)	679,915
430	COM	SACO	1,237	1,237	-	(395)	842
431	COM	SENTINEL BUTTE	87,667	87,667	-	(28,010)	59,657
432	COM	SHEEP COULEE REPEATER	475,744	475,744	-	(152,000)	323,744
433	COM	SIOUX CITY REPEATER	427,162	427,162	-	(136,478)	290,684
434	COM	SIOUX FALLS REPEATER	330,718	330,718	-	(105,664)	225,054
435	COM	SIOUX PASS	1,366	1,366	-	(436)	930
436	COM	SNAKE BUTTE REPEATER	532,435	532,435	-	(170,113)	362,322
437	COM	SPALDING REPEATER	549,514	549,514	-	(175,570)	373,944
438	COM	SPIRIT MOUND	295,982	295,982	-	(94,566)	201,416
439	COM	STRASBERG	1,853	1,853	-	(592)	1,261
440	COM	SUMMIT REPEATER	50,053	50,053	-	(15,992)	34,061
441	COM	TAPPEN COMMUNICATIONS SITE	291,767	291,767	-	(93,220)	198,547
442	COM	TAPPEN REPEATER	421,026	421,026	-	(134,518)	286,508
443	COM	TENNANT COMMUNICATIONS SITE	8,782	8,782	-	(2,806)	5,976
444	COM	TORONTO REPEATER	106,096	106,096	-	(33,898)	72,198
445	COM	TRIPP REPEATER	216,887	216,887	-	(69,295)	147,592
446	COM	TURKEY RIDGE REPEATER	588,190	588,190	-	(187,927)	400,263
447	COM	TYLER REPEATER	1,239,694	1,239,694	-	(396,082)	843,612
448	COM	VICTOR (EREC)	35,530	35,530	-	(11,352)	24,178

449	COM	VIDA	98,597		98,597	-	(31,502)	67,095
450	COM	WALL REPEATER	479,343		479,343	-	(153,150)	326,193
451	COM	WATERTOWN REPEATER	727,715		727,715	-	(232,505)	495,210
452	COM	WAYSIDE	17,781		17,781	-	(5,681)	12,100
453	COM	WESSINGTON SPGS. REPEATER	682,469		682,469	-	(218,049)	464,420
454	COM	WESTFIELD	19,003		19,003	-	(6,071)	12,932
455	COM	WHITE SWAN	91,987		91,987	-	(29,390)	62,597
456	COM	WHITLOCK (BCPS)	165,594		165,594	-	(52,907)	112,687
457	COM	WOLBACH REPEATER	28,280		28,280	-	(9,035)	19,245
458	COM	YELLOWTAIL SWITCHYARD (BEPS)	223,367		223,367	-	(71,366)	152,001
459	<b>COM Total COMMUNICATION FACILITIES</b>		<b>38,594,246</b>	<b>-</b>	<b>38,594,246</b>	<b>-</b>	<b>(12,423,746)</b>	<b>26,170,500</b>
460	MCCS	MILES CITY CONVERTER STATION -	19,890,751		19,890,751	-	-	19,890,751
461	MCCS	MILES CITY CONVERTER STATION -	3,713,857		3,713,857	-	-	3,713,857
462	<b>MCCS Total MILES CITY CONVERTER STATION</b>		<b>23,604,608</b>	<b>-</b>	<b>23,604,608</b>	<b>-</b>	<b>-</b>	<b>23,604,608</b>
463	DIST	BUFORD TRENTON TAP - BUFORD	650,001		650,001	(650,001)	-	-
464	DIST	BUFORD TRENTON PUMP SUB	184,827		184,827	(184,827)	-	-
465	DIST	FALLON PUMPING PLANT SUBS	223,594		223,594	(223,594)	-	-
466	DIST	FALLON RELIFT PUMPING PLA	171,257		171,257	(171,257)	-	-
467	DIST	FALLON-GLENDIVE PUMP #4	25,506		25,506	(25,506)	-	-
468	DIST	FORT PECK-WOLF POINT	190,500		190,500	(190,500)	-	-
469	DIST	FRAZER PUMP SUB	253,597		253,597	(253,597)	-	-
470	DIST	GARRISON-SNAKE CREEK	1,079,092		1,079,092	(1,079,092)	-	-
471	DIST	GLENDIVE P.P. #1 SUB.	425,706		425,706	(425,706)	-	-
472	DIST	INTAKE SUBSTATION	108,040		108,040	(108,040)	-	-
473	DIST	INTAKE-INTAKE PUMP	6,494		6,494	(6,494)	-	-
474	DIST	SAVAGE PUMPING PLANT SUBS	102,283		102,283	(102,283)	-	-
475	DIST	SHIRLEY PUMP SUBSTATION	1,237,730		1,237,730	(1,237,730)	-	-
476	DIST	SNAKE CREEK PUMP SUBSTATION	920,941		920,941	(920,941)	-	-
477	DIST	TERRY PUMPING PLANT SWITCH	474,404		474,404	(474,404)	-	-
478	DIST	TIBER DAM SUBSTATION	318,568		318,568	(318,568)	-	-
479	DIST	WIOTA SUBSTATION	216,163		216,163	(216,163)	-	-
480	<b>DIST Total DISTRIBUTION FACILITIES</b>		<b>6,588,703</b>	<b>-</b>	<b>6,588,703</b>	<b>(6,588,703)</b>	<b>-</b>	<b>-</b>

481	RMR	NEW UNDERWOOD-STEGALL	287,835		287,835	-	-	287,835
482	RMR	STEGALL SUBSTATION	9,030,765		9,030,765	(8,728,156)	-	302,609
483	RMR	STEGALL-WAYSIDE	2,978,205		2,978,205	-	-	2,978,205
484	RMR	WAYSIDE	237,296		237,296			237,296
485	RMR	YELLOWTAIL SWITCHYARD-YELLOW	121,495		121,495	(91,121)		30,374
486	RMR	YELLOWTAIL (PPL)	692,335		692,335	(519,251)		173,084
487	RMR	YELLOWTAIL SWITCHYARD	12,752,527		12,752,527	(9,564,395)	-	3,188,132
488	RMR	YELLOWTAIL SWITCHYARD (YT)	131,232		131,232			131,232
489	<b>RMR Total</b>	<b>ROCKY MOUNTAIN REGION FACIL</b>	<b>26,231,690</b>	<b>-</b>	<b>26,231,690</b>	<b>(18,902,924)</b>	<b>-</b>	<b>7,328,766</b>
490	COE	BIG BEND	13,739,430		13,739,430	(7,056,327)	(1,390,857)	5,292,246
491	COE	FORT PECK	9,914,432	1,273,100	11,187,532	(374,321)	(472,403)	10,340,808
492	COE	FORT RANDALL	15,892,504	9,187,100	25,079,604	-	(1,692,618)	23,386,986
493	COE	GARRISON	101,778,262	3,851,000	105,629,262	(12,823,517)	(18,508,673)	74,297,072
494	COE	GAVINS POINT	8,273,872	1,289,400	9,563,272	(2,189,902)	(2,534,920)	4,838,450
495	COE	OAHE	12,627,190	10,665,000	23,292,190	(1,464,554)	(1,555,028)	20,272,608
496	<b>COE Total</b>	<b>CORPS OF ENGINEERS FACILITIES</b>	<b>162,225,691</b>	<b>26,265,600</b>	<b>188,491,291</b>	<b>(23,908,621)</b>	<b>(26,154,501)</b>	<b>138,428,170</b>
497	<b>Grand Total</b>	<b>TOTAL</b>	<b>1,551,097,955</b>	<b>96,244,014</b>	<b>1,647,341,969</b>	<b>(89,592,261)</b>	<b>(45,100,511)</b>	<b>1,512,649,198</b>
498		SUBTOTAL WESTERN-UGP ONLY	1,362,640,574	69,978,414	1,432,618,988	(46,780,716)	18,946,010	1,366,892,262

1/ Plant balance does not include customer liability for network upgrades. Investment is only brought into plant balance as WAPA incurs expense (e.g. if transmission credits are provided to customer)

Western-UGP Facilities Included per AI for January 1, 2019 Rates (Update 1)*									
Line No.	Facility	Specific Plant Included	Attachment AI Criteria						Further Description
			1	1(b)	2	3	4	5	
1	<b>Substations</b>								
2	Appeldorn	230-kV breakers 482, 586, 682 and assoc. switches and switch 487	x						
3		station service KW4A, KW30A and switches	x						
4	Armour	115-kV switches 16x, 26x, 76x	x						
5		12.47-kV switches 172x, KW1A	x						maintenance building SS
6		station service KZ1A, KX2A and switches	x						
7		115/69 kV transformer KY1A		x					Three East River members are served through KY1A (Charles Mix, Douglas and Southeastern)
8		69 kV breaker 1052 and assoc switches		x					Two East River members are served through 1052 (Douglas and Southeastern)
9	Ash Tap	115-kV switches 1161, 1261, 1361	x						
10	Aurora	115-kV breakers 266, 464, 562, 662 and assoc. switches	x						
11		capacitor PY4A	x						
12		station service KY2A and KW2A	x						
13	Belden (NPPD)	115-kV breaker 1106 and assoc. switches	x						
14	Belfield	230-kV breakers 1282, 1382, 1582 and assoc. switches	x						
15		345/230-kV transformer KU1A	x						
16		345-kV breakers 292, 396, 492 and assoc. switches	x						
17		station service KW1B and assoc. switches	x						
18		reactor KW2A, 13.8 breaker 3224 and assoc. switches	x						
19	Beresford	115-kV breakers 262, 362, 462, 566, 764, 864 and assoc. switches	x						
20		capacitors PY7A, PY8A	x						
21		station service KZ1A and switch 1451	x						
22		115/69kV transformer KY1A		x					Two East River members are served through KY1A (Clay-Union and Southeastern)
23		69kV breaker 1652 and assoc. switches		x					Two East River members are served through 1652 (Clay-Union and Southeastern)
24	Bisbee	69-kV switches 247, 347	x						
25	Bismarck	230-kV breakers 182, 282, 382, 386, 482, 582, 682, 782, 882, 986, 9182 and assoc. switches	x						
26		230/115-kV transformers KV3A, KV8A	x						
27		115-kV breakers 3062, 3162, 3362, 3562 and assoc. switches	x						
28		station service KW4A, KW4E, KW4F and assoc. switches	x						
29		12.47-kV breaker 1422, switches 142x, 152x, 1221, 1829	x						maintenance buildings ss
30	Bole	230-kV switches 182, 282, 481, 482	x						
31		station service KW21A, switch 2123	x						
32		230/69-kV transformer KV1A	x						
33		69-kV switches 1351, 1355	x						
34		69-kV breaker 1152 and assoc. switches		x					Sun River Electric Cooperative and NorthWestern MT
35	Bonesteel	115-kV breakers 664, 764 and assoc. switches	x						
36		capacitors PY6A, PY7A	x						
37		115-kV switches 46x, 26x	x						
38		station service KW1A, switch 1521	x						
39	Brookings	115-kV breakers 1166, 1562, 1462, 1762, 1362, 1861, 1932 and assoc. switches	x						
40		capacitors PY11A and PY20A, breakers 1164, 2064	x						
41		station service KW1A, KZ1A and assoc. switches	x						
42		115/69kV transformer KY1A		x					One East River member and two municipal customers served through KY1A (Sioux Valley Energy, City of White, and City of Volga)
43		115 kV switches 161, 361, 461		x					One East River member and two municipal customers served through KY1A (Sioux Valley Energy, City of White, and City of Volga)

