

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA  
Allocation of Revenues  
TCJA Settlement - Docket GE17-003**

<b>Customer Class</b>	<b>Pro Forma 2017 Excluding Riders</b>				<b>TCJA Base Revenue Decrease</b>		
	<b>Customers</b>	<b>Kwh</b>	<b>KW</b>	<b>Total Revenue</b>	<b>Change</b>	<b>Total</b>	<b>%</b>
Residential Service	6,899	66,391,840		\$6,803,236	(\$39,237)	\$6,763,999	-0.6%
Small General Service	2,002	31,532,744	98,548.4	3,238,595	(17,183)	3,221,412	-0.5%
Large General Service	118	35,630,597	146,049.7	2,951,157	(16,034)	2,935,123	-0.5%
General Space Heating	144	5,713,526		325,219	(2,059)	323,160	-0.6%
Municipal Lighting	54	2,477,817		235,782	(1,342)	234,440	-0.6%
Municipal Pumping	50	1,482,823	7,173.1	118,807	(561)	118,246	-0.5%
Outdoor Lighting Service	559	807,360		70,628	(371)	70,257	-0.5%
<b>Total South Dakota Electric</b>	<b>9,826</b>	<b>144,036,707</b>	<b>251,771.2</b>	<b>\$13,743,424</b>	<b>(\$76,787)</b>	<b>\$13,666,637</b>	<b>-0.6%</b>

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**  
Allocation of Revenues  
TCJA Settlement - Docket GE17-003

Rate Class	Pro Forma 2017 Excluding Transmission & Infrastructure Riders					Allocation of Revenue Change 1/	Percent Increase	Rate Design Results			Authorized EL15-024	
	Bill Determinants	Kwh	KW	Total Revenue	Ratio			Revenue Change		Total	Total Revenue	Ratio
								\$	%			
Residential Service												
Rate 10	6,559	60,900,758	0.0	\$6,470,683	48.501%	(\$37,064)	-0.57%	(\$37,150)	-0.57%	\$6,433,533	\$7,070,007	48.501%
Rate 53	340	5,491,082	0.0	332,553	2.761%	(2,110)	-0.63%	(2,087)	-0.63%	330,466	402,451	2.761%
Total Residential	6,899	66,391,840	0.0	6,803,236	51.262%	(39,174)	-0.58%	(39,237)	-0.58%	6,763,999	7,472,458	51.262%
Small General Service												
Rate 20 Primary	1	3,300	0.0	472	0.004%	(3)	-0.64%	(2)	-0.42%	470	647	0.004%
Rate 20 Secondary	1,970	31,139,613	96,959.0	3,205,431	22.603%	(17,273)	-0.54%	(17,126)	-0.53%	3,188,305	3,294,958	22.603%
Subtotal	1,971	31,142,913	96,959.0	3,205,903	22.607%	(17,276)	-0.54%	(17,128)	-0.53%	3,188,775	3,295,605	22.607%
Rate 25	7	258,048	1,460.6	17,566	0.054%	(41)	-0.23%	(41)	-0.23%	17,525	7,903	0.054%
Rate 26	24	131,783	128.8	15,126	0.016%	(12)	-0.08%	(14)	-0.09%	15,112	2,261	0.016%
Total Small General	2,002	31,532,744	98,548.4	3,238,595	22.677%	(17,329)	-0.54%	(17,183)	-0.53%	3,221,412	3,305,769	22.677%
Large General Rate 30	118	35,630,597	146,049.7	2,951,157	20.811%	(15,904)	-0.54%	(16,034)	-0.54%	2,935,123	3,033,724	20.811%
Space Heating Rate 32	144	5,713,526	0.0	325,219	2.307%	(1,763)	-0.54%	(2,059)	-0.63%	323,160	336,349	2.307%
Municipal Lighting	54	2,477,817	0.0	235,782	1.727%	(1,320)	-0.56%	(1,342)	-0.57%	234,440	251,777	1.727%
Rate 48 Municipal Pumping	50	1,482,823	7,173.1	118,807	0.725%	(554)	-0.47%	(561)	-0.47%	118,246	105,708	0.725%
Rate 24 Outdoor Lighting Service	559	807,360	0.0	70,628	0.491%	(375)	-0.53%	(371)	-0.53%	70,257	71,568	0.491%
<b>Total South Dakota Electric</b>	<b>9,826</b>	<b>144,036,707</b>	<b>251,771.2</b>	<b>\$13,743,424</b>	<b>100.000%</b>	<b>(\$76,419)</b>	<b>-0.56%</b>	<b>(\$76,787)</b>	<b>-0.56%</b>	<b>\$13,666,637</b>	<b>\$14,577,353</b>	<b>100.000%</b>

1/ TCJA decrease calculated in accordance with Settlement Stipulation approved in Docket No. GE17-003 (\$76,419)  
Allocation based on revenue allocation authorized in EL15-024.

