



Western
Area Power
Administration

UGP 2018 Transmission & Ancillary Services Formula Rates

October 31, 2017

Customer Information Meeting

Billings, MT and via WebEx

Presented by:

Steve Sanders, UGP Operations and
Transmission Advisor

Purpose of Meeting

- Present the calculated UGP 2018 Transmission & Ancillary Services Formula Rates (and 2016 True-ups)
- As provided for in the *Federal Register* Notice published July 27, 2015 (80 FR 44342):
 - Western will provide customers the opportunity to discuss and comment on the recalculated revenue requirements on or before October 31 of each year.
- This meeting provides an opportunity to discuss the proper application of data in the formula rates, not the rate formulas themselves



UGP 2018 Rates Summary/Notices

Type of Service	Rate	Effective
Annual Transmission Revenue Requirement (ATRR for UMZ)	\$133,279,878	01/01/2018
Scheduling, System Control and Dispatch Service (SSCD for SPP OATT Schedule 1)	\$8,911,338	01/01/2018
Regulation and Frequency Response Service *	\$188,791	01/01/2018
Energy Imbalance Service * Index for Prevailing Market Energy Rate for EI	(see Note 1) not yet determined	01/01/2018
Generator Imbalance Service * Index for Prevailing Market Energy Rate for GI	(see Note 1) not yet determined	01/01/2018
Operating Reserves-Spinning Reserve Service and Supplemental Reserve Service *	\$174,628 (see Note 2)	01/01/2018
<p>Note 1: Western-UGP has elected to delay financial settlement for Energy Imbalance and Generator Imbalance until such time as certain billing procedures are finalized. Prior to charging and billing for these services on a financial basis, notice of Western-UGP's intent to initiate financial charging will be posted on Western-UGP's OASIS web site. Until the new financial settlement of Energy Imbalance is implemented, monthly energy imbalance accounts will be maintained, as in the past. These accounts will be repaid within the following month.</p> <p>Note 2: Index for Prevailing Market Energy Rate for Reserves: SPP Integrated Marketplace at Miles City DC Tie (MCWEST).</p> <p>* For UGP's WAUW Balancing Authority Area in the Western Interconnection</p>		



Annual Comparison

	CY2016 (est)	CY2017 (est)	CY2018 (est)
Gross Annual Transmission Revenue Requirement (ATRR)	\$145,449,367	\$149,874,331	\$150,606,142
Revenue Credits	\$(14,418,939)	\$(19,805,925)	\$(17,521,618)
True-up	\$7,294,940	\$16,967,212	\$195,354
Net ATRR	\$138,325,368	\$147,035,618	\$133,279,878
Gross Plant	\$1,301,131,134	\$1,363,411,106	\$1,438,721,122



Annual Comparison (cont.)

	CY2016(est)	CY2017 (est)	CY2018 (est)
Gross SSCD /1	\$12,218,940	\$12,063,539	\$11,607,518
Revenue Credits	\$0	\$443,560	\$407,927
True-Up /2	\$0	\$580,847	\$(2,288,252)
Net SSCD	\$12,218,940	\$12,200,825	\$8,911,338
Net Regulation /3	\$308,284	\$301,656	\$188,791
Net Reserves /3	\$236,842	\$257,621	\$174,628

/1 Scheduling, System Control and Dispatch Service (Schedule 1 in SPP OATT)

/2 Prior-year True-Up of ACTUAL Net SSCD Rev. Req'm't (for transmission) and ACTUAL SSCD Revenues (for transmission)

/3 Including associated true-ups



Annual comparison (cont.)

- True-up from the Integrated System (IS) is no longer being included (last true-up was in 2017 estimate for IS wrap-up in actual 2015 costs)
- Revenues received for Schedule 1 (SSCD) service may be adjusted which will impact future revenue requirement. SPP recently notified UGP that it has been incorrectly distributing amounts due to Corn Belt for Schedule 1 in UMZ to UGP. True-up reflects this excess revenue.