44		69 kV breaker 1052 and assoc. switches	x						One East River member and two municipal customers served through 1052 (Sioux Valley Energy, City of White, and City of Volga)
45	Campbell County	230-kV breakers 182, 282, 382 and assoc. switches	x						
46	Cando Tap	69-kV switches 1751, 1753	x						
47	Canyon Ferry	100-kV breakers 162, 262, 266, 362, 366 and assoc. switches	x						
48	Carpenter	230-kV breakers 182, 382, 486 and assoc. switches	x	x					Two East River members (Coddington Clark and Kingsbury)
49		station service KW1A, KW3A and assoc. switches	x						
50	Carrington	115-kV breakers 262, 362 and assoc. switches, switch 161	x						
51		capacitor PX3A	x						
52		station service KW9A and assoc. switches	x						
53	Charlie Creek	345-kV breakers 4096, 4192 and assoc switches	x						
54	Circle	115-kV breakers 1462, 1562, 1666, 1764, 1864 and assoc. switches	x						
55		capacitors PY17A, PY18A	x						
56		reactor KY17A	x						
57		station service KX9A, switches 94x	x						
58	Conrad	230-kV breakers 182, 382, 482 and assoc. switches	x						
59		230/115-kV transformer KV1A	x						
60		reactor KW31A, breaker 3124, switch 3123	x						
61		115-kV breaker 1162, 1362, 1452, and assoc. switches / switches 1263, 1265	x						
62		station service KW30A, switch 3023	x						
63	Creston	161 kV breakers 162, 262, 362, 466, 562, 662, 762, 964, 8161, 8262 and assoc. switches	x						
64		161/69-kV transformer KY3A	x						
65		capacitors PZ21A and PY9A	x						
66		69-kV breakers 2252, 2352, 2456 and assoc. switches	x						
67		station service KW3A, KW6A, Breakers 323, 623 and assoc. switches	x						
68	Crossover	230-kV breakers 582, 586, 786, 882 and assoc. switches	x		x				to NWMT
69		230-kV switches 981, 983, 985, 987, 989, 990	x						
70		phase shifter KV8A	x						
71	Culbertson East	115-kV switches 16x, 26x, 36x	x	x					two customers (Oreg Generation and Basin Generation)
72	Custer	230-kV breakers 182, 382, 482 and assoc. switches	x						
73		station service KW2A and assoc. switches	x						
74		reactor KW1B and assoc. switches	x						
75		230/69/12.47-kV transformer KV1A	x						
76		reactor KZ2A, 69-kV breaker 2152 and assoc. switches	x						
77	Dawson County	115-kV breakers 162, 262, 362, 462, 662, 762, 862 and assoc. switches	x						
78		230-kV breakers 2282, 2382, 2482, 2582, 2682 and assoc switches	x						
79		230/115-kV transformer KU5A	x						
80		capacitors PY7A, PY8A	x						
81		reactor KY8A	x						
82		station service KZ2B, KW2B and assoc. switches	x						
83		reactors KZ1A, KZ2A, KZ3A, breakers 3122, 3222, 3322 and assoc. switches	x						
84	Denison	161-kV breakers 1362, 1566, 1662 and assoc. switches / switches 1461, 1465	x						
85		230-kV breakers 186, 282, 382, 386 and assoc. switches	x						
86		230/161-kV transformer KV1A	x						
87		reactor KW30A and assoc. switches	x						
88		230/69-kV transformers KV2A and KV3A	x						
89		69-kV breakers 2156, 2254, 2352, 2452, 2652, 2754, 2952, 5152 and assoc. switches	x						
90		capacitors PZ27A, PZ22A	x						
91		reactors KZ27A, KZ22A	x						
92		station service KW30B, KW20C and assoc. switches	x						

93	Devils Lake	115-kV breakers 162, 262, 462, 562, 662, 2062 and assoc. switches	x											
94		115-kV switches 361, 365	x											
95		50 percent of 115/41.8-kV transformer KY1A	x										capacitors and maintenance building	
96		41.8-kV breaker 1042 and assoc. switches	x											
97		capacitors PX5A, PX5B and assoc. switches	x											
98		station service KX3A and KW4A and assoc. switches	x											
99		transformers KX3B, KW4B and assoc. switches	x										warehouse and maintenance buildings	
100	Eagle Butte	115-kV breakers 162, 362 and assoc. switches / switch 763	x											
101		Station Service KW1A	x											
102	Edgeley	115-kV breakers 462, 562, 662, 762 and assoc. switches	x											
103		115/69-kV transformer KY6A	x											
104		69-kV breaker 1352 and assoc. switches	x											
105		capacitor KW31A, breaker 3124 and assoc. switches	x											
106	Elk Creek	115-kV breakers 1162, 1262, 1462 and assoc switches	x											
107		station service KY22A, switches 2261, 2221	x											
108	Elliot	115-kV breakers 262, 362, 462 and assoc switches	x											
109	Enderlin Tap	115-kV switches 176x, 196x	x											
110	Exira	161-kV breakers 162, 166, 262, 362, 366, 462, 562, 662 and assoc. switches	x											
111		station service KHA	x											
112	Fairview West	115-kV breakers 162, 262, 362, 462 and assoc. switches	x											
113		transformer KY20A for station service, switches 2011, 2061	x											
114	Faith	115-kV switches 16x and 26x	x											
115	Fargo	230-kV breakers 182, 282, 382, 582, 682, 782, 882, 9182 and assoc. switches	x											
116		115-kV breakers 1162, 1262, 1362, 1462, 1662, 1862, 1962, 2362, 2462, 2764, 2864, 2964 and assoc switches	x											
117		115-kV switch 5461	x											
118		capacitors PY14A, PY14B, PY14C	x											
119		230/115-kV transformers KV1A, KV2A	x											
120		115/69-kV transformers KY3A and KY3B				x							to Minnkota	
121		69-kV breakers 3552, 3652 and assoc switches				x							to Minnkota	
122		69-kV switches 315x, 335x, 345x				x							to Minnkota	
123		station service KY4A, KSB, KSA, switches 5447, 552x	x											
124		13.2-kV breakers 4122, 4322, 4622, 4722, 4822 and assoc. switches	x											
125		reactors KW6A, KW7A, KW8A	x											
126		SVC and associated equipment	x											
127	Flandreau	115-kV breakers 1162, 1262, 1362, 1662 and assoc. switches	x											
128		capacitor PY3A	x											
129		station service KZ1A, KW1C switches 302x, 205x, 401x	x											
130		115/69-kV transformer KY1A				x							One East River member, two municipal customers and Basin generation served through KY1A (Sioux Valley Energy, City of Colman, and City of Madison)	
131		69-kV breaker 2152 and assoc. switches				x							One East River member, two municipal customers and Basin generation served through 2152 (Sioux Valley Energy, City of Colman, and City of Madison)	
132	Forman	115-kV breakers 1162, 1362, 1462, 1562, 1764 and assoc switches	x											
133		capacitor PY7A	x											
134		station service KW9A, switches 92x	x											
135		115/69-kV transformer KY1A, switches 126x	x											
136		69-kV breakers 152, 252, 452 and assoc. switches	x											
137		69-kV switches 353, 355	x											
138	Fort Thompson	230-kV breakers 582, 586, 682, 782, 786, 882, 1182, 1186, 1282, 1382, 1386, 1482, 1582, 1586, 1682, 1782, 1786, 1882, 2382, 2386, 2482 and assoc. switches	x											
139		230-kV switches 181, 281, 381, 2583, 2683	x											
140		230/69-kV transformers KV1B, KV1A	x											
141		13.8-kV switches 121, 221, 253, 153, 6323, 6321, 6022, 3121, 3221	x											

142		station service KW1A, KW1B and assoc switches	x							
143		69-kV breakers 4352	x							
144	Fort Thompson 2	345-kV breakers 3392, 3396 and assoc. switches	x							
145		reactor KU4A, switch 3991	x							
146		345/230-kV transformers KU1A, KU1B and 345-kV switches 2391, 2491	x							
147		reactors KW2A, KW2B, breakers 6422, 6822 and assoc. switches	x							
148		capacitor PW2A	x							
149		reactor KW3A, breaker 6522 and assoc. switches	x							
150		capacitor PW3A	x							
151		station service KW1D, KW1C, switches 662x, 6611, 6311, 632x	x							
152	Glendive	115-kV switch 362	x							
153		115/57-kV transformer KY1A		x						2 customers - MDU and Lower Yellowstone
154		57-kV breaker 342 and assoc. switches		x						2 customers - MDU and Lower Yellowstone
155	Grand Forks	230-kV breakers 286, 382, 486 and associated switches / switches 183 and 580	x							
156		230/115-kV transformer KV1A	x							
157		reactor KW43A, breaker 4324 and assoc. switches	x							
158		station service KW41A, KW42A and associated switches	x							
159		115-kV breakers 1462, 1562, 1662, 1862, 1962 and assoc. switches	x							
160		115/69-kV transformer KY2B, switch 3261 and 3259	x							
161		69-kV breakers 2252, 2352, 2452, 2552 and assoc. switches / switches 2151, 2153			x					2452 to MPC, 2552 to NSP
162		capacitors PZ3A, PZ3B, switches 335x, 345x	x							
163	Grand Island	345-kV breakers 1092, 1192, 1196, 1292, 1596, 1592, 1692, 1796 and assoc. switches	x							
164		reactor KU4A, switch 1098	x							
165		reactors KW1B, KW1A, breakers 5122, 5022 and assoc. switches	x							
166		345/230-kV transformers KU1A, KU1B and switch 293	x							
167		reactors KW2A, breakers 6022 and assoc. switches	x							
168		station service KHA, KHB and assoc switches	x							
169	Grande Prairie	345-kV breakers 196, 292, 396, 298, 198 and assoc. switches	x							
170		reactors KU1A and KU2A	x							
171	Granite Falls	230-kV breakers 184, 282, 382, 486, 582, 682, 782, 882, 1082, 1184, 9182 and assoc. switches	x							
172		capacitors PV1A, PV11A	x							
173		reactors KV1A, KV11A	x							
174		230/115-kV transformers KV3A, KV8A	x							
175		reactors KW3A, KW54A, KW55A, KW56A, KW57A	x							
176		13.8-kV breakers 5424, 5524, 5624, 5724 with assoc. switches and switches 5121, 5123	x							
177		115-kV breakers 2062, 2262, 2366, 2762, 3162, 8162 and assoc. switches	x							
178		115-kV switches 246x, 296x	x							
179		capacitors PY25A, PY26A, breakers 2564, 2664 and assoc. switches	x							
180		reactors KY25A, KY26A	x							
181		station service KW50A, KW51A and assoc switches	x							
182	Great Falls	230-kV breakers 230/99, 230/100, 230/22, 230/23 and assoc. switches			x					in NWMT Great Falls Sub
183		230 kV switch 26B			x					in NWMT Great Falls Sub
184		230/161-kV transformer KV1A	x							
185		161-kV breaker 162 and assoc switchers	x							
186		station service KW1A and switch 221	x							
187	Gregory	115-kV breakers 162, 262, 762 and assoc. switches	x							
188		station service KW1A and switch 521	x							
189	Groton	115-kV breakers 262, 362, 462, 562, 862, 966 and assoc. switches / switches 16x	x							862 due to Groton Synch Condensator