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Residential Electric Service - Rate 10  
TCJA Settlement - Docket GE17-003**

Residential Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>	6,559	\$0.247 per day	\$591,327	\$0.247 per day	\$591,327
<b>Basic Service Charge rate 95</b>	1	\$0.050 per day	18	\$0.050 per day	18
			<u>\$591,345</u>		<u>\$591,345</u>
<b>Energy</b>					
Summer	18,244,434	\$0.07923 per Kwh	1,445,507	\$0.07862 per Kwh	1,434,377
	<u>18,244,434</u>		<u>1,445,507</u>		<u>1,434,377</u>
Winter					
First 750	26,557,514	\$0.07923 per Kwh	2,104,152	\$0.07862 per Kwh	2,087,952
Over 750	16,098,810	\$0.04923 per Kwh	792,544	0.04862 per Kwh	782,724
	<u>42,656,324</u>		<u>2,896,696</u>		<u>2,870,676</u>
Total Energy	60,900,758		4,342,203		4,305,053
Transmission Rider	60,900,758	\$0.00438 per Kwh	266,745	\$0.00438 per Kwh	266,745
Infrastructure Rider	60,900,758	\$0.00497 per Kwh	302,677	\$0.00497 per Kwh	302,677
<b>Base Fuel</b>	60,900,758	\$0.02524 per Kwh	1,537,135	\$0.02524 per Kwh	1,537,135
Total Rate 10			<u>\$7,040,105</u>		<u>\$7,002,955</u>
Total Excluding Riders			<u>\$6,470,683</u>		<u>\$6,433,533</u>
Total Revenues Per Design					\$6,433,533
Target Revenues					<u>\$6,433,619</u>
Difference					<u>(\$86)</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders		\$6,470,683
Pro Forma Revenue Increase		(37,064)
Total Revenue Requirement		<u>\$6,433,619</u>
Less:		
Proposed Basic Service Charge Revenues		591,345
Base Fuel		1,537,135
Winter >750 differential	(\$0.03000)	16,098,810 Kwh
Subtotal		1,645,516
Net to be Collected Through Energy		\$4,788,103
Total Kwh		60,900,758
Summer Rate Per Kwh		\$0.07862
Winter Rate Per Kwh - 1st 750		\$0.07862
Winter Over 750 Kwh		\$0.04862

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Residential Electric Service Rate 53  
TCJA Settlement - Docket GE17-003**

Residential Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>	340	\$0.247 per day	\$30,653	\$0.247 per day	\$30,653
<b>Energy</b>	5,491,082	\$0.02974 per Kwh	163,305	\$0.02936 per Kwh	161,218
<b>Base Fuel</b>	5,491,082	\$0.02524 per Kwh	138,595	\$0.02524 per Kwh	138,595
Transmission Rider	5,491,082	\$0.00438 per Kwh	24,051	\$0.00438 per Kwh	24,051
Infrastructure Rider	5,491,082	\$0.00497 per Kwh	27,291	\$0.00497 per Kwh	27,291
Total Rate 53			<u>\$383,895</u>		<u>\$381,808</u>
Total Excluding Riders			<u>\$332,553</u>		<u>\$330,466</u>
Total Revenues Per Design					\$330,466
Target Revenues					<u>\$330,443</u>
Difference					<u>\$23</u>

**Derivation of Rate:**

Pro Forma Revenues	\$332,553
Pro Forma Revenue Increase	(2,110)
Total Revenue Requirement	<u>\$330,443</u>
Less:	
Proposed Basic Service Charge Revenues	30,653
Projected Base Fuel	138,595
Subtotal	<u>169,248</u>
Net to be Collected Through Energy	\$161,195
Total Kwh	5,491,082
Energy Rate per KW	\$0.02936

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Residential Electric TOD Service Rate 16  
TCJA Settlement - Docket GE17-003**