SSCD True-Up

- SSCD Costs are included in Gross Transmission ATRR, and must be deducted to get Net Transmission ATRR (in both Estimate and Actual calculations). Therefore, differences between the SSCD estimate and actuals costs are reflected in the Transmission ATRR True-Up. This is NOT the SSCD True-up.
- Separate SSCD True-Up in AS1 Ancillary Rate
 - True-Up = Actual SSCD Revenue Requirement (for transmission) – Actual revenue received (for transmission). Add to Forward Year Estimate.
 - For 2016, \$11,316,099-\$13,604,351 = \$(2,228,252)



SSCD Costs Removed from Transmission ATRR

WAPA-UGP-Trans-Anc-Service-Rates-Calc-2018-0101-temp.xlsx - Excel

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Line No.	TRANSMISSION ALLOC. ALLOCATED AMOUNT
1	150,606,142
2	5,064,000
3	747,000
4	0
5	11,607,518
6	103,100
7	0
8	17,521,618
9	195,354
10	0
11	133,279,878

Cover Sheets WAUGP-ATRR 2018 est WAUGP-AS1 2018 est Facilities 2018 est FACILITIES - Included per AI



SSCD True-Up Calculation

WAPA-UGP-Trans-Anc-Service-Rates-2016-TrueUp.xlsx - Excel

	A	B	C	D	E
		SPP	SPP	Western-UGP 2016 Difference	
		January - December 2016 Estimate	January - December 2016 Actual	Annual	
21					
22	Description				
23	Annual Actual Gross Revenue Requirement	145,449,367	148,958,523	3,509,156	
24	Short-Term Firm Point-to-Point Transmission Service Credit/1	\$ (36,446)	\$ (4,722,918)	\$ (4,686,472)	
25	Non-Firm Point-to-Point Transmission Service Credit	\$ (1,477,725)	\$ (529,803)	\$ 947,922	
26	Revenue from Existing Transmission Agreements	\$ (631,106)	\$ (15,145)	\$ 615,961	
27	Scheduling, System Control, and Dispatch Service Credit	\$ (12,218,940)	(\$11,777,630)	\$ 441,310	
28	Account No. 454	\$ (54,722)	\$ (108,162)	\$ (53,440)	
29	Total Revenue Credits	\$ (14,418,939)	\$ (17,153,658)	\$ (2,734,719)	
30	Prior Year True Up	\$ 7,294,940	\$ 7,294,940	\$ -	
31	2016 Net Revenue Requirement	138,325,368	139,099,805	774,437	
32	Network Revenue	\$ (138,325,368)	\$ (138,904,451)	\$ (579,083)	
33	Total 2016 True-up (to WAUGP-ATRR 2018 est)	\$ -	\$ 195,354	\$ 195,354	
34					
35	2016 Actual SSCD Revenue Requirement		\$ 11,316,099		
36	2016 Revenue received for SSCD service/2		\$ (13,604,351)		
37	Total true-up to include in 2018 estimate (to WAUGP-AS1 2018 est, Line 13)		\$ (2,288,252)		

Page 2

Cover Sheets WAUGP-ATRR 2016 true up WAUGP-AS1 2016 true up Facilities 2016 true up FACILITIES - Includ...



SSCD True-Up Calculation (cont.)

WAPA-UGP-Trans-Anc-Service-Rates-2016-TrueUp.xlsx - Excel

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Line No.	DESCRIPTION (1)	SSCD (2)	REFERENCE (3)
1	Western-UGP 2016 Actual		
2	Scheduling, System Control and Dispatch Service		
3			
4			
5	1 A. Operation and Maintenance Expense	\$11,068,743	O&M Expenses Worksheet
6	2 B. A&G Expense	\$150,549	A&G Expenses Worksheet
7	3 C. Depreciation Expense	\$266,086	Depreciation Expense Worksheet
8	4 D. Taxes Other than Income Taxes for Transmission	\$0	Not Applicable
9	5 E. Allocation of General Plant	\$0	No General Plant identified at this time, all plant is identified as either generation or transmission related
10	6 F. Cost of Capital		
11	7 Weighted Transmission Composite Interest Rate	4.915%	Cost of Capital Worksheet
12	8 Net Plant Investment	\$5,946,130	
13	9 Cost of Capital	\$292,252	L7*L8
14	10 H. Revenue Requirement		
15	11 Annual Western-UGPR Cost	\$11,777,630	L1+L2+L3+L13
16	12 SSCD Revenue from non-Transmission Facilities	\$461,531	
17	13 Revenue Requirement for SSCD for Transmission Facilities	\$11,316,099	L11-L12