190		115-kV switches 16x, 126x	x									
191		115/69-kV transformer KY1A		x								Two East River members served through KY1A (Lake Region, Northern)
192		station service KZ1A and KW2A	x									
193		115/69-kV transformer KY2A	x									NWPS line is networked and included
194		69-kV breakers 1152 and 1352 and assoc. switches	x									East River 2 customers
195	Groton South	115-kV breakers 1162, 1262, 1266, 1362, 1462, 1466, 1562, 1662, 1666, 2062, 2066 and assoc. switches	x									
196	Havre	161-kV breakers 162, 262, 362 and assoc. switches	x									
197		115-kV breaker 1362, 1462, 1562, 1662 and assoc. switches		x								Hill County Coop and Tiber LLC
198		161/115-kV transformer KZ1A	x									
199		12.47-kv breaker 522 and assoc switches	x									
200		reactor KW1A	x									
201		station service KW1E, KW2A, switches 921, 221, 223	x									
202	Hebron	230-kV breakers 586, 682, 882, 986 and assoc switches	x									
203	Hilken	230-kV breakers 186, 386, 482 and assoc. switches	x									
204	Huron	230-kV breakers 582, 586, 782, 786, 882 and assoc. switches, switches 181, 281	x									
205		230/115-kV transformers KV1A	x									
206		reactors KW1A, KW3A, breakers 132, 332 and assoc. switches	x									
207		station service KW1C, KW1D and assoc. switches	x									
208		115-kV breakers 1062, 1162, 1362, 1962 and assoc. switches, switches 126x, 1761	x									
209	Jamestown	230-kV breakers 3182, 3282, 3382, 3482, 3582, 3682, 3782, 3882, 3982, 9182 and assoc switches	x									
210		115-kV breakers 162, 262, 362, 462, 562, 762, 1864, 1964, 2064 and assoc switches	x									not 662 - to OTP N.O.
211		capacitors PY20A, PY19A	x									
212		reactors KY20A, KY19A, KY7A	x									
213		230/115-kV transformers KU3A, KU6A	x									
214		reactor KW21A, breaker 2122 and assoc. switches	x									
215		station service KWA, KWB switches 222x, 232x	x									
216		station service KW4B, wches 242x, 252x 302x	x									
217		reactor KW26A, breaker 2622 and assoc. switches	x									
218	Killdeer	115-kV breakers 162, 166, 366, 462 and assoc. switches	x									
219		Capacitor PY2A, 115-kV breaker 264 and assoc. switches	x									
220		station service KY1A, switch 3163, KX3A and assoc. switches	x									
221	Lakota	115-kV breaker 162 and assoc switches	x									
222		station service KW1A, switches 825, 921	x									
223	Leeds	115-kV breakers 262, 362, 462, 562 and assoc. switches	x									
224		capacitor PZ4A, breaker 744 and assoc. switches	x									
225		115/69-kV transformer KY1A, switches 161, 162	x									
226		69-kV breakers 444, 544 and assoc switches / switch 143	x									
227		station service KW3B and switch 1021	x									
228	Letcher	230-kV breakers 382, 582, 686 and assoc. switches	x									NWPS line to Mitchell is Networked
229		230/115-kV transformer KV3A	x									
230		115-kV breakers 1266, 1362, 1562 and assoc. switches	x									
231		station service KW3B and assoc switches	x									
232	Martin	115-kV breakers 262, 362, 462, 662 and assoc. switches	x									
233		station service KW1A and switch 2021	x									
234	Maurine	230-kV breakers 182, 282, 582 and assoc. switches	x									
235		230/115-kV transformer KV1A	x									
236		115-kV breakers 1362, 1462, 1562, 1662, 1762, 1964, 2064 and assoc switches	x									
237		capacitors PY19A, PY20A	x									
238		reactors KY19A, KY20A	x									



239		reactor KW32A, breaker 3224 and assoc switches	x										
240		station service KW30A, KW31A and assoc switches	x										
241	Midland	115-kV switches 16x and 26x / switch 361	x										
242		station service KW20A, switches 2031, 2011, 3011	x										
243	Miles City	57-kV breaker 152 and assoc. switches		x	x							2 customers (MDU, Kinsey Irrigation)	
244	Miles City 2	230-kV breakers 382, 386, 482, 582 and assoc. switches and switch 783	x										
245		230/115-kV transformer KV1A	x										
246		115-kV breakers 1362, 1462, 1662 and assoc. switches, switches 1161 and 1165	x										
247		reactor KW7A, breaker 724 and assoc switches	x										
248		station service K2, K1 and assoc switches	x										
249		13.8-kV SS to Miles City DC Converter Station	x										
250	Miles City 3	All Facilities and Equipment	x										
251	Mingusville	230-kV breakers 182, 282, 382 and assoc. switches, and line disconnects	x										
252		station service transformer KV10A and station service equipment	x										
253	Mission	115-kV breakers 162, 262, 462 and assoc. switches, switches 863, 865	x										
254		reactors KY30A, KY31A, KY7A	x										
255		capacitors PY30A, PY31A	x										
256		115-kV breakers 764, 3064, 3164 and assoc. switches	x										
257		station service KX2A, KX1A and switches 243x, 253x	x										
258	Morris	230-kV breakers 182, 382, 482, 582 and assoc switches	x										
259		230/115-kV transformer KV1A	x										
260		115-kV breakers 1162, 1462, 1562, 1762 and assoc switches	x										
261		station service KW1B and switches 512x	x										
262	Mount Vernon	115-kV breakers 162, 262 and assoc switches	x										
263		station service KZ1A and assoc switches	x										
264		115/69 kV transformer KY1A		x								One East River member and one municipal customer served through KY1A and East River 1952 (Central and City of Plankinton)	
265	Nelson Tap	115-kV switches 176x, 196x	x										
266	New Underwood	230-kV breakers 282, 382, 384, 484, 582, 682, 782, 882, 986, 9182, 9282 and assoc switches	x										
267		reactor KV3A, KV4A	x										
268		230/115-kV transformers KV2A, KV1A	x										
269		115-kV breakers 1262, 1362, 1462, 1562, 1662, 1866, 8162, 8262 and assoc switches	x										
270		13.8-kV breaker 4522, 4022, 4122, 4222 and assoc switches	x										
271		reactor KW45A, KW40A, KW41A, KW42A	x										
272		station service KW1A, KW1B and assoc switches	x										
273	Newell	115-kV switches 116x, 1262, 136x	x										
274		115/69-kV transformer KY1A		x								2 customers: Butte Electric and West River	
275		Station Service KW1A and assoc equipment	x										
276	O'Fallon Creek	115-kV breakers 162, 262, 362 and assoc switches	x										
277		115/69-kV transformer KY1A		x								2 customers: Buffalo Rapids Irrigation and Tongue River Electric	
278		69kV breaker 452 and assoc switches		x								2 customers: Buffalo Rapids Irrigation and Tongue River Electric	
279		Station Service KW1B	x										
280	Pace Yellowtail	230-kV breakers IH278, IH296 and assoc switches	x										
281	Philip	115-kV breakers 1462, 1562, 1762, 1862 and assoc switches	x										
282		station service KW32A, KW31A and assoc switches	x										
283	Pierre	115-kV breakers 162, 362, 662, 862 and assoc switches	x										
284		115-kV switches 563, 565, 761	x										
285		station service KW1A, KW2A, KW1B, switches 271x, 281x, 302x	x										
286		69kV breaker 1252 and assoc breakers		x								One East River member and two irrigation districts served through KY2A and 1252 (Oahe, Grey Goose Irrigation and Crow Creek Irrigation)	
287		Station Service KW1D, KW1E, KW1F and assoc switches	x										