**Based on a Sample of Rate 10 Authorized Billing Units**

Residential Service	Billing Units	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>	286	\$0.55 per day	\$57,415	\$0.55 per day	\$57,415
<b>Energy</b>					
Summer					
On-Peak Kwh	507,507	0.11919 per Kwh	60,490	0.11745 per Kwh	59,607
Off Peak Kwh	655,646	0.05500 per Kwh	36,061	0.05500 per Kwh	36,061
Subtotal	1,163,153				
Winter					
On-Peak Kwh	775,025	0.08919 per Kwh	69,124	0.08745 per Kwh	67,776
Off Peak Kwh	1,400,956	0.05500 per Kwh	77,053	0.05500 per Kwh	77,053
Subtotal	2,175,981				
Total Energy	3,339,134				
<b>Base Fuel</b>	3,339,134	0.02524 per Kwh	84,280	0.02524 per Kwh	84,280
Total Rate 16 Revenues			<u>\$384,423</u>		<u>\$382,192</u>
Reduction @ Residential Decrease			(\$2,230)		
Total Revenues Per Design					\$382,192
Target Revenues					<u>382,193</u>
Difference					<u>(\$1)</u>

**Derivation of Rate:**

Pro Forma Revenues				<u>Projected</u>
Pro Forma Revenue Increase				\$384,423
Total Revenue Requirement				(2,230)
				\$382,193
Less:				
Basic Service Charge				\$57,415
Base Fuel				84,280
Off Peak set equal to	\$0.055	2,056,602 Kwh		113,113
Summer On-Peak Differ	\$0.030	507,507 Kwh		15,225
				<u>270,033</u>
Net to be Collected Through Energy				\$112,160
Total On-Peak Kwh				1,282,532
Winter On-Peak Rate				\$0.08745
Summer On-Peak				\$0.11745

MONTANA-DAKOTA UTILITIES CO.

Derivation of Rate and Reconciliation  
Small General Electric Service Rate 20  
TCJA Settlement - Docket GE17-003

Small General Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>					
Primary (201)	1	\$0.51 per day	\$186	\$0.51 per day	\$186
Secondary	1,970	0.54 per day	388,287	0.54 per day	388,287
Total Basic Service Charge	1,971		388,473		388,473
<b>Energy</b>					
Primary (201)					
Summer	1,418	\$0.06142 per Kwh	87	\$0.06087 per Kwh	86
Winter					
First 2000	1,882	\$0.06142 per Kwh	116	0.06087 per Kwh	115
Over 2000	0	\$0.04142 per Kwh	0	0.04087 per Kwh	0
	1,882		116		115
Primary Energy	3,300		203		201
Secondary					
Summer	10,643,810	\$0.06242 per Kwh	664,387	0.06187 per Kwh	658,533
Winter					
First 2000	11,376,023	\$0.06242 per Kwh	710,091	0.06187 per Kwh	703,835
Over 2000	9,119,780	\$0.04242 per Kwh	386,861	0.04187 per Kwh	381,845
	20,495,803		1,096,952		1,085,680
Secondary Energy	31,139,613		1,761,339		1,744,213
Total Energy	31,142,913		1,761,542		1,744,414
<b>Demand</b>					
Primary (201)					
First 10 KW	0.0	\$0.00 per KW	0	\$0.00 per KW	0
Over 10 KW	0.0	6.00 per KW	0	6.00 per KW	0
Total	0.0		0		0
Secondary					
First 10 KW	51,985.5	0.00 per KW	0	0.00 per KW	0
Over 10 KW	44,973.5	6.00 per KW	269,841	6.00 per KW	269,841
Total	96,959.0		269,841		269,841
Total Demand	96,959.0		269,841		269,841
<b>Base Fuel- Primary</b>	3,300	\$0.02524 per Kwh	83	\$0.02524 per Kwh	83
<b>Base Fuel- Secondary</b>	31,139,613	\$0.02524 per Kwh	785,964	\$0.02524 per Kwh	785,964
Transmission Rider	31,142,913	\$0.00438 per Kwh	136,406	\$0.00438 per Kwh	136,406
Infrastructure Rider	31,142,913	\$0.00497 per Kwh	154,780	\$0.00497 per Kwh	154,780
Total Rate 20 Revenues			\$3,497,089		\$3,479,961
Total Excluding Riders			\$3,205,903		\$3,188,775
Target Revenues					3,188,627
Difference					\$148
				Primary	\$470
				Secondary	\$3,188,305
					\$3,188,775

