

Western-UGP
Transmission and Ancillary Services
Rate Calculation

Effective January 1, 2018

2018 Rate Estimate Calculation

Western-UGP

Transmission and Ancillary Services List of Workpapers and Schedules

WAUGP-ATRR 2018 est	Projected ATRR -2018 estimate
WAUGP-AS1 2018 est	Scheduling, System Control and Dispatch Service ATRR - 2018 estimate
FACILITY COST DETAIL 2018 est	Facility Costs - 2018 estimate
FACILITIES - Included per AI	Western-UGP Facilities Included per AI
FACILITIES - Excluded per AI	Western-UGP Facilities Excluded per AI
Facility Changes 2018	List of facility changes
COST DATA 2018 est	Cost Support - 2018 estimate
WAUW-AS3 2018 est	Regulation and Frequency Response ATRR - 2018 estimate
WAUW-AS5&6 2018 est	Reserves ATRR - 2018 estimate

Western-UGP Timeline

September 1, 2017 (on or shortly after)	Annual recalculation of prior year (2016) and estimated ATRR for upcoming year (2018) will be available for review/comment on SPP's website and Western's website at www.wapa.gov/ugp/rates/default.htm
October 31, 2016 (on or before)	Western-UGP will provide opportunity to discuss/comment on recalculated (2016) ATRR and estimated ATRR (2018). 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 www.wapa.gov/ugp/rates/default.htm
January 1, 2018	Recalculated revenue requirement will go into effect
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January 1, 2019	Recalculated revenue requirement will go into effect

Western-UGP						
Revenue Requirement - Non-Levelized						
Utilizing Financial Statement Results of Operations						
12 Months Ending 09/30/2018 ESTIMATE						
Line No.	(1)	REFERENCE (2)	COMPANY TOTAL (3)	ALLOCATOR	(4)	TRANSMISSION ALLOCATED AMOUNT (5)
1	GROSS REVENUE REQUIREMENT	(line 76)				\$ 150,606,142
2	REVENUE CREDITS	(Note R)				
3	Short-Term Firm Point-to-Point Transmission Service Credit		5,064,000	NA	1.00000	5,064,000
4	Non-Firm Point-to-Point Transmission Service Credit		747,000	NA	1.00000	747,000
5	Revenue from Existing Transmission Agreements		0	NA	1.00000	0
6	Scheduling, System Control, and Dispatch Service Credit		11,607,518	NA	1.00000	11,607,518
7	Account No. 454	(line 115)	103,100	TP	1.00000	103,100
8	Account No. 456	(line 119)	0	TP	1.00000	0
9	TOTAL REVENUE CREDITS					17,521,618
10	PRIOR PERIOD TRUE-UP (Under-collection)					195,354
11	Portion of ATRR eligible for SPP region-wide cost sharing					0
11	NET REVENUE REQUIREMENT	(line 1 - line 8 + line 9 + line 10)				\$ 133,279,878
RATE BASE:						
12	GROSS PLANT IN SERVICE	(Note A)				(Col 3 times Col 4)
13	Production	Schedule 1A Total	1,014,181,514	NA		
14	Transmission	Schedule 1A Total	1,438,721,122	TP	1.00000	1,438,721,122
15	Distribution	Schedule 1A Total	41,839,985	NA		
16	General & Intangible	Bal Sheet - Other Assets - SGL	-	W/S	1.00000	0
17	Common	175002	-	CE	0.00000	0
17	TOTAL GROSS PLANT	(sum lines 12 to 16)	2,494,742,621	GP=	57.670%	1,438,721,122
18	ACCUMULATED DEPRECIATION					
19	Production	Schedule 4	552,202,357	NA		
20	Transmission	Schedule 4	714,648,444	TP	1.00000	714,648,444
21	Distribution	Schedule 4	20,618,439	NA		
22	General & Intangible	Bal Sheet - Other Assets - SGL	0	W/S	1.00000	0
23	Common	175902	0	CE	0.00000	0
23	TOTAL ACCUM. DEPRECIATION	(sum lines 18 to 22)	1,287,469,240			714,648,444
24	NET PLANT IN SERVICE					
25	Production	(line 12 - line 18)	461,979,157			
26	Transmission	(line 13 - line 19)	724,072,679			724,072,679
27	Distribution	(line 14 - line 20)	21,221,546			
28	General & Intangible	(line 15 - line 21)	0			0
29	Common	(line 16 - line 22)	0			0
29	TOTAL NET PLANT	(sum lines 24 to 28)	1,207,273,381	NP=	59.976%	724,072,679
30	ADJUSTMENTS TO RATE BASE	(Note B)				
31	Account No. 281	(enter negative)	0		0.00000	0
32	Account No. 282	(enter negative)	0	NP	0.59976	0
33	Account No. 283	(enter negative)	0	NP	0.59976	0
34	Account No. 190		0	NP	0.59976	0
35	Account No. 255	(enter negative)	0	NP	0.59976	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)				
38	CWC	calculated	22,538,018			0
39	Materials & Supplies	Bal Sheet - Other Assets - SGL	0			0
40	Prepayments	151191 (Note C)	0	TE	0.00000	0
41	TOTAL WORKING CAPITAL	Bal Sheet Other Assets	0	GP	0.57670	0
41	RATE BASE	(sum lines 37 to 39)	22,538,018			0
		(sum lines 29, 35, 36, 40)	1,229,811,399			724,072,679
O&M						
42	Transmission	Schedule 11 (Note E)				
43	Western-UGP		60,656,044	PTP/UGP	0.95642	58,012,660
44	Western-RMR		46,472,157	PTP/RMR	0.00940	436,909
45	COE	COE Financial Stmt	46,357,568	PTP/COE	0.10023	4,646,529
46	Less Account 565	(Note E)		NA	1.00000	0
47	A&G	Schedule 11 (Note F)				
48	Western-UGP		19,695,956	PTP/UGP	0.95642	18,837,608
49	Western-RMR		7,122,416	PTP/RMR	0.00940	66,962
50	Less FERC Annual Fees		0	W/S	1.00000	0
51	Less EPRI & Reg. Comm. Exp. & Non-safety Ad	(Note G)	0	W/S	1.00000	0
52	Plus Transmission Related Reg. Comm. Exp	(Note G)	0	TE	0.00000	0
53	Common		0	CE	0.00000	0
54	Transmission Lease Payments		0	NA	1.00000	0
53	TOTAL O&M	(sum lines 42, 43, 44, 46, 47, 50, 51 less 45, 48, 49)	180,304,141			82,000,669
54	DEPRECIATION EXPENSE					
55	Transmission	Schedule 4				
56	Western-UGP		33,273,126	PTP/UGP	0.95642	31,823,087
57	Western-RMR		18,424,185	PTP/RMR	0.00940	173,216
58	COE		10,645,769	PTP/COE	0.10023	1,067,051
59	General		0	W/S	1.00000	0
60	Common		0	CE	0.00000	0
60	TOTAL DEPRECIATION	(sum lines 54 to 59)	62,343,080			33,063,353
61	TAXES OTHER THAN INCOME TAXES	(Note H)				
62	LABOR RELATED					
63	Payroll		0	W/S	1.00000	0
64	Highway and vehicle		0	W/S	1.00000	0
65	PLANT RELATED					
66	Property		0	GP	0.57670	0
67	Gross Receipts		0		0.00000	0
68	Other		0	GP	0.57670	0
69	Payments in lieu of taxes		0	GP	0.57670	0
70	TOTAL OTHER TAXES	(sum lines 61 to 66)	0			0
71	INCOME TAXES	(Note I)				
72	T=1 - (((1 - SIT) * (1 - FIT)) / (1 - SIT * FIT * p)) =		0.00%	NA		
73	CIT=(T/(1-T) * (1-(WCLTD/R))) =		0.00%			
74	where WCLTD= (line 107) and R= (line 109) and FIT, SIT & p are as given in footnote I.					
75	1 / (1 - T) = (from line 68)		0.0000			
76	Amortized Investment Tax Credit	(enter negative)	0			0
77	Income Tax Calculation	(line 69 * line 75)	0	NA		0
78	ITC adjustment	(line 70 * line 71)	0	NP	0.59976	0
79	Total Income Taxes	(line 72 * line 73)	0			0
80	RETURN [Rate Base * Rate of Return]	(line 41 * line 106)	60,367,012	NA		35,542,120
81	REV. REQUIREMENT	(sum lines 53, 60, 67, 74, 75)	303,014,233			150,606,142