288	Rapid City	115-kV breakers 162, 262, 362, 462, 562, 664, 766, 862, 2164 and assoc switches	x																	
289		reactors KY10A, KY21A	x																	
290		capacitors PY6A, PY21A	x																	
291		station service KW20A, KW43A KW42A, switches 202x, 422x, 432x, 431x	x																	
292	Rolla	115-kV breaker 1162 and assoc switches	x																	
293	Rudyard	115-kV switches 260, 261, 160, 161	x																	
294		station service KW1A, switches 521, 523	x																	
295	Rugby	115-kV breakers 1262, 1362, 1462, 1566, 1662, 1762, 1864, 1966 and assoc switches	x																	
296		capacitor PY8A	x																	
297		reactor KY2A	x																	
298		Station Service KX2A, KW1A and assoc. switches and equipment	x																	
299	Shelby 2	115-kV breakers 1062, 1362, 1462 and assoc. switches, switches 1263, 1265	x																	
300		230/115-kV transformer KV3A	x																	
301		reactor KW3A, breaker 3124 and assoc switches	x																	
302		station service KW2A and assoc. switches	x																	
303		230-kV breakers 482, switches 481, 383, 281, 183	x																	
304	Sioux City	230-kV breakers 182, 282, 382, 482, 582, 682, 9182 and assoc switches, switch 7283	x																	
305		230/161-kV transformers KV1A and KV5A	x																	
306		161-kV breakers 1062, 1162, 1262, 1362, 1562, 1662, 8162	x																	
307		reactors KW53A, KW54A, breakers 5324, 5424 and assoc switches	x																	
308		station service KW1B, KW1C, switches 502x, 512x, 522x	x																	
309		69-kV breakers 2156, 2352, 2852, 2952, 3052, 3152 and assoc switches	x	x																to NIPCO (looped) and MEC
310	Sioux City 2	345-kV breakers 8498, 8592, 8692, 8696 and assoc switches	x																	
311		reactor KU6A	x																	
312		345/230-kV transformers KU1A, KU1B, switches 8091, 8081, 8291, 8281	x																	
313		230-kV breakers 7382, 7482 and assoc switches	x																	
314		reactors KW10A, KW10B, breakers 5522, 5622 and assoc switches	x																	
315		station service K1, K2 and assoc switches	x																	
316	Sioux Falls	230-kV breakers 2182, 2282, 2382, 2482, 2582, 2682, 2782, 9182 and assoc switches	x																	
317		230/115-kV transformers KV3A, KV5A	x																	
318		reactors KW31A, KW51A	x																	
319		breakers 3124, 5124 and assoc switches	x																	
320		station service KW33A, KW53A, KZ1A, switches 33xx, 53xx, 1851	x																	
321		115-kV breakers 162, 262, 362, 462, 562, 662, 762, 966, 7162 and assoc switches	x																	
322	Spencer	161-kV breakers 162,462,562, 662 and assoc switches	x																	
323		Reactor PY6A	x																	
324		161/69-kV transformer KY1A	x																	
325		69-kV breakers 1142, 1242, 1342, 1442, 1542 and assoc switches	x	x																to NIPCO and Wisdom Sub
326		station service KW10A and assoc switches	x																	
327	Stegall	230 kV main and transfer bus, breaker 382 and assoc switches	x																	
328		Reactor KV3A, breaker 384 and assoc. switches	x																	
329	Summit	115-kV breakers 262, 362, 462, 562, 762, and assoc switches , switch 163	x																	
330		station service KZ1A, switch 1351	x																	
331		115/69 kV transformer KY1A		x																Four East River members served through KY1A (Whetstone, Lake Region, Traverse, and Codington-Clark)
332		69 kV breaker 1152 and assoc. switches		x																Three East River members served through 1152 (Whetstone, Lake Region, and Traverse)

333	Tiber	115-kV switches 1260, 1261	x							2 customers (generator and Marias)
334	Towner	115-kV Ring Bus	x							
335	Tyndall	115-kV switches 16x, 26x, 361	x							
336		Station Service KZ1A and switches 351 and 751	x							
337	Utica Junction	230-kV breakers 382, 486, 582, 686 and assoc switches	x							
338		230/115-kV transformer KV3A	x							
339		115-kV breakers 1266, 1362, 1562, 1762 and assoc switches	x							
340		station service KW3A and assoc switches	x							
341	Valley City	115-kV 162, 262, 362, 462, 562 and assoc switches	x							
342		115/69-kV transformer KY1A	x	x	x					2 customers (Minnkota Power and City of Valley City)
343		station service KW2A and switch 321	x							
344	Virgil Fodness	230-kV breakers 382, 386, 482, 486 and assoc switches	x							
345		230-kV switches 185 and 283	x							
346	VT Hanlon	230-kV Ring Bus	x							
347	Wall	115-kV switches 16x, 26x, 36x, 461	x							
348		station service KW1B, switch 821	x							
349	Wanblee Tap	115-kV interrupters 162 and 262 and assoc. switches	x							Zero costs, customer funded
350	Ward	230-kV breakers 182, 282, 286 and assoc switches	x							
351		new 230-kV breaker in ring bus	x							Zero costs, customer funded
352	Washburn	230-kV switches 18x, 28x	x							
353		station service KX3A, KW9A and assoc switches	x							
354	Watertown	230-kV breakers 182, 282, 382, 482, 582, 682, 882, 984, 1182, 9182 and assoc switches	x							
355		reactor KV9A	x							
356		capacitor PV9A	x							
357		230/115-kV transformers KV2A, KV8A	x							
358		115-kV breakers 862, 1162, 1262, 1362, 1562, 1762, 1862, 1962, 8162 and assoc switches	x	x						1762 - two customers MRES and NorthWestern Energy
359		station service KY3A, KHA, KHB, K1, K2 and assoc switches	x							
360		reactor KW1A, breaker 3122 and assoc switches	x							
361		13.2-kV switches 372x, 362x, 82x	x							
362		115/69 kV transformer KY3A		x						Two East River members are served through KY3A (Codington-Clark and H-D)
363		69 kV breaker 2752 and assoc switches		x						Two East River members served through 2752 (Codington-Clark and H-D)
364	Watertown 2	345-kV breakers 7296, 7292, 7398 and assoc switches	x							
365		reactor KU3A	x							
366	Watertown Static Var	All Facilities and Equipment	x							
367	Watford City	230-kV breakers 682, 782, 882 and assoc switches	x							
368		230-kV switches 282, 283, 182, 183	x							
369		station service KW1B, switches 121, 123	x							
370		reactor KY16A, switches 166x	x							
371		capacitor PY16A	x							
372		115-kV breakers 1262, 1362 and assoc switches	x							
373		reactor KY17A, switches 176x	x							
374		capacitor PY17A	x							
375		230-kV Bay Addition			x					MDU
376	Wessington Springs	230-kV breakers 586, 682, 786, 882 and assoc switches	x							
377		Station Service	x							
378	Whately	69 kV switches 151, 351	x							
379	White	345-kV breakers 292, 296, 392, 396, 492, 496, 592, 596 and assoc switches	x							
380		115-kV breakers 2262, 2362, and assoc switches	x							
381		345/115-kV transformer KU1A, switches 2163, 2165	x							
382		station service KWA, KWB switches 312x, 3311, 3511	x							
383		reactor KW32A, breaker 3224 and assoc switches	x							
384	Wicksville	115-kV breakers 162, 262, and assoc switches / switch 361	x							

385	Williston	115-kV breakers 1262, 1362, 1462, 1562, 1662, 1762, 1866 and assoc switches	x																	
386		115/57-kV transformers KY4B, switches 2465, 2469																		
387		57-kV breakers 3152, 3252, 3352, 3452 and assoc switches																		
388	Williston 2	230-kV breakers 182, 286, 382, 482, 486, 582, 686 and assoc switches	x																	
389		115-kV breakers 2162, 2266, 2362, 2466, 2562, 2662, 2666 and assoc switches	x																	
		Reactors KW1C and KW2C, breakers 1224 and 2224 and switches 1223 and 2223	x																	
390		station service KW1B, KW2B and assoc switches	x																	
391	Winner	115-kV breakers 162, 362, 462, 1062 and assoc switches / switches 661, 761	x																	
392		reactor KY10A	x																	
393		capacitor PY10A, PY11A, switches 1160, 1161	x																	
394	Wolf Point	115-kV breakers 1362, 1562, 1662, 1762, 1862 and assoc switches/switches 1963, 1965	x																	
395		station service KW1A	x																	
396	Woonsocket	115-kV breakers 162, 262 and assoc switches/ switches 361 and 861	x																	
397		station service KX1A, KW1B and assoc switches	x																	
398																				
399	<b>Transmission Lines</b>																			
400	AURORA- BROOKINGS 115-KV	T/L	x																	
401	AURORA-FLANDREAU 115-KV	T/L	x																	
402	BAKER-HETTINGER		x																	
403	BEULAH-GARRISON		x																	
404	BISMARCK-GLENHAM		x																	
405	BISMARCK-JAMESTOWN NO. 1		x																	
406	BISMARCK-JAMESTOWN NO. 2		x																	
407	BISMARCK-MEDORA		x																	
408	BROOKINGS-SIOUX FALLS		x																	
409	BROOKINGS-WATERTOWN NO. 1		x																	
410	BROOKINGS-WATERTOWN NO. 2		x																	
411	BROOKINGS-WHITE 115/230KV		x																	
412	CANYON FERRY - CANYON FERRY TAP		x																	
413	CARRINGTON-JAMESTOWN		x																	
414	CHARLIE CREEK - WATFORD CITY		x																	
415	CHARLIE CREEK-BELFIELD		x																	
416	CHARLIE CREEK - BEULAH		x																	
417	CONRAD-SHELBY #2	230-kV	x																	
418	CRESTON-MARYVILLE		x																	
419	DAWSON COUNTY - MILES CITY		x																	
420	DAWSON-GLENDIVE		x																	
421	DAWSON-MEDORA		x																	
422	DAWSON-O'FALLON CREEK		x																	
423	DAWSON-WILLISTON		x																	

424	DENISON-CRESTON		x																	
425	DEVILS LAKE-CARRINGTON		x																	
426	DEVILS LAKE-LAKOTA		x																	
427	EDGELEY-FORMAN		x																	
428	EDGELEY-GROTON		x																	
429	ELK CREEK-NEWELL-MAURINE		x																	
	115-kv T/L																			
430	FARGO-GRAND FORKS		x																	
431	FARGO-MORRIS		x																	
432	FORMAN-SUMMIT (BISMARCK)		x																	
433	FORMAN-SUMMIT (HURON)		x																	
434	FORT PECK-DAWSON #1		x																	
435	FORT PECK-DAWSON #2		x																	
436	FORT PECK-HAVRE	161-kv	x																	
437	FORT PECK-WHATELY	69-kv	x																	
438	FORT PECK-WILLISTON		x																	
439	FORT PECK-WOLF POINT #2		x																	
440	FORT RANDALL-FORT THOMPSON 1&2		x																	
441	FORT RANDALL-GAVIN'S POINT		x																	
442	FORT RANDALL-GREGORY		x																	
443	FORT RANDALL-MT VERNON		x																	
444	FORT RANDALL-O'NEILL		x																	
445	FORT RANDALL-SIOUX CITY 1&2		x																	
446	FORT THOMPSON-GRAND ISLAND		x																	
447	FORT THOMPSON-HURON 230-KV 1&2		x																	
448	FORT THOMPSON-SIOUX FALLS 1&2		x																	
449	GARRISON-BISMARCK 230KV 1&2		x																	
450	GARRISON-JAMESTOWN		x																	
451	GARRISON-MALLARD		x																	
452	GARRISON-WM. J. NEAL		x																	
453	GAVINS POINT-BELDEN		x																	
454	GAVINS POINT-SIOUX FALLS		x																	
455	GRANITE FALLS- MORRIS		x																	
456	GRANITE FALLS-MINNESOTA VALLEY		x																	
457	GREAT FALLS-CONRAD	230-kv	x																	
458	GREGORY-MISSION		x																	
459	GROTON-HURON		x																	
460	GROTON-SUMMIT		x																	
461	HAVRE-VERONA	161-kv	x																	
462	HAVRE-SHELBY#2	115-kv	x																	
463	HESKETT-DEVAUL		x																	
464	HETTINGER-NEW UNDERWOOD		x																	