**MONTANA-DAKOTA UTILITIES CO.**

**Derivation of Rate and Reconciliation  
Small General Electric Service Rate 20  
TCJA Settlement - Docket GE17-003**

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders				\$3,205,903
Pro Forma Revenue Increase				(17,276)
Total Revenue Requirement				<u>\$3,188,627</u>
Less:				
Proposed Basic Service Charge Revenues				388,473
Proposed Demand Charge Revenues				269,841
Base Fuel				786,047
Over 2,000 Winter differential	(0.02000)	9,119,780		(182,396)
Secondary Rate Differential	0.00100	31,139,613		<u>31,140</u>
Subtotal				1,293,105
Net to be Collected				\$1,895,522
Total Kwh				31,142,913
Summer Primary Rate per Kwh				0.06087
Winter Primary Rate 1st 2000 Kwh				0.06087
Winter Primary over 2000 Kwh				0.04087
Summer Secondary Rate per Kwh				0.06187
Winter Secondary Rate 1st 2000 kwh				0.06187
Winter Secondary over 2000 kwh				0.04187

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Outdoor Lighting Service Rate 24  
TCJA Settlement - Docket GE17-003**

Outdoor Lighting	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Energy</b>	807,360	\$0.06224 per Kwh	50,250	\$0.06178 per Kwh	\$49,879
<b>Base Fuel</b>	807,360	\$0.02524 per Kwh	20,378	0.02524 per Kwh	20,378
Transmission Rider	807,360	\$0.00438 per Kwh	3,536	\$0.00438 per Kwh	3,536
Infrastructure Rider	807,360	\$0.00497 per Kwh	4,013	\$0.00497 per Kwh	4,013
Total Revenue			<u>\$78,177</u>		<u>\$77,806</u>
Total Excluding Riders			<u>\$70,628</u>		<u>\$70,257</u>
Total Revenues Per Design					\$70,257
Target Revenues					<u>\$70,253</u>
Difference					<u>\$4</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders	\$70,628
Pro Forma Revenue Increase	(375)
Total Revenue Requirement	<u>\$70,253</u>
Less:	
Projected Base Fuel	<u>20,378</u>
Subtotal	20,378
Net to be Collected Through Energy	49,875
Total Kwh Sales	807,360
Proposed Energy Charge	\$0.06178



**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Irrigation Power Service Rate 25  
TCJA Settlement - Docket GE17-003**

Irrigation Power Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>	7	\$0.53 per day	\$1,354	\$0.53 per day	\$1,354
Energy	258,048	\$0.0138 per Kwh	3,561	\$0.01364 per Kwh	3,520
Demand					
Summer	994.3	\$5.00 per KW	4,972	\$5.00 per KW	4,972
Winter	466.3	2.50 per KW	1,166	2.50 per KW	1,166
Base Fuel	258,048	\$0.02524 per Kwh	6,513	\$0.02524 per Kwh	6,513
Transmission Rider	258,048	\$0.00438 per Kwh	1,130	\$0.00438 per Kwh	1,130
Infrastructure Rider	258,048	\$0.00497 per Kwh	1,282	\$0.00497 per Kwh	1,282
Total Revenue			<u>\$19,978</u>		<u>\$19,937</u>
Total Excluding Riders			<u>\$17,566</u>		<u>\$17,525</u>
Total Revenues Per Design					\$17,525
Target Revenues					<u>17,525</u>
Difference					<u>\$0</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders	\$17,566
Pro Forma Revenue Increase	(41)
Total Revenue Requirement	<u>\$17,525</u>
Less:	
Proposed Basic Service Charge Revenues	1,354
Proposed Demand Charge Revenues	6,138
Base Fuel	<u>6,513</u>
Subtotal	14,005
Net to be Collected Through Energy	3,520
Total Kwh Sales	258,048
Proposed Energy Charge	\$0.01364

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Small General Optional Time-of-Day Electric Service Rate 26  
TCJA Settlement - Docket GE17-003**