SUPPORTING CALCULATIONS AND NOTES									
TRANSMISSION PLANT INCLUDED IN UMZ RATES									
77	Total transmission plant	(line 13, column 3)						1,438,721,122	
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)						1,438,721,122	
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		22,955,932	1.00		22,955,932			
90	Distribution		0	0.00		0			W&S Allocator
91	Other		0	0.00		0			(\$ / Allocation)
92	Total	(sum lines 88 to 91)	22,955,932			22,955,932	=		1.00000
PERCENTAGE OF TOTAL PLANT ALLOCATOR PTP									
			\$						
93	Transmission Plant in Service Western-UGP		1,320,460,041						
94	Total Plant in Service Western-UGP		1,380,627,642						
95	UGP Percentage of Transmission Plant to Total Plant	(line 93 / line 94)				PTP/UGP	=		0.95642
96	Transmission Plant in Service Western-RMR		7,324,885						
97	Total Plant in Service Western-RMR		779,116,202						
98	RMR Percentage of Transmission Plant to Total Plant	(line 96 / line 97)				PTP/RMR	=		0.00940
99	Transmission Plant in Service COE		110,936,197						
100	Total Plant in Service COE		1,106,790,095						
101	COE Percentage of Transmission Plant to Total Plant	(line 99 / line 100)				PTP/COE	=		0.10023
COMMON PLANT ALLOCATOR (CE)									
			\$		% Electric			Labor Ratio =	CE
102	Electric		0		(line 102 / line 105)			(line 92)	0.00000
103	Gas		0						
104	Water		0		0.00000	*		1.00000	
105	Total	(sum lines 102 to 104)	0						
RETURN (R)									
106	Long Term Interest Schedule 5		\$42,803,963						
			\$	%	Cost (Note O)			Weighted	=WCLTD
107	Long Term Debt	HFD Sch's 21RX & 21X Col 8 Lines	872,012,712	100%	0.0491			0.0491	=R
108	Proprietary Capital	23,25,26,29,30	0	0%	0.1238			0.0000	
109	Total (sum lines 107 to 108)		872,012,712	100%				0.0491	
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)						103,100	
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 Acct No. 561. Western does not include transmission expenses in ancillary service rates.								
K	Removes transmission plant determined by Commission order to be state-jurisdictional according to the seven-factor test (until RUS 12 balances are adjusted to reflect application of seven-factor test).								
L	Removes dollar amount of transmission plant included in the development of OATT ancillary services rates and generation step-up facilities, which are deemed to be included in OATT ancillary services. For these purposes, generation step-up facilities are those facilities at a generator substation on which there is no through-flow when the generator is shut down.								
M	Percentage of Total Plant Allocators are developed separately for Western-UGP and Western-RMR to allocate O&M, A&G, and Depreciation Expenses between Transmission and Generation.								
N	Western does not have Common Plant.								
O	Debt cost rate = long-term interest (line 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 2018 Estimate

Scheduling, System Control, and Dispatch Service

Line No.	DESCRIPTION (1)	SSCD (2)	REFERENCE (3)
1	A. Operation and Maintenance Expense	\$10,878,078	O&M Expenses Worksheet
2	B. A&G Expense	\$164,843	A&G Expenses Worksheet
3	C. Depreciation Expense	\$278,475	Depreciation Expense Worksheet
4	D. Taxes Other than Income Taxes for Transmission	\$0	Not Applicable
			No General Plant identified at this time, all plant is identified as either generation or transmission related
5	E. Allocation of General Plant	\$0	
6	F. Cost of Capital		
7	Weighted Transmission Composite Interest Rate	4.882%	Cost of Capital Worksheet
8	Net Plant Investment	\$5,860,765	
9	Cost of Capital	\$286,123	L7*L8
10	H. Revenue Requirement		
11	Annual Western-UGPR Cost	\$11,607,518	L1+L2+L3+L9
12	Estimated SSCD Revenue from non-Transmission facilities	\$ 407,927	
13	Prior Year True-Up	\$ (2,288,252)	
14	Revenue Requirement for SSCD for Transmission facilities	\$8,911,338	L11-L12+L13

Western-UGP
2018 Estimated Facility Costs

Line No.		FID	DESCRIPTION	ESTIMATED FACILITY TOTAL (\$)	FY2018 EST SPP TOTALS (\$)
1	TL	AUR BR	AURORA- BROOKINGS 115-KV T/L	133,158	133,158
2	TL	AUR FL	AURORA-FLANDREAU 115-KV T/L	96,623	96,623
3	TL	BK HET	BAKER-HETTINGER	459,778	459,778
4	TL	BU GA	BEULAH-GARRISON	351,685	351,685
5	TL	BS GH	BISMARCK-GLENHAM	5,076,897	5,076,897
6	TL	BS JT 1	BISMARCK-JAMESTOWN NO. 1	7,067,948	7,067,948
7	TL	BS JT 2	BISMARCK-JAMESTOWN NO. 2	4,229,572	4,229,572
8	TL	BS MDR	BISMARCK-MEDORA	13,112,492	13,112,492
9	TL	BR SF	BROOKINGS-SIOUX FALLS	2,067,611	2,067,611
10	TL	BR WT 1	BROOKINGS-WATERTOWN NO. 1	1,718,240	1,718,240
11	TL	BR WT 2	BROOKINGS-WATERTOWN NO. 2	3,318,558	3,318,558
12	TL	BR WHT	BROOKINGS-WHITE 115/230KV	2,952,237	2,952,237
13	TL	CF EH A	CANYON FERRY-EAST HELENA "A"	141,044	141,044
14	TL	CF EH B	CANYON FERRY-EAST HELENA "B"	141,044	141,044
15	TL	CA JT	CARRINGTON-JAMESTOWN	1,259,668	1,259,668
16	TL	WC BU	CHARLIE CREEK - WATFORD CITY	13,451,446	13,451,446
17	TL	CCRB EF	CHARLIE CREEK-BELFIELD	14,513,308	14,513,308
18	TL	CONSH2	CONRAD-SHELBY #2	5,804,318	5,804,318
19	TL	CS MY	CRESTON-MARYVILLE	1,366,481	1,366,481
20	TL	DC MC	DAWSON COUNTY - MILES CITY	2,605,678	2,605,678
21	TL	DC GL	DAWSON-GLENDIVE	553,800	553,800
22	TL	DC MDR	DAWSON-MEDORA	3,026,142	3,026,142
23	TL	DC OF	DAWSON-O'FALLON CREEK	918,676	918,676
24	TL	DC WN	DAWSON-WILLISTON	1,258,900	1,258,900
25	TL	DN CS	DENISON-CRESTON	20,977,731	20,977,731
26	TL	DL CA	DEVILS LAKE-CARRINGTON	7,671,712	7,671,712
27	TL	DL LA	DEVILS LAKE-LAKOTA	1,872,142	1,872,142
28	TL	ED FO	EDGELEY-FORMAN	375,316	375,316
29	TL	ED GR	EDGELEY-GROTON	771,572	771,572
30	TL	ELCMA	ELK CREEK-NEWELL-MAURINE 115-kv T/L	60,704	60,704
31	TL	FA GK	FARGO-GRAND FORKS	2,369,098	2,369,098
32	TL	FA MO	FARGO-MORRIS	7,305,876	7,305,876
33	TL	FO SU D	FORMAN-SUMMIT (BISMARCK)	922,098	922,098
34	TL	FO SU C	FORMAN-SUMMIT (HURON)	3,440,115	3,440,115
35	TL	FP DC 1	FORT PECK-DAWSON 1	363,285	363,285
36	TL	FP DC 2	FORT PECK-DAWSON 2	8,301,710	8,301,710
37	TL	FP HV	FORT PECK-HAVRE	28,806,330	28,806,330

38	TL	FP WH	FORT PECK-WHATELY	157,876	157,876
39	TL	FP WN	FORT PECK-WILLISTON	10,096,097	10,096,097
40	TL	FP WP 2	FORT PECK-WOLF POINT #2	7,554,492	7,554,492
41	TL	FR FT D	FORT RANDALL-FORT THOMPSON 1&2	7,782,247	7,782,247
42	TL	FR GP	FORT RANDALL-GAVIN'S POINT	2,262,949	2,262,949
43	TL	FR GY	FORT RANDALL-GREGORY	777,327	777,327
44	TL	FR MV	FORT RANDALL-MT VERNON	967,828	967,828
45	TL	FR ON	FORT RANDALL-O'NEILL	679,540	679,540
46	TL	FR SC D	FORT RANDALL-SIOUX CITY 1&2	11,019,006	11,019,006
47	TL	FT GI	FORT THOMPSON-GRAND ISLAND	16,397,505	16,397,505
48	TL	FT HU D	FORT THOMPSON-HURON 230-KV 1&2	8,122,069	8,122,069
49	TL	FT SF D	FORT THOMPSON-SIOUX FALLS 1&2	10,455,917	10,455,917
50	TL	GA BS D	GARRISON-BISMARCK 230KV 1&2	6,991,140	6,991,140
51	TL	GA JT	GARRISON-JAMESTOWN	4,760,328	4,760,328
52	TL	GA ML	GARRISON-MALLARD	1,993,083	1,993,083
53	TL	GA WJ	GARRISON-WM. J. NEAL	1,540,944	1,540,944
54	TL	GP BN	GAVINS POINT-BELDEN	455,727	455,727
55	TL	GP SF	GAVINS POINT-SIOUX FALLS	2,782,330	2,782,330
56	TL	GF MO	GRANITE FALLS- MORRIS	3,279,089	3,279,089
57	TL	GF MNV	GRANITE FALLS-MINNESOTA VALLEY	156,778	156,778
58	TL	GTFCO	GREAT FALLS-CONRAD	12,744,945	12,744,945
59	TL	GY MS	GREGORY-MISSION	10,144,327	10,144,327
60	TL	GR HU	GROTON-HURON	1,212,199	1,212,199
61	TL	GR SU	GROTON-SUMMIT	3,255,847	3,255,847
62	TL	HV RB	HAVRE-RAINBOW	8,681,332	8,681,332
63	TL	HV SH2	HAVRE-SHELBY#2	5,561,905	5,561,905
64	TL	HE DV	HESKETT-DEVAUL	3,647,666	3,647,666
65	TL	HETNU	HETTINGER-NEW UNDERWOOD	11,263,708	11,263,708
66	TL	HU MV	HURON-MT VERNON	617,623	617,623
67	TL	HU WT D	HURON-WATERTOWN 230KV 1&3	6,319,622	6,319,622
68	TL	JT ED	JAMESTOWN-EDGELEY	324,360	324,360
69	TL	JT FA 1	JAMESTOWN-FARGO NO. 1	4,941,649	4,941,649
70	TL	JT FA 2	JAMESTOWN-FARGO NO. 2	3,155,850	3,155,850
71	TL	JT GK	JAMESTOWN-GRAND FORKS	26,295,922	26,295,922
72	TL	JT VC	JAMESTOWN-VALLEY CITY	1,055,414	1,055,414
73	TL	LE DL	LEEDS-DEVILS LAKE	8,982,948	8,982,948
74	TL	LE RL	LEEDS-ROLLA	3,762,722	3,762,722
75	TL	ML RG	MALLARD-RUGBY	1,089,083	1,089,083
76	TL	MR MS	MARTIN-MISSION	1,840,716	1,840,716
77	TL	MR PL	MARTIN-PHILIP	1,790,108	1,790,108
78	TL	MA RC	MAURINE-RAPID CITY	6,346,265	6,346,265