465	HURON-MT VERNON		x																	
466	HURON-WATERTOWN 230KV 1&3		x																	
467	JAMESTOWN-EDGELEY		x																	
468	JAMESTOWN-FARGO NO. 1		x																	
469	JAMESTOWN-FARGO NO. 2		x																	
470	JAMESTOWN-GRAND FORKS		x																	
471	JAMESTOWN-VALLEY CITY		x																	
472	LEEDS-DEVILS LAKE		x																	
473	LEEDS-ROLLA		x																	
474	MALLARD-RUGBY		x																	
475	MARTIN-MISSION		x																	
476	MARTIN-PHILIP		x																	
477	MAURINE-RAPID CITY		x																	
478	MILES CITY-BAKER		x																	
479	MILES CITY-CUSTER	230-kV	x																	
480	NEW UNDERWOOD-PHILIP		x																	
481	NEW UNDERWOOD-RAPID CITY NO. 1		x																	
482	NEW UNDERWOOD-RAPID CITY NO. 2		x																	
483	NEW UNDERWOOD-STEGALL (HURON)		x																	
484	OAHE-FORT THOMPSON 230KV 1&2		x																	
485	OAHE-FORT THOMPSON 230KV 3&4		x																	
486	OAHE-GLENHAM		x																	
487	OAHE-MAURINE		x																	
488	OAHE-NEW UNDERWOOD		x																	
489	OAHE-PIERRE		x																	
490	O'FALLON CREEK-MILES CITY		x																	
491	PIERRE-PHILIP		x																	
492	RAPID CITY-DRY CREEK		x																	
493	RAPID CITY-ELK CREEK 115-kV T/L		x																	
494	RUGBY-LEEDS		x																	
495	SIOUX CITY-DENISON		x																	
496	SIOUX CITY-SPENCER		x																	
497	SIOUX FALLS- SIOUX CITY		x																	
498	SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE		x																	
499	SUMMIT-WATERTOWN		x																	
500	TIBER TAP-TIBER	115-kV	x	x																
501	UTICA JCT-SIOUX FALLS		x																	
502	VALLEY CITY-FORMAN		x																	
503	VERONA GREAT FALLS	161-kV	x																	
504	VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/RASMUS		x																	
505	WATERTOWN-GRANITE FALLS 1&2		x																	
506	WATERTOWN-SIOUX CITY		x																	

507	WATFORD CITY-BEULAH		x								
508	WILLISTON-WATFORD CITY		x								
509	WOLF POINT-CIRCLE		x								
510	WM. J. NEAL-RUGBY		x								
511	YELLOWTAIL-CUSTER	230-kV	x								
512	YELLOWTAIL-YELLOWTAIL (PACE)	230-kV, 110 MW Capacity Rights on RMR Line	x								
513											
514	<b>Taps</b>										
515	Charlie Creek	345-kV breakers 4096, 4192 and assoc switches	x								
516	Denbigh Tap	115kV breakers 1362, 1562 and assoc switches	x								
517	O'Neill	115-kV inerrupters and switches	x								
518	Penn Tap	115-kV switches 176x, 196x	x								
519	Pleasant Lake Tap	115-kV switches 56x, 66x	x								
520	Shirley Tap	115-kV switches 561, 560	x								
521	Terry Tap	115-kV switches 160, 161, 260, 261, 361	x								
522	Tiber Tap	115-kV switches 163, 260, 261, 360, 361	x	x						2 customers from Tiber (Bureau of Reclamation and Tiber LLC)	
523	Vetal Tap	115-kV switches 16x, 26x, 36x	x								
524											
525	<b>O&amp;M Service &amp; Maintenance Centers</b>										
526	ARMOUR O&M SER. CEN.						x				
527	BISMARCK O&M SER. CEN.						x				
528	DAWSON SER. CEN.						x				
529	DEVILS LAKE O&M SER. CEN.						x				
530	FARGO LINE MAINTENANCE FACILITY						x				
531	FARGO O&M SER. CEN.						x				
532	FORT PECK SER. CEN.						x				
533	FORT THOMPSON O&M S. C.						x				
534	HAVRE SERVICE CENTER						x				
535	HURON O&M SER. CEN.						x				
536	JAMESTOWN O&M SER. CEN.						x				
537	MILES CITY MTCE FAC.						x				
538	MILES CITY MTCE FAC.						x				
539	NEW UNDERWOOD SER. CEN.						x				
540	PHILIP O&M SER. CENT.						x				
541	PIERRE O&M SER. CEN.						x				
542	RAPID CITY GARAGE & STOR.						x				
543	SIOUX CITY O&M SER. CEN.						x				
544	SIOUX FALLS O&M SER. CEN.						x				
545	WATERTOWN MAINT. CEN.						x				
546											
547	<b>Operation Centers</b>										
548	WATERTOWN ALTERNATE OPERATIONS CENTER						x				
549	WATERTOWN OPERATIONS CENT						x				

550	WATERTOWN OPER CTR (BFPS)				x				
551									
552	<b>Mobile Equipment</b>								
553	MOB 115KV SWITCH TRAILER	x							
554	MOB 115KV SWITCH TRAILER	x							
555	MOB TRANSF 111KV 15MVA	x							
556	MOB TRANSF 115KV 10MVA	x							
557	MOB TRANSF 115KV 10MVA	x							
558	MOB TRANSF 115KV 25MVA	x							
559	MOB TRANSF 115KV 40MVA	x							
560	MOB TRANSF 230KV 1-33MVA	x							
561	MOBILE BY PASS KIT (BISMARCK)	x							
562	MOBILE BY PASS KIT (HURON)	x							
563	MOBILE CAPACITOR BANK	x							
564	MOBILE SUB 110KV	x							
565	MOBILE SUB 115KV 20MVA	x							
566	MOBILE SUB 41.8 KV	x							
567	MOBILE SUB 69KV	x							
568	MOB SH.REACTOR	x							
569									
570	<b>Transmission-Related Generation Facilities</b>								
571	FORT THOMPSON-BIG BEND NO. 1	x							
572	FORT THOMPSON-BIG BEND NO. 2	x							
573									
574	<b>Communication Facilities</b>								
575	ANITA SCADA				x				
576	ASSINNIBOINE meters for NWMT NITS from Havre				x				
577	BAKER microwave, RTU				x				
578	ATLANTIC COMMUNICATION SITE				x				
579	BAKER RELAY				x				
580	BANTRY				x				
581	BARRETT				x				
582	BATTLE MT. MICROWAVE				x				
583	BELLE PRAIRIE				x				
584	BENEDICT				x				
585	BEULAH				x				
586	BIG BEND				x				
587	BIJOU REPEATER				x				
588	BISMARCK REPEATER				x				
589	Bison microwave alarm system				x				
590	BISON REPEATER				x				
591	BOLE NORTH REPEATER				x				
592	BRINSMADE				x				
593	BRISTOL				x				
594	BRUNSVILLE REPEATER				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.

Western-UGP Facilities Excluded under AI January 1, 2019 Rates (Update 1)*			
Line No.	Facility	Specific Plant NOT Included	Further Description
1	<b>Substations</b>		
2			
3	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	Aurora	115-kV breaker 162, 362 and assoc. switches	
7	Belfield	230-kV breaker 1482 and assoc switches	
8	Beresford	69-kV breaker 1552 and assoc. switches	East River
9		12.47-kV switch 821, 823, 829	City of Beresford
10	Big Bend	230-kV interrupters 1081, 2081, 2081, 4081 and assoc switches	
11	Bisbee	69/12.5-kV transformer KZ1A and switch 145	
12		12.5-kV breaker 124 and assoc. switches	CPEC
13	Bismarck	115-kV breaker 3462 and assoc. switches	Capitol Electric
14		12.5-kV switches 1527, 1529	USBR
15	Bole	69-kV breaker 1452 and 1252 and assoc. switches	NWMT
16	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	Buford Trenton Tap	All Not Included	
20	Buford Trenton Pumping	All Not Included	
21	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	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	Conrad	115-kV breaker 1062 and assoc. switches	Sun River
28	Custer	69-kV breakers 2252, 2352 and assoc. switches	Yellowstone Valley and Mid-Yellowstone
29	Custer Trail	All Not Included	
30	Dawson County	115-kV switch 1061	protection for non-included transformer (transformer not owned by Western)
31	Denbigh Tap	Switches 1460, 1461	
32	Denison	69-kV breaker 2552 and assoc. switches	City of Denison
33	Devaul	All Not Included	
34	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	Eagle Butte	115/69-kV transformer KY1A and 115-kV interrupter 762	
37		69-kV breaker 1752 and assoc. switches	Moreau Grand
38	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	Elk Creek	115-kV ground switch 1160	
43	Elliot	115-kV interrupter 2063 and assoc. switches, 115-kV switch 369	
44	Enderlin Tap	Interrupter 1862 and assoc. switches	
45	Exira	Switches 169, 369, 569	Generator Lead
46	Faith	115/12.47-kV tranformer KY1A and 115-kV interrupter 362	
47		12.47-kV breaker 1022 and assoc. switches	City of Faith
48	Fallon Pumping	All Not Included	
49	Fallon Relift	All Not Included	
50	Flandreau	12.47-kV switches 3121, 3122, 3123, 3129, 3223	City of Flandreau
51	Forman	69-kV breaker 452 and assoc. switches	
52		69/41.8-kV transformer KZ3A 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	Fort Randall	115-kV breaker 962 and assoc. switches	