Page 1

Cover Sheets WAUGP-ATRR 2016 true up WAUGP-AS1 2016 true up Facilities 2016 true up FACILITIES - Includr ...

READY 120%



Forward SSCD Rate reflects prior year SSCD True-Up

WAPA-UGP-Trans-Anc-Service-Rates-Calc-2018-0101-temp.xlsx - Excel

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Line No.	DESCRIPTION (1)	SSCD (2)	REFERENCE (3)
1	Western-UGP 2018 Estimate		
2	Scheduling, System Control, and Dispatch Service		
5	1 A. Operation and Maintenance Expense	\$10,878,078	O&M Expenses Worksheet
6	2 B. A&G Expense	\$164,843	A&G Expenses Worksheet
7	3 C. Depreciation Expense	\$278,475	Depreciation Expense Worksheet
8	4 D. Taxes Other than Income Taxes for Transmission	\$0	Not Applicable
9	5 E. Allocation of General Plant	\$0	No General Plant identified at this time, all plant is identified as either generation or transmission related
10	6 F. Cost of Capital		
11	7 Weighted Transmission Composite Interest Rate	4.882%	Cost of Capital Worksheet
12	8 Net Plant Investment	\$5,860,765	
13	9 Cost of Capital	\$286,123	L7*L8
14	10 H. Revenue Requirement		
15	11 Annual Western-UGPR Cost	\$11,607,518	L1+L2+L3+L9
16	12 Estimated SSCD Revenue from non-Transmission facilities	\$ 407,927	
17	13 Prior Year True-Up	\$ (2,288,252)	
18	14 Revenue Requirement for SSCD for Transmission facilities	\$8,911,338	L11-L12+L13

Page 1

Cover Sheets WAUGP-ATTR 2018 est WAUGP-AS1 2018 est Facilities 2018 est FACILITIES - Included per AI f ...



2018 Facility Changes

- A number of new facilities added (some removed):
 - Cost recovery for all non-GI related facilities is 100% Zonal in UMZ. No UGP Regional cost recovery yet.
 - Network Upgrades identified as pre-SPP join requirements and therefore not part of SPP Planning Process.
 - Maintenance replacements per UGP requirements.
 - GI related facilities due to pre-SPP join GI requests. Facilities funded by Interconnect Customers. No costs in UGP Transmission Plant yet.
 - New load interconnections. Facilities funded by Customer. No costs in UGP Transmission Plant yet.
- New/changed facilities now summarized in worksheet in .XLS labeled “Facilities Changes 20XX” (Pg. 41 in 2018 PDF)



2018 Facility Changes (cont.)

Western-UGP	Description
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 115 kV line) and maintenance requirement 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)

New worksheet in .XLS labeled “Facilities Changes 2018” (Pg. 41 in 2018 PDF)



2018 Facility Changes (cont.)

Western-UGP	Included in estimated facilities (2018)
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)

New worksheet in .XLS labeled “Facilities Changes 2018” (Pg. 41 in 2018 PDF)



More Information

Western-UGP OASIS Home Page (See Rates Folder)

<http://www.oasis.oati.com/wapa/index.html>

SPP Member Related Posting Page

<http://sppoasis.spp.org/documents/SWPP/MemberRelatedPostings/MemberRelatedPostings.asp>

UGP Rates Information

<https://www.wapa.gov/regions/UGP/rates/Pages/rates.aspx>

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Comment Addresses

Please send written comments by email to UGPTRates@wapa.gov or to the address below:

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Comments must be received by
November 20, 2017.