79	TL	MC BK	MILES CITY-BAKER	10,569,338	10,569,338
80	TL	MC CU	MILES CITY-CUSTER	3,750,704	3,750,704
81	TL	NU PL	NEW UNDERWOOD-PHILIP	2,915,316	2,915,316
82	TL	NU RC 1	NEW UNDERWOOD-RAPID CITY NO. 1	1,132,486	1,132,486
83	TL	NU RC 2	NEW UNDERWOOD-RAPID CITY NO. 2	309,991	309,991
84	TL	NU SG C	NEW UNDERWOOD-STEGALL (HURON)	2,651,860	2,651,860
85	TL	OA FT N	OAHE-FORT THOMPSON 230KV 1&2	3,973,416	3,973,416
86	TL	OA FT S	OAHE-FORT THOMPSON 230KV 3&4	5,563,296	5,563,296
87	TL	OA GH	OAHE-GLENHAM	5,949,648	5,949,648
88	TL	OA MA	OAHE-MAURINE	1,967,901	1,967,901
89	TL	OA NU	OAHE-NEW UNDERWOOD	6,683,770	6,683,770
90	TL	OA PI	OAHE-PIERRE	388,816	388,816
91	TL	OF MC	O'FALLON CREEK-MILES CITY	2,488,318	2,488,318
92	TL	PI PL	PIERRE-PHILIP	2,140,436	2,140,436
93	TL	ELCRC	RAPID CITY-ELK CREEK 115-kv T/L	52,064	52,064
94	TL	RG LE	RUGBY-LEEDS	2,235,655	2,235,655
95	TL	SH SH2	SHELBY-SHELBY #2	576,090	576,090
96	TL	SC DN	SIOUX CITY-DENISON	4,505,781	4,505,781
97	TL	SC SP	SIOUX CITY-SPENCER	1,938,353	1,938,353
98	TL	SC SF	SIOUX FALLS- SIOUX CITY	3,217,192	3,217,192
99	TL	SF VFO	SIOUX FALLS-VIRGIL FODNESS 230KV T-LINE	277,897	277,897
100	TL	SU WT	SUMMIT-WATERTOWN	6,743,203	6,743,203
101	TL	TT TI	TIBER TAP-TIBER	1,084,858	1,084,858
102	TL	UJ SF	UTICA JCT-SIOUX FALLS	3,485,236	3,485,236
103	TL	VC FO	VALLEY CITY-FORMAN	1,527,895	1,527,895
104	TL	VR GTF	VERONA GREAT FALLS 161-kv LINE	5,110,115	5,110,115
105	TL	UJ VFO	VIRGIL FODNESS-UTICA JUNCTION-FT RANDALL/RASMUS	312,931	312,931
106	TL	WT GF D	WATERTOWN-GRANITE FALLS 1&2	7,488,154	7,488,154
107	TL	WT SC	WATERTOWN-SIOUX CITY	26,924,889	26,924,889
108	TL	WC BU	WATFORD CITY-BEULAH	313,380	313,380
109	TL	WN WC	WILLISTON-WATFORD CITY	17,627,868	17,627,868
110	TL	WP CR	WOLF POINT-CIRCLE	8,867,960	8,867,960
111	TL	WJ RG	WM. J. NEAL-RUGBY	4,629,316	4,629,316
112	TL	YT CU	YELLOWTAIL-CUSTER	2,265,163	2,265,163
113	TL Total		TRANSMISSION LINES	539,798,772	539,798,772
114	SUB	AN	ANITA	6,259	6,259
115	SUB	APD	APPELDORN SUBSTATION	5,878,984	5,654,144
116	SUB	AR	ARMOUR SUBSTATION	2,278,492	1,528,571
117	SUB	AHS	ASH SUBSTATION	63,325	63,325
118	SUB	AB	ASSINNIBOINE	35,005	35,005
119	SUB	AUR	AURORA SUBSTATION	2,899,881	2,775,537

120	SUB	BK	BAKER	280,629	280,629
121	SUB	BN	BELDEN SUBSTATION	164,986	164,986
122	SUB	BEF	BELFIELD SUBSTATION	13,779,308	13,562,207
123	SUB	BE	BERESFORD SUBSTATION	4,706,447	4,179,787
124	SUB	BB	BISBEE SUBSTATION	272,529	56,597
125	SUB	BS	BISMARCK SUBSTATION	21,057,127	20,889,070
126	SUB	BI	BISON	12,472	12,472
127	SUB	BOL	BOLE SUB	3,019,775	2,390,572
128	SUB	BO	BONESTEEL SUBSTATION	3,398,446	2,171,822
129	SUB	BR	BROOKINGS SUBSTATION	4,460,377	4,460,377
130	SUB	CB	CAMPBELL COUNTY SWITCHING STATION /1	-	-
131	SUB	CF	CANYON FERRY	45,210	45,210
132	SUB	CRP	CARPENTER SUBSTATION	2,463,312	2,463,312
133	SUB	CA	CARRINGTON SUBSTATION	3,819,873	3,178,907
134	SUB	CCR	CHARLIE CREEK	1,376,076	1,376,076
135	SUB	CR	CIRCLE SUBSTATION	9,139,054	7,307,243
136	SUB	CON	CONRAD SUB	5,377,877	5,062,832
137	SUB	CS	CRESTON SUBSTATION	8,453,084	8,453,084
138	SUB	CRO	CROSSOVER SUB	11,176,976	11,176,976
139	SUB	CQE	CULBERTSON EAST SWITCHING STATION	2,390,851	2,390,851
140	SUB	CU	CUSTER SUBSTATION	4,633,608	4,037,764
141	SUB	CT	CUSTER TRAIL SUBSTATION	1,475,222	-
142	SUB	DC	DAWSON COUNTY SUBSTATION	10,551,258	10,550,231
143	SUB	DNT	DENBIGH TAP	848,872	810,134
144	SUB	DN	DENISON SUBSTATION	16,187,909	15,922,624
145	SUB	DV	DEVAUL SUBSTATION	1,654,628	772,357
146	SUB	DL	DEVILS LAKE SUBSTATION	2,918,474	2,756,503
147	SUB	DK	DICKINSON	23,704	23,704
148	SUB	EJ	E. J. MANNING	49,112	49,112
149	SUB	EA	EAGLE	66,108	66,108
150	SUB	EB	EAGLE BUTTE SUBSTATION	1,347,433	1,107,263
151	SUB	ED	EDGELEY SUBSTATION	6,569,979	5,820,725
152	SUB	ELC	ELK CREEK SUBSTATION	2,099,907	2,075,418
153	SUB	EL	ELLENDALE SUBSTATION	579	-
154	SUB	ELI	ELLIOTT SWITCHING STATION	3,121,488	3,046,320
155	SUB	END	ENDERLIN TAP STATION	749,768	509,134
156	SUB	EXI	EXIRA SWITCHING STATION	5,500,776	5,385,485
157	SUB	FVW	FAIRVIEW WEST SWITCHING STATION	4,296,873	4,296,873
158	SUB	FH	FAITH SUBSTATION	1,224,932	744,323
159	SUB	FA	FARGO SUBSTATION	27,341,908	27,341,908
160	SUB	FL	FLANDREAU SUBSTATION	4,222,330	4,181,895