58	Fort Thompson	69-kV breaker 4452 and assoc. switches	West Central
59	Frazer Pumping	All Not Included	
60	Garrison	115-kV breakers 462, 562 and assoc switches	generator leads
61	Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	generator leads
62	Glendive Pumping No. 1 Tap	All Not Included	
63	Glendive Pumping No. 1	All Not Included	
64	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 breaker 3262 and assoc. switches	
67	Gregory	115-kV Disconnect Switch 463	protection for non-included transformer (transformer not owned by Western)
68		12.47-kV breaker 422 and assvoc. Switches	
69	Groton	69-kV breaker 1552 and assoc. switches	East River
70	Havre	12.5-kV breaker 822 and assoc. switches	Hill County
71	Hilken	take-off structure to Baldwin Wind	generator lead
72	Huron	115-kV switches 1261, 1265	
73		115/69-kV transformer KY1A	
74		69-kV breakers 1952, 2052 and assoc. switches	East River
75	Intake	All Not Included	
76	Intake Pumping	All Not Included	
77	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	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	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	Leeds	69/12.5-kV transformer KZ3A and switch 645	
87		12.5-kV breaker 624 and assoc. switches	CPEC
88	Martin	115/34.5-kV transformer KY1A and interrupter 962	
89		34.5-kV breaker 1242 and assoc. switches	LaCreek
90	Maurine	115/69-kV transformer KY1A and switches 1263, 1265	
91		69-kV breaker 2252 and assoc. switches	Grand Electric
92	Midland	Capacity Rights in 115/69 kV Transformer KY1A	
93	Mission	115/24.9-kV transformer KY1A and interrupter 362	Cherry-Todd
94	Morris	41.8-kV breakers 3132, 3232, 3332 and assoc switches	
95		115/41.8-kV transformer KY3A	
96		115-kV breaker 1362 and assoc switches	
97	Mount Vernon	69-kV breaker 1852 and assoc. switches	East River
98	Nashua Tap	All Not Included	
99	Nelson Tap	Switch 1861	
100	Newell	69-kV breakers 2252, 2452 and assoc. switches	Rushmore
101	New Underwood	13.8 kV interrupter 4423 and assoc. switch	
102	Oahe	230-kV breakers 2882, 2482, 2486, 2082, 1162 and assoc. switches	generator lead
103		115-kV breaker 1162 and assoc. switches	generator lead
104	O'Fallon Creek	12.47-kV breaker 522 and assoc. switches and equipment	MDU
105	Penn Tap	Switches 1860, 1861	
106	Philip	115/69-kV transformer KY1A and switches 1963	
107		69-kV breaker 2152 and assoc. switches	West Central
108	Pierre	115/12.47-kV transformer KY1A and 115-kV interrupter 762	
109		12.47-kV breakers 2212, 2312, 2412 and assoc. switches	City of Pierre
110	Pleasant Lake Tap	Switched 760, 761	
111	Rapid City	115/12.47-kV transformer KY1A	
112	Richland	All Not Included	
113	Rudyard	115/69/12.5-kV transformer KY1A and interrupter 362	
114		69-kV breaker 752 and assoc. switches	Hill County
115		12.5-kV breaker 422 and assoc. switches	Hill County
116	Rugby	115/41.8-kV transformer KY1A and breaker 1162 and assoc. switches	

117		41.8-kV breaker 2142 and assoc. switches	Otter Tail
118	Savage Pumping	All Not Included	
119	Shelby	All Not Included	
120	Shelby 2	115-kV breaker 1162 and assoc. switches	to Shelby
121	Shirley Pumping	All Not Included	
122	Sioux Falls	115-kV breaker 862 and assoc. switches	East River
123		69-kV breaker 1552 and assoc. switches	East River
124	Spencer	69-kV breaker 1642 and assoc. switches	City of Spencer
125	Summit	41.8-kV breakers 2142, 2242 and assoc. switches	
126		115/41.8-kV transformer KY1B	
127		115-kV interrupter 862 and switch 861	
128	Terry Pumping	All Not Included	
129	Terry Tap	115/34.5-kV transformer KY1A and switch 363	
130		34.5-kV breaker 342 and assoc. switches	Buffalo Rapids and MDU
131	Tiber	115/12.5-kV transformer KY1A and breaker 1262	
132		12.5-kV breaker 122 and assoc. switches	USBR
133	Tyndall	69-kV breaker 452 and assoc. switches	East River
134		115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
135	Valley City	69-kV breakers 344, 1144 and assoc. switches	City of Valley City
136	Wall	115/12.47-kV transformer KY1B and interrupters 461 and 562	
137		12.47-kV breaker 622 and assoc. switches	West River
138	Ward	230-kV Switch 889	
139	Washburn	230/41.8-kV transformer KU1A and breaker 282	
140		41.8-kV breaker 342 and assoc. switches	Otter Tail - emergency tie
141	Watford City	115-kV interrupter 162	protection for non-included transformer (transformer not owned by Western)
142	Wessington Springs	230-kV switch 989	generator outlet
143	Whately	69/12.5-kV transformer KYA and switches 253, 257	
144		12.5-kV breaker 224 and assoc. switches	Norval
145	Wicksville	115-kV interrupter 362	protection for non-included transformer (transformer not owned by Western)
146		24.9-kV breaker 1032 and assoc. switches	West River
147	Williston	60-kV breaker 3552 and assoc. switches	MDU non-credited line
148	Williston 2	115-kV breaker 2562 and assoc. switches	
149	Winner	12.47-kV breakers 2222, 2422, 2523 and assoc. switches	City of Winner and Rosebud Electric
150	Wiota	All Not Included	
151	Wiota Tap	All Not Included	
152	Wolf Point	115/34.5-kV transformer KY1A and switches 1963, 1965	
153		34.5-kV breakers 2142, 2242, 2342, 2442 and assoc. switches	MDU and Norval
154		12.5-kV breakers 3222, 3322, 3422 and assoc. switches	Norval and McCone
155	Woonsocket	34.5-kV breakers 442 and 542 and assoc. switches	NWPS and City of Wessington Springs
156		115/69-kV transformer KY1B and 115-kV breaker 862	
157		Mobile Transformer 115/34.5-kV	
158		115-kV interrupters 362 and 862 and assoc. switches, switch M263, M261	
159	<b>Transmission Lines</b>		
160	SHELBY-SHELBY2	115-kV	
161	<b>Corps Switchyard Facilities</b>		
162	Big Bend	230-kV interrupters 1081, 2081, 3081, 4081 and assoc switches	
163	Fort Peck	230-kV interrupters 481, 581 and assoc switches	
164		115-kV switches 861, 961	
165	Garrison	230-kV breakers 182, 282, 382 and assoc switches	
166		115-kV breakers 462, 561 and assoc switches	
167	Gavins Point	115-kV breakers 162, 262, 362 and assoc. switches	
168	Oahe	115-kV breaker 1162 and assoc. switches	
169		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.



Western-UGP 2019 Estimate ( <b>Update 1</b> ) Facility Changes	
Big Bend	Added 3 existing qualifying 230kV Interruptors and 230kV Buswork (1083, 4083, 7089) for Ft Thompson-Big Bend 230kV lines already included in the Transmission System
Brookings	Maintenance replacement of substation equipment. Ownership transfer of Breakers 1562 and 1762 to City of Brookings to WAPA.
Fort Peck	Maintenance replacements - Additions Estimates: SCADA equipment; Instrument Transformers; relays. Excluded two 115 switches (861, 961) and two 230 switches (481, 581) on high side of GSUs.
Fort Randall	Maintenance replacements - Additions Estimates: One 115/230-kV transformer and three 115 double breaker bays (962, 966, 1762, 1766, 1966) energized in 2018; maintenance replacement of station service transformers and SCADA equipment (2019)
Garrison	Maintenance replacements - Additions Estimates: maintenance replacement SCADA equipment; switchyard grading improvement. Excluded two 115 breaker bays (462, 562) and three 230 breaker bays (182, 282, 382) on high side of GSUs.
Gavins Point	Maintenance replacements - Additions Estimates: Station service switchgear and motor operated disconnect
Martin	Maintenance replacement of substation equipment. Ownership transfer from LaCreek to WAPA. Facilities already qualified for SPP inclusion.
Oahe	Maintenance replacements - Additions Estimates: 230-kV Breakers 2282, 2286, 2482, 2486; 230/115-kV Transformer addition; 115-kV Breakers 1562, 1566 (in-service 2018); Switchyard breaker addition (2019); one 115 breaker bay 1062 (ownership changed from WMMPA to Corps)

Western-UGP 2019 Estimate (Update 1)										
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)				
1		<b>Net Plant Investment Worksheet</b>								
2		1,432,618,988	1/	785,428,386	2/	1,184,290,338	3/	503,401,395	12/	3,905,739,107
3		1,366,892,262	4/	7,328,766	5/	138,428,170	6/	0		1,512,649,198
4		18,946,010	7/	0		1,045,862,168	L2-L3	503,401,395	L2-L3	1,568,209,573
5		12,320,470	8/							
6		0.01322	L4/L2	0.00000	L4/L2	0.88311	L4/L2	1.00000	L4/L2	
7		0.95412	L3/L2	0.00933	L3/L2	0.11689	L3/L2	0.00000	L3/L2	
8		0.00860	L5/L2							
9		709,637,739	9/	376,687,240	10/	603,678,800	11/	279,134,995	13/	1,969,138,774
10		677,080,467	L7*L9	3,514,837	L7*L9	70,562,217	L7*L9	0	L7*L9	751,157,521
11		9,384,773	L6*L9	0	L6*L9	533,116,583	L9-L10	279,134,995	L6*L9	821,636,351
12		6,102,858								6,102,858
13		689,811,795	L3-L10	3,813,929	L3-L9	67,865,953	L3-L10	0	L3-L10	761,491,677
14		9,561,237	L4-L11	0	L4-L10	512,745,585	L4-L11	224,266,400	L4-L11	746,573,222
15		6,217,612	L5-L12							6,217,612
15		1/ Transmission Plant-in-Service Worksheet, C3L498								
16		2/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 1								
17		3/ FY Corps of Engineers Financial Statements, Electric and Power Multi-Purpose Plant in Service								
18		4/ Transmission Plant-in-Service Worksheet, C6L498								
19		5/ Transmission Plant-in-Service Worksheet, C6L489								
20		6/ Transmission Plant-in-Service Worksheet, C6L496								
21		7/ Transmission Plant-in-Service Worksheet, C5L498								
22		8/ SSCD Plant-in-Service is based on a percentage of Watertown Operations Centers cost, based on FTE								
23		9/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4								
24		10/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4								
25		11/ FY Corps of Engineers Financial Statements, Statement of Assets and Liabilities								
26		12/ FY Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedule 15								
27		13/ FY Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedule 17								