Small General Optional TOD Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates		
		Rate	Revenue	Rate	Revenue	
<b>Basic Service Charge</b>						
Primary	0	\$0.60 per day	\$0	\$0.60 per day	0	
Secondary	24	0.65 per day	5,694	0.65 per day	5,694	
	24		5,694		5,694	
<b>Energy</b>						
Summer Primary Service						
Off-Peak	0	0.03969 per kwh	0	0.03859 per kwh	0	
On-Peak	0	0.06969 per kwh	0	0.06859 per kwh	0	
Total Summer	0		0		0	
Winter Primary Service						
Off Peak	0	0.03969 per kwh	0	0.03859 per kwh	0	
On Peak	0	0.05969 per kwh	0	0.05859 per kwh	0	
Total Winter	0		0		0	
Summer Secondary Service						
Off-Peak	37,409	0.03969 per kwh	1,485	0.03959 per kwh	1,481	
On-Peak	12,206	0.06969 per kwh	851	0.06959 per kwh	849	
Total Summer	49,615		2,336		2,330	
Winter Secondary Service						
Off-Peak	62,232	0.03969 per kwh	2,470	0.03959 per kwh	2,464	
On-Peak	19,936	0.05969 per kwh	1,190	0.05959 per kwh	1,188	
Total Winter	82,168		3,660		3,652	
Total Energy	131,783		5,996		5,982	
<b>Demand</b>						
Primary Demand						
On-Peak						
First 10 KW	0.0	0.00 per KW	0	0.00 per KW	0	
Over 10 KW Summer	0.0	7.00 per KW	0	7.00 per KW	0	
Over 10 KW Winter	0.0	5.00 per KW	0	5.00 per KW	0	
Off-Peak	0.0	0.00 per KW	0	0.00 per KW	0	
Total Primary Demand	0.0		0		0	
Secondary Demand						
On-Peak						
First 10 KW	112.0	0.00 per KW	0	0.00 per KW	0	
Over 10 KW Summer	11.2	7.25 per KW	81	7.25 per KW	81	
Over 10 KW Winter	5.6	5.25 per KW	29	5.25 per KW	29	
Off-Peak	171.7	0.00 per KW	0	0.00 per KW	0	
Total Secondary Demand	300.5		110		110	
<b>Total Demand</b>	300.5		110		110	
<b>Base Fuel</b>						
	131,783	0.025240 per Kwh	3,326	0.025240 per Kwh	3,326	
Transmission Rider	131,783	\$0.00438 per Kwh	577	\$0.00438 per Kwh	577	
Infrastructure Rider	131,783	\$0.00497 per Kwh	655	\$0.00497 per Kwh	655	
Total Rate 26 Revenues			<u>\$16,358</u>		<u>\$16,344</u>	
Total Excluding Riders			<u>\$15,126</u>		<u>\$15,112</u>	
Total Revenues Per Design						
Target Revenues					\$15,112	
Difference					<u>(\$2)</u>	

MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA

Derivation of Rate and Reconciliation  
Small General Optional Time-of-Day Electric Service Rate 26  
TCJA Settlement - Docket GE17-003

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders				\$15,126
Pro Forma Revenue Increase				(12)
Total Revenue Requirement				\$15,114
Less:				
Proposed Basic Service Charge Revenues				\$5,694
Proposed Demand Revenues				110
Secondary Energy Differential	\$0.00100	131,783	Kwh	132
On-Peak Summer Energy Differential	0.03000	12,206	Kwh	366
On-Peak Winter Energy	0.02000	19,936	Kwh	399
Off-Peak Differential	0.00000	99,641	Kwh	0
Base Fuel				3,326
Subtotal				10,027
Net to be Collected Through Energy				5,087
Total Kwh Sales				131,783
Proposed Energy Charges:				
Winter Primary Off-Peak				\$0.03859
Winter Primary On-Peak				0.05859
Summer Primary Off-Peak				0.03859
Summer Primary On-Peak				0.06859
Winter Secondary Off-Peak				0.03959
Winter Secondary On-Peak				0.05959
Summer Secondary Off-Peak				0.03959
Summer Secondary On-Peak				0.06959

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**  
**Derivation of Rate and Reconciliation  
Large General Electric Service Rate 30  
TCJA Settlement - Docket GE17-003**

Large General Service 30	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>					
Primary Service	0	\$45.00 per month	0	\$45.00 per month	0
Secondary Service	118	30.00 per month	42,480	30.00 per month	42,480
Total Basic Service Charge	118		42,480		42,480
<b>Energy</b>					
<b>Primary Service</b>	0	\$0.02432 per kwh	0	\$0.02387 per kwh	0
<b>Secondary Service</b>	35,630,597	0.02532 per kwh	902,167	0.02487 per kwh	886,133
Total Energy	35,630,597		902,167		886,133
<b>Demand</b>					
Primary Service - Summer	0.0	7.25 per Kw	0	7.25 per Kw	0
Primary Service - Winter	0.0	6.25 per Kw	0	6.25 per Kw	0
Subtotal	0.0		0		0
Secondary Service - Summer	48,334.6	8.25 per Kw	398,760	8.25 per Kw	398,760
Secondary Service - Winter	97,715.1	7.25 per Kw	708,434	7.25 per Kw	708,434
Subtotal	146,049.7		1,107,194		1,107,194
Total Demand	146,049.7		1,107,194		1,107,194
<b>Base Fuel</b>	35,630,597	0.02524 per kwh	899,316	0.02524 per kwh	899,316
Transmission Rider	35,630,597	\$0.00438 per Kwh	156,062	\$0.00438 per Kwh	156,062
Infrastructure Rider	35,630,597	\$0.00497 per Kwh	177,084	\$0.00497 per Kwh	177,084
Total Rate 30			<u>\$3,284,303</u>		<u>\$3,268,269</u>
Total Excluding Riders			<u>\$2,951,157</u>		<u>\$2,935,123</u>
Target Revenues					2,935,253
Difference					<u>(130)</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders			\$2,951,157
Pro Forma Revenue Increase			(15,904)
Total Revenue Requirement			<u>\$2,935,253</u>
Less:			
Proposed Basic Service Charge Revenues			42,480
Proposed Demand Revenues			1,107,194
Secondary Energy Differential	\$0.00100	35,630,597 Kwh	35,631
Projected Base Fuel			899,316
Subtotal			<u>2,084,621</u>
Net to be Collected Through Energy			<u>\$850,632</u>
Total Kwh Sales			35,630,597
Proposed Energy Charges:			
Rate 30- Primary			\$0.02387
Rate 30- Secondary			\$0.02487