161	SUB	FO	FORMAN SUBSTATION	6,217,170	5,371,843
162	SUB	FTH	FORSYTH	130,348	130,348
163	SUB	FR	FORT RANDALL	253,710	253,710
164	SUB	FT2	FORT THOMPSON #2	10,793,612	10,793,612
165	SUB	FT	FORT THOMPSON SUBSTATION	17,605,121	17,511,519
166	SUB	GL	GLENDIVE SUBSTATION	1,725,310	1,725,310
167	SUB	GK	GRAND FORKS SUBSTATION	10,447,494	10,447,494
168	SUB	GI	GRAND ISLAND SUBSTATION	16,277,289	16,277,289
169	SUB	GRP	GRAND PRAIRIE SUBSTATION /1	536	536
170	SUB	GF	GRANITE FALLS SUBSTATION	23,650,839	21,913,508
171	SUB	GTF	GREAT FALLS SUB	8,439,044	8,439,044
172	SUB	GY	GREGORY SUBSTATION	1,543,285	1,499,533
173	SUB	GR	GROTON SUBSTATION	5,310,945	5,163,100
174	SUB	GSO	GROTON SOUTH SUBSTATION	8,536,000	8,536,000
175	SUB	HA	HARLEM	98,534	98,534
176	SUB	HV	HAVRE SUBSTATION	11,822,560	11,688,186
177	SUB	HBN	HEBRON SUBSTATION /1	-	-
178	SUB	HET	HETTINGER	10,832	10,832
179	SUB	HLK	HILKEN SUBSTATION	3,894,020	3,749,986
180	SUB	HU	HURON SUBSTATION	11,331,376	10,996,899
181	SUB	JT	JAMESTOWN SUBSTATION	21,250,110	19,636,231
182	SUB	KD	KILLDEER SUBSTATION	7,052,536	6,583,888
183	SUB	LA	LAKOTA SUBSTATION	2,796,418	1,488,581
184	SUB	LE	LEEDS SUBSTATION	3,943,917	3,785,195
185	SUB	LET	LETCHER SUBSTATION	11,108,748	11,108,748
186	SUB	ML	MALLARD	29,969	29,969
187	SUB	MT	MALTA	340,848	340,848
188	SUB	MDN	MANDAN SUBSTATION	19,476	19,476
189	SUB	MR	MARTIN SUBSTATION	1,829,481	847,810
190	SUB	MA	MAURINE SUBSTATION	8,287,348	8,104,233
191	SUB	MD	MIDLAND SUBSTATION	836,212	689,069
192	SUB	MC2	MILES CITY SUB #2	6,386,403	6,386,403
193	SUB	MC3	MILES CITY SUB #3	1,895,702	1,895,702
194	SUB	MC	MILES CITY SUBSTATION	1,242,288	1,242,288
195	SUB	MGV	MINGUSVILLE	5,440,000	5,440,000
196	SUB	MS	MISSION SUBSTATION	3,473,710	2,888,367
197	SUB	MO	MORRIS SUBSTATION	7,229,447	6,297,826
198	SUB	MV	MT VERNON SUBSTATION	2,030,824	1,892,893
199	SUB	NA	NASHUA SUB	72,368	-
200	SUB	NEL	NELSON SUBSTATION	1,944,817	1,911,073
201	SUB	NU	NEW UNDERWOOD SUBSTATION	18,612,551	18,571,416

202	SUB	NL	NEWELL SUBSTATION	2,568,762	2,296,568
203	SUB	OF	O'FALLON CREEK SUBSTATION	3,264,302	3,216,941
204	SUB	ON	O'NEILL SUB (NPP)	180,660	180,660
205	SUB	PET	PENN TAP	890,607	851,881
206	SUB	PL	PHILIP SUBSTATION	2,037,148	1,808,499
207	SUB	PI	PIERRE SUBSTATION	4,284,664	3,573,508
208	SUB	PLL	PLEASANT LAKE TAP	992,415	951,783
209	SUB	RB	RAINBOW SUBSTATION	250,629	-
210	SUB	RC	RAPID CITY SUBSTATION	14,783,428	14,260,805
211	SUB	RH	RICHLAND SUBSTATION	1,733,528	-
212	SUB	RL	ROLLA SUBSTATION	623,513	623,513
213	SUB	RY	RUDYARD SUBSTATION	3,234,229	1,813,249
214	SUB	RG	RUGBY SUBSTATION	8,848,633	8,598,449
215	SUB	SA	SAVAGE SUB	74,403	74,403
216	SUB	SH	SHELBY SUBSTATION	861,699	(96,933)
217	SUB	SH2	SHELBY SUBSTATION #2	5,188,377	5,018,681
218	SUB	SL	SHIRLEY TAP	22,102	22,102
219	SUB	SC2	SIOUX CITY #2	13,390,487	13,390,487
220	SUB	SC	SIOUX CITY SUBSTATION	19,174,215	19,174,215
221	SUB	SF	SIOUX FALLS SUBSTATION	14,642,087	14,164,186
222	SUB	SP	SPENCER	5,856,077	5,764,801
223	SUB	SNY	STANLEY	49,735	49,735
224	SUB	SB	SULLY BUTTES	74,428	74,428
225	SUB	SU	SUMMIT SUBSTATION	2,821,313	2,447,465
226	SUB	TR	TERRY TAP	606,044	517,786
227	SUB	TT	TIBER TAP	166,306	166,306
228	SUB	TN	TOWNER SUBSTATION	6,273,000	6,273,000
229	SUB	TY	TYNDALL SUBSTATION	931,157	882,074
230	SUB	UJ	UTICA JCT.	12,974,150	12,974,150
231	SUB	VH	V. T. HANLON	10,224,553	10,224,553
232	SUB	VC	VALLEY CITY SUBSTATION	6,819,468	6,572,732
233	SUB	VR	VERONA	108,751	108,751
234	SUB	VE	VETAL TAP	232,375	232,375
235	SUB	VFO	VIRGIL FODNESS SUBSTATION	3,206,763	3,206,763
236	SUB	WNB	WANBLEE TAP	-	-
237	SUB	WL	WALL SUBSTATION	1,569,037	840,011
238	SUB	WDD	WARD SUBSTATION	3,453,847	3,408,486
239	SUB	WB	WASHBURN SUBSTATION	2,071,165	1,122,253
240	SUB	WT2	WATERTOWN #2	2,900,981	2,900,981

241	SUB	WTS	WATERTOWN STATIC VAR SYSTEM	11,778,775	11,778,775
242	SUB	WT	WATERTOWN SUBSTATION	16,036,010	16,036,010
243	SUB	WC	WATFORD CITY SUB	7,600,294	7,600,294
244	SUB	WSG	WESSINGTON SPRINGS SUBSTATION	5,141,440	4,968,129
245	SUB	WH2	WHATELY (NORTHERN)	40,860	40,860
246	SUB	WH	WHATELY SUBSTATION	109,910	55,663
247	SUB	WHT	WHITE 345/115 SUB	11,022,034	11,022,034
248	SUB	WV	WICKSVILLE SUBSTATION	839,174	766,048
249	SUB	WN2	WILLISTON 2 SUBSTATION	13,797,713	13,797,713
250	SUB	WN	WILLISTON SUBSTATION	10,064,217	9,966,897
251	SUB	WI	WINNER SUBSTATION	3,234,614	3,135,555
252	SUB	WJ	WM. J. NEAL	156,417	156,417
253	SUB	WP	WOLF POINT SUBSTATION	7,181,905	5,856,171
254	SUB	WO	WOONSOCKET SUBSTATION	2,953,732	1,966,208
255	SUB	YJ	YANKTON JCT.	76,396	76,396
256	SUB	YA	YANKTON SUBSTATION	43,844	-
257	SUB Total		SUBSTATIONS	692,814,794	657,863,847
258	O&M	ARC	ARMOUR O&M SER. CEN.	3,488,667	3,488,667
259	O&M	BSM	BISMARCK O&M SER. CEN.	9,917,899	9,917,899
260	O&M	DCF	DAWSON SER. CEN.	6,845,966	6,845,966
261	O&M	DLM	DEVILS LAKE O&M SER. CEN.	3,852,064	3,852,064
262	O&M	FAO	FARGO LINE MAINTENANCE FACILITY	2,040,287	2,040,287
263	O&M	FAM	FARGO O&M SER. CEN.	794,673	794,673
264	O&M	FPM	FORT PECK SER. CEN.	5,650,952	5,650,952
265	O&M	FTM	FORT THOMPSON O&M S. C.	315,000	315,000
266	O&M	HVM	HAVRE SERVICE CENTER	249,377	249,377
267	O&M	HUM	HURON O&M SER. CEN.	2,512,836	2,512,836
268	O&M	JTM	JAMESTOWN O&M SER. CEN.	3,841,398	3,841,398
269	O&M	MCM	MILES CITY MTCE FAC.	1,025,254	1,025,254
270	O&M	NUM	NEW UNDERWOOD SER. CEN.	96,884	96,884
271	O&M	PLM	PHILIP O&M SER. CENT.	1,679,674	1,679,674
272	O&M	PIM	PIERRE O&M SER. CEN.	1,051,383	1,051,383
273	O&M	RCM	RAPID CITY GARAGE & STOR.	2,221,623	2,221,623
274	O&M	SCM	SIOUX CITY O&M SER. CEN.	3,007,882	3,007,882
275	O&M	SFC	SIOUX FALLS O&M SER. CEN.	239,920	239,920
276	O&M	WTM	WATERTOWN MAINT. CEN.	7,366,309	7,366,309
277	O&M Total		O&M SERVICE & MAINT. CENTERS	56,198,048	56,198,048
278	OPS	WAO	WATERTOWN ALTERNATE OPERATIONS CENTER	6,304,774	4,479,542
279	OPS	WTO	WATERTOWN OPERATIONS CENT	1,104,084	719,716
280	OPS	WTO F	WATERTOWN OPER CTR (BFPS)	11,553,752	7,602,006
281	OPS Total		OPERATION CENTERS	18,962,610	12,801,264