Western-UGP 2019 Estimate (Update 1)										
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)				
1	<b>Depreciation Worksheet</b>									
2	PS Depreciation Expense	33,684,952	1/	18,138,747	2/	11,151,845	3/	3,184,433	4/	66,159,977
3	PS-ED Transmission Depreciation 5/	32,139,530		169,251		1,303,506		0		33,612,287
4	PS-ED Generation Depreciation 6/	445,475		0		9,848,339		3,184,433		13,478,247
5	PS-ED SSCD Depreciation 7/	289,689								289,689
5	1/ FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 4									
6	2/ FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 4									
7	3/ FY Corps of Engineers Statement of Revenues and Expenses									
8	4/ From data provided by BOR									
9	5/ For Western-UGP, Western-RMR, COE, and BOR the portion of depreciation expense allocated to PS-ED transmission is based on the ratio of transmission plant-in-service to total									
10	plant-in-service, calculated on L7 of the Net Plant Investment Worksheet									
11	6/ For Western-UGP, Western-RMR and BOR the portion of depreciation expense allocated to PS-ED generation is based on the ratio of generation plant-in-service to total plant-in-service									
12	calculated on L6 of the Net Plant Investment Worksheet. COE generation depreciation is COE total depreciation less transmission depreciator									
13	7/ For Western-UGP, the portion of depreciation expense allocated to PS-ED SSCD is based on the ratio of SSCD plant-in-service to total plant in service, calculated on L8 of the Net Plan									
14	Investment Worksheet									

Western-UGP 2019 Estimate (Update 1)										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
1	<b>Cost of Capital Worksheet</b>									
2	<b>Long Term Debt:</b>									
3	FY Balances	886,311,612	1/	448,818,898	1/	574,042,068	1/	212,291,288	1/	2,121,463,866
4	<b>Interest Expenses:</b>									
5	FY Interest	43,563,930	13/	28,141,238	13/	19,641,815	2/	9,219,296	2/	100,566,279
6	Average Interest Rate	4.915%	L6/L3	6.270%	L6/L3	3.422%	L6/L3	4.343%	L6/L3	
7	Transmission Plant Factor	0.9036	3/	0.0048	4/	0.0915	5/	0.0000	6/	
8	Weighted Trans. Composite Rate									4.785% 7/
9	Generation Plant Factor	0.0121	8/	0.0000	9/	0.6669	10/	0.3210	11/	
10	Weighted Gen. Composite Rate									3.735% 12/
11	1/ FY Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedules 21X and 21RX									
12	2/ FY Historical Financial Data in Support of the Power Repayment Study for the P-SMBP, Schedule 33, 33A and ROOs Schedule 5									
13	3/ C2L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
14	4/ C3L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
15	5/ C4L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
16	6/ C5L3, Net Plant Investment Worksheet/C6L3, Net Plant Investment Worksheet									
17	7/ (C2L6*C2L7)+(C3L6*C3L7)+(C4L6*C4L7)+(C5L6*C5L7)									
18	8/ C2L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
19	9/ C3L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
20	10/ C4L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
21	11/ C5L4, Net Plant Investment Worksheet/C6L4, Net Plant Investment Worksheet									
22	12/ (C2L6*C2L9)+(C3L6*C3L9)+(C4L6*C4L9)+(C5L6*C5L9)									
23	13/ Interest from Results of Operations Schedule 5									

Western-UGP 2019 Estimate (Update 1)

Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
1	<b>A&amp;G Expenses Worksheet</b>					
2	<b>Object Class</b>	<b>WESTERN-UGP 1/</b>	<b>WESTERN-RMR 2/</b>	<b>COE 3/</b>	<b>BOR 3/</b>	<b>Total</b>
3	1411			0	0	0
4	1412			0	0	0
5	1415			0	0	0
6	1416			0	0	0
7	1421			0	0	0
8	1422			0	0	0
9	1425			0	0	0
10	1426			0	0	0
11	1431			0	0	0
12	1432			0	0	0
13	1441			0	0	0
14	1442			0	0	0
15	<b>PS Total A&amp;G</b>	20,321,911	7,425,862	0	0	27,747,773
16	<b>PS-ED Transmission A&amp;G 4/</b>	19,389,568	69,290	0	0	19,458,858
17	<b>PS-ED Generation A&amp;G 5/</b>	268,752	0	0	0	268,752
18	<b>PS-ED SSCD A&amp;G 6/</b>	174,768	0	0	0	174,768
19	1/ Western-UGP A&G Expenses are from the FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 11A					
20	2/ Western RMR A&G Expenses are from the FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11A					
21	3/ A&G Expenses for COE and BOR are unavailable. All COE and BOR A&G expenses are included in O&M Expense:					
22	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					
24	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					
26	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					

Western-UGP 2019 Estimate (Update 1)						
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
1	<b>O&amp;M Expenses Worksheet</b>					
2		<b>WESTERN-UGP 1/</b>	<b>WESTERN-RMR 2/</b>	<b>COE 3/</b>	<b>BOR 4/</b>	
3	<b>Total Electric Operating Expense</b>	75,706,000				75,706,000
4	<b>Less:</b>					
5	<b>Other Power Supply Expenses</b>					0
6	<b>A&amp;G Expenses</b>	20,321,911				20,321,911
7	<b>Prior Year Adjustments</b>					0
8	<b>Plus:</b>					
9	<b>Moveable Property Interest</b>	5,683,000				5,683,000
10	<b>Warehouse Stores Interest</b>					0
11	<b>Scheduling, System Control &amp; Dispatch</b>	11,679,921				11,679,921
12	<b>COE/BOR Total</b>			48,576,331	41,885,629	90,461,960
13	<b>PS Total O&amp;M</b>	61,067,089	49,394,313	48,576,331	41,885,629	163,208,970
14	<b>PS-ED Transmission O&amp;M 5/</b>	58,265,409	460,894	5,677,943	0	64,404,246
15	<b>PS-ED Generation O&amp;M 6/</b>	807,596	0	42,898,388	41,885,629	85,591,614
16	1/ All Western-UGP O&M Expenses are from the FY UGPCSR - Pick-Sloan Missouri River Basin and UGPCSR - Ft. Peck Power System Results of Operations, Schedule 11; except					
17	Moveable Property and Warehouse Stores Interest, which are from Schedule 5					
18	2/ All Western RMR O&M Expenses are from the FY RMCSR - Pick-Sloan Missouri River Basin Results of Operations, Schedule 11; except Moveable Property and Warehouse					
19	Stores Interest, which are from Schedule 5					
20	3/ Total Corps O&M Expenses are from the FY Corps of Engineers Financial Statements					
21	4/ Total BOR O&M Expenses are from the FY Historical Financial Data in Support of the Power Repayment Study for the Pick-Sloan Missouri Basin Program, Schedule 14					
22	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					
23	Net Plant Investment Worksheet					
24	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					
25	Net Plant Investment Worksheet					

Western-UGP 2019 Estimate (**Update 1**)

Rate for Regulation and Frequency Response

Line No.	DESCRIPTION (1)	REGULATION and FREQUENCY RESPONSE (2)	REFERENCE (3)
1	Western Regulation Revenue Requirement	\$277,605	(1)
2	Over Collection - 2017 Regulation Revenue Rqmt	(\$19,249)	(2)
3	Average WAUW Control Area Load in 2017	168,000	
4	Average Total Control Area(s) Load in 2017 True-up	168,000	(3)
5	Ratio WAUW Control Area to Total Control Area(s)	1.0000	L3 / L4
6	Over Collection - 2017 WAUW Regulation Revenue Rqmt	(\$19,249)	L2 * L5
7	Total Regulation Revenue Rqmt with True-up	258,356	L1 + L6
(1)	Regulation and Frequency Response Service from "Regulation and Frequency Response for 2019, Western's Costs"		
(2)	Over/Under Collection "True-up of Regulation and Frequency Response Rate for 2017"		
(3)	Average of monthly peaks for 2017 Control Area(s)		
	<b>Regulation and Frequency Response (Western's Costs)</b>		
11	Fixed Charge Rate	14.023%	(4)
12	Corps Generation Net Plant Costs (\$)	\$ 512,745,585	(5)
13	Annual Corps Generation Cost (\$)	\$ 71,899,750	L1*L2
14	Plant Capacity (kW)	2,295,000	
15	Cost/kW (\$/kW)	\$ 31.33	L3/L4
16	Capacity Used for Regulation (kW)	8,861	
17	Regulation Revenue Requirement (\$) - Capacity	\$277,605	
18	Regulation Revenue Requirement (\$) - Purchases	\$0	(6)
19	Total Regulation Revenue Requirement (\$)	\$277,605	
(4)	Determination of Pick-Sloan Missouri Basin Program, Eastern Division Annual Corps Revenue Requirement for 2019 Rate		
(5)	Corps Generation Net Plant is Total Electric Plant in Service less Depreciation Reserve		
(6)	Cost of Purchases Required to Regulate for Intermittent Resources		

Western-UGP 2019 Estimate (Update 1)

Rate for Reserves

Line No.	DESCRIPTION (1)	RESERVES (2)	REFERENCE (3)
1	Fixed Charge Rate	14.023%	(1)
2	Corps Generation Net Plant Costs (\$)	\$ 512,745,585	(2)
3	Annual Corps Generation Cost (\$)	\$ 71,899,750	L1*L2
4	Plant Capacity (kW)	2,295,000	
5	Cost/kW (\$/kW-Yr)	\$ 31.33	L3/L4
6	Prior Year True-Up	\$ (3,770)	
7	Monthly Charge (\$/kW-mo)	\$ 2.61	
8	Western's Maximum Load in WAUW Control Area (kW)	168,000	(3)
9	Maximum Generation in WAUW Control Area (kW)	97,500	(4)
10	Capacity used for Reserves (kW) -- 3% Load + 3% Gen	7,965	L8*3% + L9*3%
11	Annual Reserves Revenue Requirement	\$ 249,534	L10*L5
12	Over Collection - 2017 WAUW Reserve Revenue Rqmt	\$ (3,770)	
13	Total Regulation Reserves Rqmt with True-up	\$ 245,764	L11+L12
(1)	Determination of Pick-Sloan Missouri Basin Program, Eastern Division Annual Generation Revenue Requirement for 2019 Rate		
(2)	Generation Net Plant Costs include the total Corps Generation Plant-in-Service less total Corps Generation Plant depreciation		
(3)	WAUW load monthly peaks for 2017		
(4)	Northwest Power Pool Reserve Sharing System		



Western-UGP 2019 Estimate (Update 1)

Determination of Pick-Sloan Missouri Basin Program, Eastern Division Annual Costs