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**  
**Derivation of Rate and Reconciliation**  
**General Space Heating Service Rate 32**  
**TCJA Settlement - Docket GE17-003**

Space Heating Rate 32	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>					
<b>Primary Service</b>					
Single Phase	0	\$15.00 per month	0	\$15.00 per month	0
Three Phase	0	25.00 per month	0	25.00 per month	0
	<u>0</u>		<u>0</u>		<u>0</u>
<b>Secondary Service</b>					
Single Phase	116	15.00 per month	20,880	15.00 per month	20,880
Three Phase	28	25.00 per month	8,400	25.00 per month	8,400
	<u>144</u>		<u>29,280</u>		<u>29,280</u>
Total Basic Service Charge	144		29,280		29,280
<b>Energy</b>					
<b>Primary Service</b>					
Summer	0	0.06142 per Kwh	0	0.06087 per Kwh	0
Winter	0	0.02360 per Kwh	0	0.02325 per Kwh	0
Primary Total	<u>0</u>		<u>0</u>		<u>0</u>
<b>Secondary Service</b>					
Summer	295,538	0.06242 per Kwh	18,447	0.06187 per Kwh	18,285
Winter	5,417,988	0.02460 per Kwh	133,283	0.02425 per Kwh	131,386
Secondary Total	<u>5,713,526</u>		<u>151,730</u>		<u>149,671</u>
Total Energy	5,713,526		151,730		149,671
<b>Base Fuel</b>	5,713,526	0.02524 per kwh	144,209	0.02524 per kwh	144,209
Transmission Rider	5,713,526	\$0.00438 per Kwh	25,025	\$0.00438 per Kwh	25,025
Infrastructure Rider	5,713,526	\$0.00497 per Kwh	28,396	\$0.00497 per Kwh	28,396
Total Rate 32			<u>\$378,640</u>		<u>\$376,581</u>
Total Excluding Riders			<u>\$325,219</u>		<u>\$323,160</u>
Total Revenues Per Design					\$323,160
Target Revenues					323,456
Difference					<u>(\$296)</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders		\$325,219
Pro Forma Revenue Increase		<u>(1,763)</u>
Total Revenue Requirement		\$323,456
Less:		
Proposed Basic Service Charge Revenues		29,280
Secondary Energy Differential	\$0.00100	5,713,526 Kwh
Summer at Rate 20		18,285
Projected Base Fuel		<u>144,209</u>
Subtotal		197,488
Net to be Collected Through Winter Energy		<u>\$125,968</u>
Winter Kwh Sales		5,417,988
Proposed Energy Charges:		
Primary Winter		\$0.02325
Secondary Winter		\$0.02425

MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA

Derivation of Rate and Reconciliation  
Large General Time-of-Day Electric Service Rate 33  
TCJA Settlement - Docket GE17-003