282	MOB	MOBW2	MOB 115KV SWITCH TRAILER	69,741	69,741
283	MOB	MOBT13	MOB TRANSF 111KV 15MVA	213,000	213,000
284	MOB	MOBT2	MOB TRANSF 115KV 10MVA	218,493	218,493
285	MOB	MOBT12	MOB TRANSF 115KV 25MVA	556,464	556,464
286	MOB	MOBT4	MOB TRANSF 115KV 40MVA	526,201	526,201
287	MOB	MOBT6	MOB TRANSF 230KV 1-33MVA	170,278	170,278
288	MOB	MOBB2	MOBILE BY PASS KIT (BISMARCK)	35,071	35,071
289	MOB	MOBB1	MOBILE BY PASS KIT (HURON)	163,695	163,695
290	MOB	MOBC4	MOBILE CAPACITOR BANK	19,075	19,075
291	MOB	MOBS6	MOBILE SUB 110KV	127,144	127,144
292	MOB	MOBS9	MOBILE SUB 115KV 20MVA	404,166	404,166
293	MOB	MOBS7	MOBILE SUB 41.8 KV	192,498	-
294	MOB	MOBS5	MOBILE SUB 69KV	71,118	71,118
295	MOB	MOBR2	MOB SH.REACTOR	179,328	179,328
296	MOB Total		MOBILE EQUIPMENT	2,946,272	2,753,774
297	GEN	BG FT L	BIG BEND-FORT THOMPSON (LOW VOLTAGE)	81,944	-
298	GEN	FP	FORT PECK POWERPLANT (COE)	64,611	-
299	GEN	FT BG 1	FORT THOMPSON-BIG BEND NO. 1	922,164	922,164
300	GEN	FT BG 2	FORT THOMPSON-BIG BEND NO. 2	690,735	690,735
301	GEN Total		TRANSMISSION-RELATED GEN. FACILITIES	1,759,454	1,612,899
302	COM	ATC	ATLANTIC COMMUNICATION SITE	17,199	11,747
303	COM	BK2	BAKER RELAY	248,874	169,981
304	COM	BTY	BANTRY	343,131	234,358
305	COM	BAE	BARRETT	99,835	68,187
306	COM	BMW	BATTLE MT. MICROWAVE	324,151	221,395
307	COM	BPR	BELLE PRAIRIE	152,583	104,214
308	COM	BET	BENEDICT	36,772	25,115
309	COM	BU	BEULAH	10,679	7,294
310	COM	BG	BIG BEND	113,362	77,426
311	COM	BJR	BIJOU REPEATER	564,784	385,747
312	COM	BSR	BISMARCK REPEATER	248,435	169,681
313	COM	BIR	BISON REPEATER	227,955	155,693
314	COM	BON	BOLE NORTH REPEATER	149,228	101,923
315	COM	BRI	BRINSMADE	147,129	100,489
316	COM	BSL	BRISTOL	11,441	7,814
317	COM	BRV	BRUNSVILLE REPEATER	92,595	63,242
318	COM	BFF	BUFFALO	107,342	73,315
319	COM	CAH	CAHOON	194,709	132,986
320	COM	CAZ	CARRINGTON REPEATER	693,236	473,480
321	COM	CHK	CHARTER OAK REPEATER	15,667	10,701
322	COM	CHI F	CHINOOK (BEFP)	284,048	194,005

323	COM	CHR	CHINOOK REPEATER	15,293	10,445
324	COM	CKR	CLARK MW REPEATER	731,291	499,472
325	COM	CLV	CLEVELAND REPEATER, N.D.	66,872	45,674
326	COM	CMR	COLEMAN REPEATER	105,281	71,907
327	COM	CME	COLOME REPEATER	293,101	200,188
328	COM	CBR	CONRAD BUTTE REPEATER	455,668	311,221
329	COM	CNN	COTTON	1,399	956
330	COM	CSR	CRESTON REPEATER	11,107	7,586
331	COM	CLR	CROW LAKE REPEATER	246,521	168,374
332	COM	CBT	CROWN BUTTE	52,565	35,902
333	COM	CRR	CULBERTSON RADIO RELAY SITE	1,926	1,315
334	COM	CUL	CUSTER LOOKOUT	80,620	55,063
335	COM	DAL	DALTON (WES)	63,660	43,480
336	COM	DLC	DEVILS LAKE FIBER REGEN	273,047	186,491
337	COM	DLZ	DEVILS LAKE REPEATER	518,898	354,407
338	COM	DOD	DODSON REPEATER	882,795	602,949
339	COM	DO	DOGDEN BUTTE	281,286	192,118
340	COM	DRS	DRISCOLL	79,113	54,034
341	COM	DU	DUPREE REPEATER	1,821	1,244
342	COM	DUT	DUTTON REPEATER (BEFP)	75,190	51,355
343	COM	ERB	EAST RAINY BUTTE	147,041	100,429
344	COM	ECK	ECKELSON	231,893	158,383
345	COM	EKR	ELKTON	165,481	113,024
346	COM	ELZ	ELLENDALE REPEATER	644,579	440,247
347	COM	EWA	ELLSWORTH AIR BASE	204,548	139,706
348	COM	ERH	ERHARD	99,569	68,006
349	COM	EX	EXIRA REPEATER	2,527	1,726
350	COM	FB	F. L. BLAIR	76,407	52,186
351	COM	FAP	FAIRPOINT REPEATER	206,550	141,074
352	COM	FNR	FALLON REPEATER	212,944	145,441
353	COM	FCS	FERGUS FALLS COMMUNICATIONS SITE	485,567	331,642
354	COM	FLW	FLOWING WELLS	68,763	46,965
355	COM	FBS	FORBES COMMUNICATION SITE	45,316	30,951
356	COM	FP1	FORT PECK RELAY (WES)	326,153	222,762
357	COM	FPC	FORT PECK COMMUNICATIONS BUILDING	380,212	259,685
358	COM	FPR	FORT PECK REPEATER	109,069	74,494
359	COM	FTR	FORT THOMPSON REPEATER	99,223	67,769
360	COM	FTP	FORT THOMPSON REPEATER (EAST RIVER)	301,614	206,002
361	COM	FCR	FOX CREEK MICROWAVE	423,094	288,973
362	COM	FRY	FRYBURG SUB & MICROWAVE	61,204	41,802
363	COM	GA	GARRISON	736,244	502,855

364	COM	GRR	GARY REPEATER	80,799	55,186
365	COM	GP	GAVIN'S POINT	148,752	101,598
366	COM	GPR	GAVINS POINT REPEATER	315,049	215,178
367	COM	GET	GETTYSBURG REPEATER	368,771	251,871
368	COM	GH	GLENHAM	293,701	200,598
369	COM	GKM	GRAND FORKS MINNKOTA (MPC)	23,847	16,288
370	COM	HSB	HAILSTONE BUTTE	74,835	51,112
371	COM	HOY	HALLOWAY REPEATER	109,706	74,929
372	COM	HRT	HARLEM REPEATER	882,588	602,808
373	COM	HTH	HATHAWAY	68,891	47,053
374	COM	HMW	HERMOSA MICROWAVE	302,701	206,745
375	COM	HLR	HIGHLAND REPEATER	22,884	15,630
376	COM	HMR	HIGHMORE REPEATER	145,723	99,529
377	COM	HIW	HIGHWOOD	22,896	15,638
378	COM	HI	HINSDALE	201,837	137,855
379	COM	HIR	HINSDALE REPEATER	66,495	45,416
380	COM	HOE	HOPEWELL REPEATER	231,172	157,890
381	COM	HNT	HUNTER MICROWAVE	210,227	143,585
382	COM	HUD	HURON DISTRICT OFFICE	768,139	524,639
383	COM	HYS	HYSHAM	90,227	61,625
384	COM	JTR	JAMESTOWN REPEATER	46,981	32,088
385	COM	JCK	JONES CREEK	267,395	182,631
386	COM	KCK	KELLY CREEK	202,226	138,120
387	COM	KDZ	KILLDEER REPEATER	572,792	391,217
388	COM	KNE	KNEE HILL MW	471,997	322,374
389	COM	LAC	LAC QUI PARLE	751,513	513,283
390	COM	LKR	LAKE ANDES REPEATER	722,674	493,586
391	COM	LEF	LEFOR	48,470	33,105
392	COM	LI	LINDSAY RIDGE	79,074	54,008
393	COM	LCS	LINTON COMMUNICATIONS SITE	339,867	232,129
394	COM	LMO	LITTLE MISSOURI SUBSTATION	54,516	37,234
395	COM	LDP	LODGEPOLE REPEATER	32,445	22,160
396	COM	MRP	MALTA REPEATER	793,844	542,195
397	COM	MNM	MANDAN MICROWAVE SITE	69,988	47,802
398	COM	MPR	MAPLE RIVER	172,792	118,017
399	COM	MRR	MARTIN REPEATER	300,728	205,397
400	COM	MAV	MAYVILLE	196,624	134,294
401	COM	MLR	MIDLAND REPEATER	516,515	352,780
402	COM	MOX	MOE REPEATER	129,266	88,289
403	COM	MH	MOORHEAD	125,057	85,414
404	COM	MSR	MORRIS REPEATER & MICROWAVE	128,242	87,589