Line No.	DESCRIPTION (1)	COE			REFERENCE (5)
		TRANSMISSION (2)	GENERATION (3)	GENERATION (4)	
1	<b>A. Operation and Maintenance Expense</b>				
2	O&M Expense	\$64,404,246	\$85,591,614	\$42,898,388	O&M Expenses Worksheet
3	Transmission of Electricity by Others	\$0	\$0	\$0	
4	Total O&M Expense	\$64,404,246	\$85,591,614	\$42,898,388	L2 + L3
5	Net Plant Investment	\$761,491,677	\$746,573,222	\$512,745,585	Net Plant Investment Worksheet
6	O&M as % of Net Plant Investment	8.458%	11.465%	8.366%	L4/L5
7	<b>B. A&amp;G Expense</b>				
8	A&G Expense	\$19,458,858	\$268,752	\$0	A&G Expenses Worksheet
9	Net Plant Investment	\$761,491,677	\$746,573,222	\$512,745,585	L5
10	A&G as % of Net Plant Investment	2.555%	0.036%	0.000%	L8/L9
11	<b>C. Depreciation Expense</b>				
12	Depreciation Expense	\$33,612,287	\$13,478,247	\$9,848,339	Depreciation Expense Worksheet
13	Net Plant Investment	\$761,491,677	\$746,573,222	\$512,745,585	L5
14	Depreciation as a % of Net Plant Investment	4.414%	1.805%	1.921%	L12/L13
15	<b>D. Taxes Other than Income Taxes for Transmission</b>				
16	Not applicable.				
17	<b>E. Allocation of General Plant</b>				
18	No General Plant identified at this time, all plant is identified as either generation or transmission related.				
19	<b>F. Cost of Capital</b>				
20	Weighted Transmission Composite Interest Rate	4.785%	3.735%	3.735%	Cost of Capital Worksheet
21	<b>G. Fixed Charge Rate</b>				
22	Operation and Maintenance Expense	8.458%	11.465%	8.366%	L6
23	A&G Expense	2.555%	0.036%	0.000%	L10
24	Depreciation Expense	4.414%	1.805%	1.921%	L14
25	Taxes Other than Income Taxes	0.000%	0.000%	0.000%	
26	Allocation of General Plant to Transmission	0.000%	0.000%	0.000%	
27	Cost of Capital	4.785%	3.735%	3.735%	L20
28	Total	20.212%	17.041%	14.023%	
29	<b>H. Revenue Requirement</b>				
30	Fixed Charge Rate	20.212%	17.041%	14.023%	L28
31	Net Plant Investment	\$761,491,677	\$746,573,222	\$512,745,585	L5
32	Annual Western-UGPR Cost	\$153,913,374	\$127,225,998	\$71,899,750	L30 * L31

Western-UGP 2019 Estimate (Update 1)				
SSCD Facilities				
2019 SPP ESTIMATE SUMMARY	FID	DESCRIPTION	PRIOR YEAR FACILITY TOTALS (\$)	FY2019 EST SPP TOTALS (\$)
	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,006,058	4,220,457
	WTO	WATERTOWN OPERATIONS CENTER	1,311,373	868,674
	WTO F	WATERTOWN OPERATIONS CENTER (BFPS)	12,647,186	8,499,777
			19,964,617	13,588,909
2019 SPP ESTIMATE DETAIL:	FID	DESCRIPTION	FID COST DETAIL (\$)	TRANS TOTAL (\$)
	WAO	IDC	299	210
	WAO	LAND & RIGHTS	9,790	6,879
	WAO	LAND AT KCR	1,539	1,081
	WAO	MICROWAVE TOWER	295,486	207,638
	WAO	IDC	57,816	40,627
	WAO	IDC	5,246	3,686
	WAO	ANTENNA	17,480	12,283
	WAO	MICROWAVE SYSTEM	122,582	86,138
	WAO	MICROWAVE SYSTEM	12,407	8,718
	WAO	SCADA COMMUNICATION EQUIPMENT	20,217	14,206
	WAO	LAND & RIGHTS	54,138	38,042
	WAO	BUILDINGS	531,049	373,168
	WAO	BUILDINGS	90,309	63,460
	WAO	OTHER STRUCTURES AND IMPROVEMENTS	54,257	38,126
	WAO	OTHER STRUCTURES AND IMPROVEMENTS	475,746	334,307
	WAO	STATION EQUIPMENT	95,962	67,433
	WAO	SCADA COMMUNICATION EQUIPMENT	12,679	8,910
	WAO	SCADA COMMUNICATION EQUIPMENT	1,022,154	718,268
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	122,476	86,064
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	733,679	515,557
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	35,292	24,800
	WAO	MICROWAVE COMMUNICATION EQUIPMENT	13,959	9,809
	WAO	TELEPHONE COMMUNICATION EQUIPMENT	53,112	37,322
	WAO	FIBER OPTIC EQUIPMENT	184,307	129,513
	WAO	FIBER OPTIC EQUIPMENT	97,180	68,289
	WAO	FIBER OPTIC EQUIPMENT	28,885	20,297
	WAO	FIBER OPTIC EQUIPMENT	41,066	28,857
	WAO	BUILDINGS	1,320,913	928,206
	WAO	IDC	454,813	319,597
	WAO	PLANT COMM SYSTEM	40,642	28,559
	WAO	IDC	577	406
		<b>TOTAL</b>	<b>6,006,058</b>	<b>4,220,457</b>
	WTO	TELEPHONE COMMUNICATION EQUIPMENT	559,892	364,658
	WTO	IDC	33,280	21,675
	WTO	WALLS	276,284	179,943
	WTO	SIDEWALKS	153,428	99,928
	WTO	IDC	2,052	1,336
	WTO	IDC	2,835	1,847
		<b>TOTAL</b>	<b>1,027,770</b>	<b>669,387</b>

WTO	FIBER OPTICS EQUIPMENT	267,249	187,796
WTO	IDC	16,354	11,492
	<b>TOTAL</b>	<b>283,603</b>	<b>199,288</b>
WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 2 OF 2)	134,174	94,284
WTO F	ADD DROP MULTIPLEXER (PART 2 OF 2)	59,005	41,463
WTO F	POWER SYSTEM DISPATCH CONSOLES	119,667	84,090
WTO F	MICROWAVE ALARM SYSTEM MASTER STATION	19,292	13,557
WTO F	FIBER OPTIC EQUIPMENT	53,165	37,359
WTO F	FIBER OPTIC EQUIPMENT	307,465	216,056
WTO F	FIBER OPTIC EQUIPMENT	12,820	9,008
WTO F	FIBER OPTIC EQUIPMENT	415,983	292,311
WTO F	IDC	150,136	105,501
WTO F	IDC	2,533	1,780
WTO F	TELEPHONE COMMUNICATION EQUIPMENT	31,658	22,246
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	85,009	59,736
WTO F	FIBER OPTICS EQUIPMENT	108,685	76,373
WTO F	FIBER OPTICS EQUIPMENT	1,934	1,359
WTO F	FIBER OPTICS EQUIPMENT	38,123	26,789
WTO F	IDC	23,486	16,503
WTO F	MULTIPLEXER EXPANDED CAPABILITY ASSET 166934 - PROJECT WTO 0025C (PART 2	25,032	17,590
WTO F	IDC - ASSET 166934 MULTIPLEXER EXPANSION (PART 2)	514	361
WTO F	IDC	18,650	13,105
WTO F	ADD DROP MULTIPLEXER (PART 1 OF 2)	2,850	2,003
WTO F	ALCATEL 5620 FIBER TERMINAL EQUIP (PART 1 OF 2)	6,625	4,655
WTO F	VHF RADIO COMPARATOR	98,003	68,867
WTO F	IDC	3,248	2,282
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	226,333	159,044
WTO F	IDC	13,471	9,466
WTO F	TELEPHONE SYSTEM - 40 CHANNEL RECORDER & CRASH KIT	70,115	49,270
WTO F	INTEREST DURING CONSTRUCTION	1,421	999
WTO F	VOICE RECORDER SYSTEM	61,005	42,868
WTO F	SCADA SYSTEM HISTORIAN SOFTWARE	202,050	141,981
WTO F	IDC	6,761	4,751
WTO F	IDC	10,395	7,305
WTO F	SCADA MAPBOARD	506,493	355,912
WTO F	SCADA	121,027	85,046
WTO F	IDC	2,484	1,745
WTO F	AUX PWR SYS - BACKUP GENERATOR	454,504	319,380
WTO F	IDC	12,877	9,049
WTO F	(5) DIGITAL VOICE RECORDERS - WTO F	20,217	14,206
WTO F	IDC	1,979	1,391
WTO F	BATTERY BANK FOR UPS	36,320	25,522
WTO F	IDC	631	443
WTO F	DIGITAL TRANS & REC EQUIP	23,847	16,757
WTO F	FREQUENCY CONTROL ADDITIONS	57,731	40,568
WTO F	TELEPHONE COMMUNICATION EQUIPMENT	144,190	101,323
WTO F	SCADA COMMUNICATION EQUIPMENT	1,233,220	866,584
WTO F	IDC	15,694	11,028
WTO F	PLANT COMM SYSTEM	167,020	117,365
WTO F	IDC	2,373	1,668
	<b>TOTAL</b>	<b>5,110,212</b>	<b>3,590,946</b>
WTO F	WATERTOWN OPERATIONS BUILDING	636,802	414,749

WTO F	IDC	3,422	2,229
WTO F	RESURFACE PARKING LOT AT WATERTOWN OPS OFFICE	152,204	99,130
WTO F	REPLACE ROOF AT WATERTOWN OPS OFFICE	41,538	27,054
WTO F	IDC	6,304	4,106
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	20,893	13,608
WTO F	MICROWAVE COMMUNICATION EQUIPMENT	20,482	13,340
WTO F	IDC	405,078	263,827
WTO F	VEHICLE/STORAGE BUILDING	651,816	424,528
WTO F	IDC	39,508	25,732
WTO F	IDC	1,654	1,077
WTO F	OTHER STRUCTURES AND IMPROVEMENTS	15,703	10,227
WTO F	IDC	8,042	5,238
WTO F	IDC	8,042	5,238
WTO F	BUILDINGS	81,569	53,126
WTO F	BUILDINGS	81,569	53,126
WTO F	BUILDINGS	818,051	532,797
WTO F	IDC	66,517	43,322
WTO F	TELEPHONE COMMUNICATION EQUIPMENT	146,115	95,164
WTO F	IDC - REPLACEMENTS	1,845	1,202
WTO F	IDC - ADDITIONS	3,845	2,504
WTO F	BUILDINGS	220,908	143,877
WTO F	IDC	5,015	3,266
WTO F	PSOO-WATER SYSTEM	219,050	142,667
WTO F	IDC	285,734	186,099
WTO F	PWR SYS OPERATIONS OFFICE BUILDING (PART 1 OF 2)	1,929,776	1,256,863
WTO F	WATERTOWN OPS BLDG EXPANSION (PSOO)	303,096	197,406
WTO F	WATERTOWN OPS BLDG EXPANSION	1,362,395	887,328
	TOTAL	7,536,974	4,908,831