Based on a Sample of Rate 30 Authorized Billing Units

Large General TOD Service (Rate 33)	Billing Units	Authorized EL15-024		Proposed Settlement Rates	
		Rate	Revenue	Rate	Revenue
<b>Basic Service Charge</b>					
Primary Service	0	\$60.00 per month	\$0	\$60.00 per month	\$0
Secondary Service	7	60.00 per month	5,040	60.00 per month	5,040
Total Base Rate	7		5,040		5,040
<b>Energy</b>					
Summer Primary Service					
Off-Peak	0	0.03200 per Kwh	0	0.03136 per Kwh	0
On-Peak	0	0.06200 per Kwh	0	0.06136 per Kwh	0
Total Summer	0		0		0
Winter Primary Service					
Off-Peak	0	0.03200 per Kwh	0	0.03136 per Kwh	0
On-Peak	0	0.05200 per Kwh	0	0.05136 per Kwh	0
Total Winter	0		0		0
Summer Secondary Service					
Off-Peak	75,031	0.03300 per Kwh	2,476	0.03236 per Kwh	2,428
On-Peak	23,784	0.06300 per Kwh	1,498	0.06236 per Kwh	1,483
Total Summer	98,815		3,974		3,911
Winter Secondary Service					
Off-Peak	325,153	0.03300 per Kwh	10,730	0.03236 per Kwh	10,522
On-Peak	186,492	0.05300 per Kwh	9,884	0.05236 per Kwh	9,765
Total Winter	511,645		20,614		20,287
Total Energy	610,460		24,588		24,198
<b>Demand</b>					
Summer Primary Service					
Off-Peak	0.0	0.00 per KW	0	0.00 per KW	0
On-Peak	0.0	7.50 per KW	0	7.50 per KW	0
Total Summer Deman	0.0		0		0
Winter Primary Service					
Off-Peak	0.0	0.00 per KW	0	0.00 per KW	0
On-Peak	0.0	6.00 per KW	0	6.00 per KW	0
	0.0		0		0
Summer Secondary Service					
Off-Peak	575.6	0.00 per KW	0	0.00 per KW	0
On-Peak	425.5	8.00 per KW	3,404	8.00 per KW	3,404
Total Summer Deman	1,001.1		3,404		3,404
Winter Secondary Service					
Off-Peak	3,901.4	0.00 per KW	0	0.00 per KW	0
On-Peak	3,673.8	6.50 per KW	23,880	6.50 per KW	23,880
	7,575.2		23,880		23,880
Total Demand	8,576.3		27,284		27,284
<b>Base Fuel</b>					
Secondary	610,460	0.02524 per Kwh	15,408	0.02524 per Kwh	15,408
Total Rate 33 Revenue			\$72,320		\$71,930
Reduction @ Large General Decrease			(\$391)		
Total Revenues Per Design					\$71,930
Target Revenues					71,929
Difference					\$1

MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA

Derivation of Rate and Reconciliation  
Large General Time-of-Day Electric Service Rate 33  
TCJA Settlement - Docket GE17-003

Based on a Sample of Rate 30 Authorized Billing Units

Derivation of Rate:

Pro Forma Revenues Excluding Riders				\$72,320
Pro Forma Revenue Increase				(391)
Total Revenue Requirement				<u>\$71,929</u>
Less:				
Proposed Basic Service Charge Revenues				5,040
Proposed Demand Revenues				27,284
Secondary Energy Differential	\$0.00100	610,460	Kwh	610
On-Peak Summer Energy Differential	0.03000	23,784	Kwh	714
On-Peak Winter Energy Differential	0.02000	186,492	Kwh	3,730
Base Fuel				<u>15,408</u>
Subtotal				52,786
Net to be Collected Through Energy				\$19,143
Total Kwh Sales				610,460
Proposed Energy Charges:				
Winter Primary Off-Peak				\$0.03136
Winter Primary On-Peak				0.05136
Summer Primary Off-Peak				\$0.03136
Summer Primary On-Peak				0.06136
Winter Secondary Off-Peak				\$0.03236
Winter Secondary On-Peak				\$0.05236
Summer Secondary Off-Peak				\$0.03236
Summer Secondary On-Peak				\$0.06236

**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Municipal Lighting Service Rate 41  
TCJA Settlement - Docket GE17-003**

Municipal Lighting Service	Pro Forma 2017	Authorized EL15-024		Proposed Settlement Rates		
		Rate	Revenue	Rate	Revenue	
<b>Energy</b>						
Company	27,649	\$0.07885 per Kwh	2,180	\$0.07825 per Kwh	2,164	
Discounted	2,031,319	0.07096 per Kwh	144,142	0.07042 per Kwh	143,045	
Municipal	49,924	0.07048 per Kwh	3,519	0.06988 per Kwh	3,489	
Discounted	368,925	0.06343 per Kwh	23,401	0.06289 per Kwh	23,202	
Total Energy	2,477,817		173,242		171,900	
<b>Base Fuel</b>	2,477,817	\$0.02524 per Kwh	62,540	\$0.02524 per Kwh	62,540	
Transmission Rider						
Accts with No Discount	77,573	\$0.00438 per Kwh	340	\$0.00438 per Kwh	340	
Accts with 10% Discount 1/	2,400,244	0.00394 per Kwh	9,457	0.00394 per Kwh	9,457	
Infrastructure Rider						
Accts with No Discount	77,573	\$0.00497 per Kwh	386	\$0.00497 per Kwh	386	
Accts with 10% Discount 1/	2,400,244	0.00447 per Kwh	10,729	0.00447 per Kwh	10,729	
Total Rate 41 Revenue			\$256,694		\$255,352	
Total Excluding Riders			\$235,782		\$234,440	
Total Revenues Per Design						\$234,440
Target Revenues						\$234,462
Difference						(\$22)