405	COM	NWC	NEWCASTLE REPEATER	216,330	147,753
406	COM	OA	OAHE	577,874	394,688
407	COM	OK	O'KREEK REPEATER	367,630	251,091
408	COM	OR	ORCHARD REPEATER	428,707	292,807
409	COM	OTO	OTO MICROWAVE	16,445	11,232
410	COM	OTW	OTTUMWA ROAD REPEATER SITE	7,685	5,249
411	COM	PGE	PAGE N.D.	1,646	1,124
412	COM	PAH	PAHOJA SUB	107,003	73,083
413	COM	PEK	PEAK	83,844	57,265
414	COM	PLJ	PHILIP JCT. REPEATER	530,459	362,303
415	COM	PIR	PINE RIDGE	186,735	127,540
416	COM	PO	POPLAR (MDU)	3,758	2,567
417	COM	PRR	PRIMGHAR REPEATER	27,264	18,621
418	COM	PUR	PUKWANNA REPEATER	258,360	176,460
419	COM	RCR	RAPID CITY REPEATER	340,932	232,857
420	COM	RE	RICHARDSON COULEE	161,748	110,474
421	COM	RER	RICHARDSON COULEE REPEATER	166,315	113,593
422	COM	RHM	RICHLAND MW REPEATER (BEPS)	528,922	361,254
423	COM	RRR	ROCKY RIDGE REPEATER	226,934	154,996
424	COM	ROG	ROLLAG	172,922	118,106
425	COM	RGZ	RUGBY REPEATER	472,290	322,574
426	COM	RI	RUTLAND	890,560	608,252
427	COM	SAO	SACO	1,237	845
428	COM	SNB	SENTINEL BUTTE	87,667	59,877
429	COM	SRE	SHEEP COULEE REPEATER	475,744	324,933
430	COM	SCQ	SIOUX CITY REPEATER	427,162	291,752
431	COM	SFR	SIOUX FALLS REPEATER	330,718	225,880
432	COM	SI	SIOUX PASS	1,366	933
433	COM	SNA	SNAKE BUTTE REPEATER	670,911	458,232
434	COM	SPN	SPALDING REPEATER	549,514	375,318
435	COM	SM	SPIRIT MOUND	295,982	202,156
436	COM	STR	STRASBERG	1,853	1,266
437	COM	SMR	SUMMIT REPEATER	50,053	34,186
438	COM	TCS	TAPPEN COMMUNICATIONS SITE	291,767	199,277
439	COM	TA	TAPPEN REPEATER	431,247	294,542
440	COM	TEN	TENNANT COMMUNICATIONS SITE	8,782	5,998
441	COM	TOR	TORONTO REPEATER	106,096	72,464
442	COM	TFR	TRIPP REPEATER	235,958	161,159
443	COM	TU	TURKEY RIDGE REPEATER	586,206	400,379
444	COM	TYE	TYLER REPEATER	1,239,694	846,711
445	COM	VIC	VICTOR (EREC)	35,530	24,267

446	COM	VIA	VIDA	98,597	67,342
447	COM	WLR	WALL REPEATER	479,343	327,391
448	COM	WTR	WATERTOWN REPEATER	713,148	487,080
449	COM	WS	WAYSIDE	17,781	12,144
450	COM	WSR	WESSINGTON SPGS. REPEATER	677,279	462,582
451	COM	WEF	WESTFIELD	19,003	12,979
452	COM	WSW	WHITE SWAN	91,987	62,827
453	COM	WK C	WHITLOCK (BCPS)	165,594	113,101
454	COM	WOB	WOLBACH REPEATER	28,280	19,315
455	COM	YT P	YELLOWTAIL SWITCHYARD (BEPS)	223,367	152,560
456	COM Total		COMMUNICATION FACILITIES	37,917,082	25,897,367
457	MCCS	MC4	MILES CITY CONVERTER STATION - BEPS	19,890,751	19,890,751
458	MCCS	MC4	MILES CITY CONVERTER STATION - BEFP	3,643,319	3,643,319
459	MCCS Total		MILES CITY CONVERTER STATION	23,534,070	23,534,070
460	DIST	BFTBP	BUFORD TRENTON TAP - BUFORD TRENTON P.P.	650,001	-
461	DIST	BP	BUFORD TRENTON PUMP SUB	184,827	-
462	DIST	FN	FALLON PUMPING PLANT SUBS	223,594	-
463	DIST	FE	FALLON RELIFT PUMPING PLA	171,257	-
464	DIST	FN GG	FALLON-GLENDIVE PUMP #4	25,506	-
465	DIST	FP WP	FORT PECK-WOLF POINT	190,500	-
466	DIST	FG	FRAZER PUMP SUB	253,597	-
467	DIST	GA SK	GARRISON-SNAKE CREEK	1,103,389	-
468	DIST	GG	GLENDIVE P.P. #1 SUB.	425,706	-
469	DIST	IN	INTAKE SUBSTATION	108,040	-
470	DIST	IN INP	INTAKE-INTAKE PUMP	6,494	-
471	DIST	SV	SAVAGE PUMPING PLANT SUBS	102,283	-
472	DIST	SY	SHIRLEY PUMP SUBSTATION	1,321,270	-
473	DIST	SK	SNAKE CREEK PUMP SUBSTATION	920,941	-
474	DIST	TE	TERRY PUMPING PLANT SWITCH	474,404	-
475	DIST	TI	TIBER DAM SUBSTATION	318,568	-
476	DIST	VA	WIOTA SUBSTATION	216,163	-
477	DIST Total		DISTRIBUTION FACILITIES	6,696,540	-
478	RMR	NU SG	NEW UNDERWOOD-STEGALL	287,835	287,835
479	RMR	SG	STEGALL SUBSTATION	9,030,765	302,609
480	RMR	SG WY	STEGALL-WAYSIDE	2,978,205	2,978,205
481	RMR	WY	WAYSIDE	237,296	237,296
482	RMR	YT PY	YELLOWTAIL SWITCHYARD-YELLOWTAIL (PPL)	121,495	30,374
483	RMR	PY	YELLOWTAIL (PPL)	692,335	173,084
484	RMR	YT P	YELLOWTAIL SWITCHYARD	12,779,485	3,194,871
485	RMR	YT	YELLOWTAIL SWITCHYARD (YT)	120,611	120,611
486	RMR Total		ROCKY MOUNTAIN REGION FACILITIES	26,248,027	7,324,885

487	COE	CORPS SWITCHYARD FACILITIES	145,117,457	110,936,197
488	COE Total	CORPS OF ENGINEERS FACILITIES	145,117,457	110,936,197
489	Grand Total	TOTAL	1,551,993,126	1,438,721,122
490		SUBTOTAL WESTERN-UGP ONLY	1,380,627,642	1,320,460,041
491		1/ Plant balance does not include customer liability for network upgrades. Investment is only brought		
492		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, 2018 Rates*										
Line No.	Facility	Specific Plant Included	Attachment AI Criteria						Further Description	
			1	1(b)	2	3	4	5		
1	Substations									
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							
6		station service KZ1A, KX2A and switches	x							maintenance building SS
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 1164, 1362, 1462, 1666, 1862, 1962, 2064 and assoc. switches	x										
40		capacitors PY11A and PY20A	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								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										

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 switches 163, 261, 361, 360, 961	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									

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														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																

