

THE EMPIRE DISTRICT ELECTRIC COMPANY

NET METERING RATE CALCULATION

January 2013

	<u>SUMMER</u>	<u>WINTER</u>	<u>Source</u>
1. Avoided Energy Cost	0.03222	0.02695	Prosym Model
2. Transmission Loss Rate	2.336%	2.336%	Loss Study 2011
3. Cogeneration Purchase Rate	0.0330	0.0276	Line 1 *(1 + line 2)
4. Summer / Winter Differential	19.58%		

The Summer period is the four months of June through September.
The Winter period is the remaining eight months.

Costs are averaged for 2013-2014 cost years.

From Marginal Energy Costs by On-Peak & Off-Peak Periods

	2013		2014	
	Hours		Hours	
SUMMER				
Average Marginal Costs On-Peak	42.77	1,118	42.86	1,131
Average Marginal Costs Off-Peak	25.39	1,810	25.84	1,797
		<u>2,928</u> total summer hours		<u>2,928</u> total summer hours
WINTER				
Average Marginal Costs On-Peak	31.26	2,800	31.56	2,784
Average Marginal Costs Off-Peak	22.69	3,032	23.00	3,048
		<u>5,832</u> total winter hours		<u>5,832</u> total winter hours

AVOIDED ENERGY COST

(Marginal cost * on/off-peak summer hours) / total summer hour (Marginal cost * on/off-peak summer hours) / total summer hours

SUMMER				
On-Peak	16.33		16.56	
Off-Peak	15.70		15.86	
	<u>32.03</u>		<u>32.41</u>	32.22
WINTER				
On-Peak	15.01		15.07	
Off-Peak	11.80		12.02	
	<u>26.80</u>		<u>27.09</u>	26.95

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ESTIMATED MARGINAL ENERGY COSTS BY ON-PEAK & OFF-PEAK PERIODS

Winter: January-May and October-December
On-Peak Hours: Weekdays 6 AM thru 9 PM
Off-Peak Hours: All other hours

Summer: June, July, August, September
On-Peak Hours: Weekdays 10 AM thru 10 PM
Off-Peak Hours: All other hours

Average Marginal Costs \$/Mwh

Year	Annual Avg Marg Cost	Summer On-Peak Avg Marg Cost	Summer Off-Peak Avg Marg Cost	Winter On-Peak Avg Marg Cost	Winter Off-Peak Avg Marg Cost
2013	28.55	42.86	25.39	31.26	22.69
2014	28.87	42.86	25.84	31.56	23.00
2015	30.08	42.71	26.21	33.55	24.49
2016	30.30	42.18	26.57	33.75	24.97
2017	31.64	44.80	27.54	34.92	26.23

The Empire District Electric Company
Load and Capability Forecast
Based on Load Forecast 2013-2017

Year	2013	2014	2015	2016	2017
Projected :					
Gross Peak	1,190	1,197	1,205	1,214	1,223
DSM	(10.7)	(10.7)	(10.7)	(10.7)	(10.7)
Net Peak with DSM & Int.*	1,179	1,186	1,194	1,203	1,212
Asbury	203	203	194	194	194
Iatan	85	85	85	85	85
Iatan 2	102	102	102	102	102
Plum Point (own)	50	50	50	50	50
Riverton 7	38	38	38	0	0
Riverton 8	54	54	54	0	0
Riverton 9	12	12	12	0	0
Riverton 10	16	16	16	16	16
Riverton 11	17	17	17	17	17
Riverton 12	142	142	142	250	250
Energy Center 1	82	82	82	82	82
Energy Center 2	82	82	82	82	82
Energy Center 3	49	49	49	49	49
Energy Center 4	49	49	49	49	49
State Line 1	94	94	94	94	94
State Line C.C.	297	297	297	297	297
Ozark Beach	16	16	16	16	16
Plum Point PPA	50	50	50	50	50
150 MW Elk River Wind Farm PPA	7	7	7	7	7
105 MW Meridian Way Windfarm PPA	8	8	8	8	8
Total Capacity	1,453	1,453	1,444	1,448	1,448
Capacity Resp. (12%)	1,340	1,348	1,357	1,367	1,378
Capacity Balance	113	105	87	81	70
Capacity Margin	18.84%	18.36%	17.29%	16.90%	16.28%

12% Capacity Responsibility Current Capacity Ratings