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders		\$235,782
Pro Forma Revenue Increase		(1,320)
Total Revenue Requirement		\$234,462
Less:		
Municipal Discount	(\$0.00837) 49,924 Kwh	(418)
Municipal Discount & 10% Disc	(0.00753) 368,925 Kwh	(2,778)
Base Fuel		62,540
Subtotal		59,344
Net to be Collected Through Energy		\$175,118
Total Kwh Sales (Applicable Accts Discounted at 90% of actual)		2,237,793
Proposed Energy Charges:		
Company		\$0.07825
Municipal		0.06988
Company Discounted		0.07042
Municipal Discounted		0.06289



**MONTANA-DAKOTA UTILITIES CO.  
ELECTRIC UTILITY - SOUTH DAKOTA**

**Derivation of Rate and Reconciliation  
Municipal Pumping Service Rate 48  
TCJA Settlement - Docket GE17-003**

Municipal Pumping Service	Pro Forma 2017	Authorized EL15-024		Proposed Rates		
		Rate	Revenue	Rate	Revenue	
<b>Basic Service Charge</b>						
Accts with No Discount	43	\$19.00 per month	9,804	\$19.00 per month	9,804	
Accts with 10% Discount 2/	7	17.10 per month	1,436	17.10 per month	1,436	
<b>Total Basic Service Charge</b>	<b>50</b>		<b>\$11,240</b>		<b>\$11,240</b>	
<b>Energy</b>						
Accts with No Discount	40,654	\$0.02457 per Kwh	999	\$0.02415 per Kwh	982	
Accts with 10% Discount 2/	1,442,169	0.02211 per Kwh	31,886	0.02173 per Kwh	31,342	
	1,482,823		\$32,885		32,324	
<b>Demand</b>						
Winter						
Accts with No Discount	451.4	\$5.00 per KW	2,257	\$5.00 per KW	2,257	
Accts with 10% Discount 2/	4,206.5	4.50 per KW	18,929	4.50 per KW	18,929	
Summer						
Accts with No Discount	319.8	7.00 per KW	2,239	\$7.00 per KW	2,239	
Accts with Total Demand	2,195.4	6.30 per KW	13,831	6.30 per KW	13,831	
<b>Total Demand Billed</b>	<b>7,173.1</b>		<b>37,256</b>		<b>37,256</b>	
<b>Base Fuel</b>	<b>1,482,823</b>	<b>0.02524 per Kwh</b>	<b>37,426</b>	<b>0.02524 per Kwh</b>	<b>37,426</b>	
<b>Transmission Rider</b>						
Accts with No Discount	40,654	\$0.00438 per Kwh	178	\$0.00438 per Kwh	178	
Accts with 10% Discount 2/	1,442,169	0.00394 per Kwh	5,682	0.00394 per Kwh	5,682	
			5,860		5,860	
<b>Infrastructure Rider</b>						
Accts with No Discount	40,654	\$0.00497 per Kwh	202	\$0.00497 per Kwh	202	
Accts with 10% Discount 2/	1,442,169	0.00447 per Kwh	6,446	0.00447 per Kwh	6,446	
			6,648		6,648	
<b>Total Rate 48 Revenue</b>			<b>\$131,315</b>		<b>\$130,754</b>	
<b>Total Excluding Riders</b>			<b>\$118,807</b>		<b>\$118,246</b>	
Total Revenues Per Design						\$118,246
Target Revenues						118,253
Difference						<u>(\$7)</u>

**Derivation of Rate:**

Pro Forma Revenues Excluding Riders	\$118,807
Pro Forma Revenue Increase	(554)
<b>Total Revenue Requirement</b>	<b>\$118,253</b>
Less:	
Proposed Basic Service Charge Revenues	11,240
Proposed Demand Revenues	37,256
Base Fuel	37,426
<b>Subtotal</b>	<b>85,922</b>
<b>Net to be Collected Through Energy</b>	<b>32,331</b>
<b>Total Kwh Sales (Applicable Accts Discounted at 90% of actual)</b>	<b>1,338,606</b>
Energy Rate	\$0.02415
Discounted Energy Rate	0.02173