399	Transmission Lines																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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547	Operation Centers											
548	WATERTOWN ALTERNATE				x							
	OPERATIONS CENTER											
549	WATERTOWN OPERATIONS				x							
	CENT											
550	WATERTOWN OPER CTR (BFPS)				x							
551												
552	Mobile Equipment											
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		x									
	(BISMARCK)											
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	Transmission-Related											
	Generation Facilities											
571	FORT THOMPSON-BIG BEND		x									
	NO. 1											
572	FORT THOMPSON-BIG BEND		x									
	NO. 2											
573												
574	Communication Facilities											
575	ANITA	SCADA			x							
576	ASSINNIBOINE	meters for NWMT NITS from Havre			x							
577	BAKER	microwave, RTU			x							
578	ATLANTIC COMMUNICATION				x							
	SITE											
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					
595	BUFFALO				x					
596	CAHOON				x					
597	CARRINGTON REPEATER				x					
598	CHARTER OAK REPEATER				x					
599	CHINOOK (BEFP)				x					
600	CHINOOK REPEATER				x					
601	CLARK MW REPEATER				x					
602	CLEVELAND REPEATER, N.D.				x					
603	COLEMAN REPEATER				x					
604	COLOME REPEATER				x					
605	CONRAD BUTTE REPEATER				x					
606	COTTON	meters for Central MT (Basin NITS)			x					
607	CRESTON REPEATER				x					
608	CROW LAKE REPEATER				x					
609	CROWN BUTTE				x					
610	CULBERTSON RADIO RELAY SITE				x					
611	CUSTER LOOKOUT				x					
612	DALTON (WES)				x					
613	DEVILS LAKE FIBER REGEN				x					
614	DEVILS LAKE REPEATER				x					
615	DICKINSON	communications equipment			x					
616	DODSON REPEATER				x					
617	DOGDEN BUTTE				x					
618	DRISCOLL				x					
619	DUPREE REPEATER				x					
620	DUTTON REPEATER (BEFP)				x					
621	EAGLE	microwave, RTU, SCADA			x					
622	EAST RAINY BUTTE				x					
623	ECKELSON				x					
624	E. J. MANNING	fiber, microwave, SCADA			x					
625	ELKTON				x					
626	ELLENDALE REPEATER				x					
627	ELLSWORTH AIR BASE				x					
628	ERHARD				x					
629	EXIRA REPEATER				x					
630	F. L. BLAIR				x					
631	FAIRPOINT REPEATER				x					
632	FALLON REPEATER				x					
633	FERGUS FALLS COMMUNICATIONS SITE				x					
634	FLOWING WELLS				x					

635	FORBES COMMUNICATION SITE					x							
636	FORSYTH radio, quarters, fence					x							
637	FORT PECK RELAY (WES)					x							
638	FORT PECK COMMUNICATIONS BUILDING					x							
639	FORT PECK REPEATER					x							
640	Fort Randall Multiplexer, Termination Equipment					x							
641	FORT THOMPSON REPEATER					x							
642	FORT THOMPSON REPEATER (EAST RIVER)					x							
643	FOX CREEK MICROWAVE					x							
644	FRYBURG SUB & MICROWAVE					x							
645	GARRISON					x							
646	GARY REPEATER					x							
647	GAVIN'S POINT					x							
648	GAVINS POINT REPEATER					x							
649	GETTYSBURG REPEATER					x							
650	GLENHAM					x							
651	GRAND FORKS MINNKOTA (MPC)					x							
652	HAILSTONE BUTTE					x							
653	HALLOWAY REPEATER					x							
654	HARLEM microwave, RTU					x							
655	HARLEM REPEATER					x							
656	HATHAWAY					x							
657	HERMOSA MICROWAVE					x							
658	HETTINGER RTU, PTs					x							
659	HIGHLAND REPEATER					x							
660	HIGHMORE REPEATER					x							
661	HIGHWOOD meters NWM T NITS from Great Falls					x							
662	HINSDALE					x							
663	HINSDALE REPEATER					x							
664	HOPEWELL REPEATER					x							
665	HUNTER MICROWAVE					x							
666	HURON DISTRICT OFFICE					x							
667	HYSHAM					x							
668	JAMESTOWN REPEATER					x							
669	JONES CREEK					x							
670	KELLY CREEK					x							
671	KILLDEER REPEATER					x							
672	KNEE HILL MW					x							
673	LAC QUI PARLE					x							
674	LAKE ANDES REPEATER					x							
675	LEFOR					x							
676	LINDSAY RIDGE					x							
677	LINTON COMMUNICATIONS SITE					x							

678	LITTLE MISSOURI SUBSTATION				x				
679	LODGEPOLE REPEATER				x				
680	MALLARD	RTU, SCADA			x				
681	MALTA	microwave, RTU			x				
682	MALTA REPEATER				x				
683	Mandan	multiplexer			x				
684	MANDAN MICROWAVE SITE				x				
685	MAPLE RIVER				x				
686	MARTIN REPEATER				x				
687	MAYVILLE				x				
688	MIDLAND REPEATER				x				
689	MILES CITY SUB (BEFP)				x				
690	MOE REPEATER				x				
691	MOORHEAD				x				
692	MORRIS REPEATER & MICROWAVE				x				
693	NEWCASTLE REPEATER				x				
694	OAHE				x				
695	O'KREEK REPEATER				x				
696	ORCHARD REPEATER				x				
697	OTO MICROWAVE				x				
698	OTTUMWA ROAD REPEATER SITE				x				
699	PAGE N.D.				x				
700	PAHOJA SUB				x				
701	PEAK				x				
702	PHILIP JCT. REPEATER				x				
703	PINE RIDGE				x				
704	POPLAR (MDU)	antenna, meters for MDU			x				
705	PRIMGHAR REPEATER				x				
706	PUKWANNA REPEATER				x				
707	RAPID CITY REPEATER				x				
708	RICHARDSON COULEE				x				
709	RICHARDSON COULEE REPEATER				x				
710	RICHLAND MW REPEATER (BEPs)				x				
711	ROCKY RIDGE REPEATER				x				
712	ROLLAG				x				
713	RUGBY REPEATER				x				
714	RUTLAND				x				
715	SACO				x				
716	SAVAGE	land, steel structure, meter equipment			x				
717	SENTINEL BUTTE				x				
718	SHEEP COULEE REPEATER				x				
719	SIOUX CITY REPEATER				x				
720	SIOUX FALLS REPEATER				x				
721	SIOUX PASS				x				

722	SNAKE BUTTE REPEATER				x					
723	SPALDING REPEATER				x					
724	SPIRIT MOUND				x					
725	STANLEY	meters to MDU			x					
726	STRASBERG				x					
727	SULLY BUTTES	fiber termination equipment			x					
728	SUMMIT REPEATER				x					
729	TAPPEN COMMUNICATIONS SITE				x					
730	TAPPEN REPEATER				x					
731	TENNANT COMMUNICATIONS SITE				x					
732	TORONTO REPEATER				x					
733	TRIPP REPEATER				x					
734	TURKEY RIDGE REPEATER				x					
735	TYLER REPEATER				x					
736	Verona	comm, multiplex, battery			x					
737	VICTOR (EREC)				x					
738	VIDA				x					
739	V. T. HANLON	SCADA			x					
740	WALL REPEATER				x					
741	WATERTOWN REPEATER				x					
742	WAYSIDE				x					
743	WESSINGTON SPGS. REPEATER				x					
744	WESTFIELD				x					
745	Whately (Northern)	Instrument Transformer			x					
746	WHITE SWAN				x					
747	WHITLOCK (BCPS)				x					
748	WM. J. NEAL	multiplexer			x					
749	WOLBACH REPEATER				x					
750	YANKTON JCT.	multiplexer, channel bank, SCADA			x					
751	YELLOWTAIL SWITCHYARD (BEPS)				x					

Western-UGP Facilities Excluded under AI January 1, 2018 Rates*			
Line No.	Facility	Specific Plant NOT Included	Further Description
1	Substations		
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	Remove 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 asswoc. 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 tranformer 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 switches 1163, 1165	
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	Transmission Lines		
160	SHELBY-SHELBY2	115-kV	
* 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.			

Campbell County	Added new Substation, customer funded GI Interconnection, no plant costs yet, 230 breakers 182, 282, 382 and assoc. switches
Forman	Added existing 69 breaker 452 and assoc. switches (Inadvertently left out of list previously. Costs previously included)
Grande Prairie	Added new Substation, customer funded GI Interconnection, no plant costs yet, 345 breakers 196, 292, 396, 298, 198 and assoc. switches, and reactors KU1A and KU2A
Groton	Added existing 115 breaker 1352 and assoc. switches, which now qualifies under AI (East River delivery – 2 customers)
Groton South	Added new Substation (pre-SPP join requirement for 2 nd Groton-Ordway 115kV line) and maintenance required replacement of existing Groton Substation equipment, 115 breakers 1162, 1262, 1266, 1362, 1462, 1466, 1562, 1662, 1666, 2062, 2066 and assoc. switches (breaker and one-half)
Hebron	Added new Substation, customer funded GI Interconnection, no plant costs yet, 230 breakers 586, 682, 882, 986 and assoc. switches
Lakota	Removed 115/69-kV transformer KY1A, switches 362, 363 (AI criteria)
Mingusville	Added new Substation (pre-SPP join requirement), 230 breakers 182, 282, 382, associated switches, line disconnects, and station service transformer KV10A and equipment
Spencer	Added Reactor PY6A, 161-kV breakers 162 and 662 and assoc. switches. Removed 161-kV switches 864 and 964. Added 69-kV breaker 1342 and assoc. switches. Removed voltage regulator KZ1A and assoc. switches. (substation reconfigured)
Towner	Added maintenance required replacement of existing Substation (previously owned by Central Power and included in Zone 19), 115 ring bus
VT Hanlon	Added maintenance required replacement of existing Substation (previously owned by East River and included in Zone 19), 230 ring bus
Wanblee Tap	Added new Substation 115-kV interrupters 162 and 262 and assoc. switches (customer funded, no new plant costs included)
Ward	Added new 230-kV breaker and assoc. switches in ring bus (customer funded, no new plant costs included)
Watford City	Added new 230-kV breaker bay addition for MDU Interconnection (customer funded, no new plant costs included)
Williston 2	Removed 230/115 transformers KV1A and KV2A (ownership clarified)

Western-UGP 2018 Estimate										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
1	Net Plant Investment Worksheet									
2	Total PS Plant-in-Service	1,380,627,642	1/	779,116,202	2/	1,106,790,095	3/	489,861,972	12/	3,756,395,910
3	PS-ED Transmission Plant-in-Service	1,320,460,041	4/	7,324,885	5/	110,936,197	6/	0		1,438,721,122
4	PS-ED Generation Plant-in-Service	18,327,616	7/	0		995,853,898	L2-L3	489,861,972	L2-L3	1,504,043,486
5	PS-ED SSCD Plant-in-Service	11,554,970	8/							
6	Generation Plant to Total Plant	0.01327	L4/L2	0.00000	L4/L2	0.89977	L4/L2	1.00000	L4/L2	
7	Transmission Plant to Total Plant	0.95642	L3/L2	0.00940	L3/L2	0.10023	L3/L2	0.00000	L3/L2	
8	SSCD Plant to Total Plant	0.00837	L5/L2							
9	PS Accumulated Depreciation	680,363,227	9/	364,537,798	10/	603,678,800	11/	284,935,758	13/	1,933,515,583
10	PS-ED Trans. Accumulated Depreciation	650,713,072	L7*L9	3,427,213	L7*L9	60,508,158	L7*L9	0	L7*L9	714,648,444
11	PS-ED Gen. Accumulated Depreciation	9,031,715	L6*L9	0	L6*L9	543,170,642	L9-L10	284,935,758	L6*L9	837,138,115
12	PS-ED SSCD Accumulated Depreciation	5,694,205								5,694,205
13	PS-ED Net Transmission Plant	669,746,969	L3-L10	3,897,671	L3-L9	50,428,038	L3-L10	0	L3-L10	724,072,679
14	PS-ED Net Generation Plant	9,295,901	L4-L11	0	L4-L10	452,683,257	L4-L11	204,926,214	L4-L11	666,905,371
15	PS-ED Net SSCD Plant	5,860,765	L5-L12							5,860,765
15	1/ Transmission Plant-in-Service Worksheet, C2L490									
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, C5L490									
19	5/ Transmission Plant-in-Service Worksheet, C5L486									
20	6/ Transmission Plant-in-Service Worksheet, C5L488									
21	7/ Transmission Plant-in-Service Worksheet, C3L490									
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 2018 Estimate									
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)	TOTAL (6)
1	Depreciation Worksheet								
2	PS Depreciation Expense	33,273,126	1/	18,424,185	2/	10,645,769	3/	3,231,667	4/ 65,574,747
3	PS-ED Transmission Depreciation 5/	31,823,087		173,216		1,067,051		0	33,063,353
4	PS-ED Generation Depreciation 6/	441,696		0		9,578,718		3,231,667	13,252,081
5	PS-ED SSCD Depreciation 7/	278,475							278,475
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 depreciation								
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 Plant								
14	Investment Worksheet								

Western-UGP 2018 Estimate										
Line No.	(1)	WESTERN-UGP (2)		WESTERN-RMR (3)		COE (4)		BOR (5)		TOTAL (6)
1	Cost of Capital Worksheet									
2	Long Term Debt:									
3	FY Balances	853,298,759	1/	468,408,981	1/	513,774,706	1/	184,478,122	1/	2,019,960,568
4	Interest Expenses:									
5	FY Interest	42,597,309	13/	27,845,333	13/	17,970,756	2/	8,600,278	2/	97,013,676
6	Average Interest Rate	4.992%	L6/L3	5.945%	L6/L3	3.498%	L6/L3	4.662%	L6/L3	
7	Transmission Plant Factor	0.9178	3/	0.0051	4/	0.0771	5/	0.0000	6/	
8	Weighted Trans. Composite Rate									4.882% 7/
9	Generation Plant Factor	0.0122	8/	0.0000	9/	0.6621	10/	0.3257	11/	
10	Weighted Gen. Composite Rate									3.895% 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 2018 Estimate						
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
1	A&G Expenses Worksheet					
2	Object Class	WESTERN-UGP 1/	WESTERN-RMR 2/	COE 3/	BOR 3/	Total
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	PS Total A&G	19,695,956	7,122,416	0	0	26,818,372
16	PS-ED Transmission A&G 4/	18,837,608	66,962	0	0	18,904,570
17	PS-ED Generation A&G 5/	261,461	0	0	0	261,461
18	PS-ED SSCD A&G 6/	164,843	0	0	0	164,843
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 Expenses					
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					
23	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					
25	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 2018 Estimate						
Line No.	(1)	WESTERN-UGP (2)	WESTERN-RMR (3)	COE (4)	BOR (5)	TOTAL (6)
1	O&M Expenses Worksheet					
2		WESTERN-UGP 1/	WESTERN-RMR 2/	COE 3/	BOR 4/	
3	Total Electric Operating Expense	76,622,000				76,622,000
4	Less:					
5	Other Power Supply Expenses					0
6	A&G Expenses	19,695,956				19,695,956
7	Prior Year Adjustments					0
8	Plus:					
9	Moveable Property Interest	3,730,000				3,730,000
10	Warehouse Stores Interest					0
11	Scheduling, System Control & Dispatch	10,878,078				10,878,078
12	COE/BOR Total			46,357,568	47,596,658	93,954,226
13	PS Total O&M	60,656,044	46,472,157	46,357,568	47,596,658	165,488,348
14	PS-ED Transmission O&M 5/	58,012,660	436,909	4,646,529	0	63,096,099
15	PS-ED Generation O&M 6/	805,199	0	41,711,039	47,596,658	90,112,896
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 2018 Estimate

Rate for Regulation and Frequency Response

Line No.	DESCRIPTION	REGULATION and FREQUENCY RESPONSE	REFERENCE
(1)	(2)	(3)	
1	Western Regulation Revenue Requirement	\$244,284	(1)
2	Over Collection - 2016 Regulation Revenue Rqmt	(\$55,493)	(2)
3	Average WAUW Control Area Load in 2016	120,000	
4	Average Total Control Area(s) Load in 2016 True-up	120,000	(3)
5	Ratio WAUW Control Area to Total Control Area(s)	1.0000	L3 / L4
6	Over Collection - 2016 WAUW Regulation Revenue Rqmt	(\$55,493)	L2 * L5
7	Total Regulation Revenue Rqmt with True-up	188,791	L1 + L6
(1)	Regulation and Frequency Response Service from "Regulation and Frequency Response for 2018, Western's Costs".		
(2)	Over/Under Collection "True-up of Regulation and Frequency Response Rate for 2016"		
(3)	Average of monthly peaks for 2016 Control Area(s).		
	Regulation and Frequency Response (Western's Costs)		
11	Fixed Charge Rate	15.225%	(4)
12	Corps Generation Net Plant Costs (\$)	\$ 452,683,257	(5)
13	Annual Corps Generation Cost (\$)	\$ 68,921,026	L1*L2
14	Plant Capacity (kW)	2,500,000	
15	Cost/kW (\$/kW)	\$ 27.57	L3/L4
16	Capacity Used for Regulation (kW)	8,861	
17	Regulation Revenue Requirement (\$) - Capacity	\$244,284	
18	Regulation Revenue Requirement (\$) - Purchases	\$0	(6)
19	Total Regulation Revenue Requirement (\$)	\$244,284	
(4)	Determination of Pick-Sloan Missouri Basin Program, Eastern Division Annual Corps Revenue Requirement for 2018 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 2018 Estimate

Rate for Reserves

Line No.	DESCRIPTION (1)	RESERVES (2)	REFERENCE (3)
1	Fixed Charge Rate	15.225%	(1)
2	Corps Generation Net Plant Costs (\$)	\$ 452,683,257	(2)
3	Annual Corps Generation Cost (\$)	\$ 68,921,026	L1*L2
4	Plant Capacity (kW)	2,500,000	
5	Cost/kW (\$/kW-Yr)	\$ 27.57	L3/L4
6	Prior Year True-Up	\$ (27,586)	
7	Monthly Charge (\$/kW-mo)	\$ 2.30	
8	Western's Maximum Load in WAUW Control Area (kW)	147,000	(3)
9	Maximum Generation in WAUW Control Area (kW)	97,500	(4)
10	Capacity used for Reserves (kW) -- 3% Load + 3% Gen	7,335	L8*3% + L9*3%
11	Annual Reserves Revenue Requirement	\$ 202,214	L10*L5
12	Over Collection - 2016 WAUW Reserve Revenue Rqmt	\$ (27,586)	
13	Total Regulation Reserves Rqmt with True-up	\$ 174,628	L11+L12
(1)	Determination of Pick-Sloan Missouri Basin Program, Eastern Division Annual Generation Revenue Requirement for 2018 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 2016.		
(4)	Northwest Power Pool Reserve Sharing System.		