

The Empire District Electric Company
Summary of Classification Factors

The Empire District Electric Company
Missouri Jurisdiction
Case No. ER-2021-0312
Schedule TSL-5
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Empire District Electric (MISSOURI)					
Summary of Classifiers					
Classifier Description	Classifier Code	Total	- Demand	- Customer	- Commodity

External Classifiers

Common

Customer Factor	CUS	100.0%	0.0%	100.0%	0.0%
Demand Factor	DEM	100.0%	100.0%	0.0%	0.0%
Commodity Factor	COM	100.0%	0.0%	0.0%	100.0%
Poles and Fixtures	Poles	100.0%	58.0%	42.0%	0.0%
Overhead Lines	P-LINES	100.0%	70.9%	29.1%	0.0%
Underground Conduit	U-LINES	100.0%	54.4%	45.6%	0.0%
Underground Conductors and Devices	UD-LINES	100.0%	61.5%	38.5%	0.0%
Line Transformers	L-Transformers	100.0%	57.5%	42.5%	0.0%

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Account 365 - Overhead Conductors and Devices

Account 365 - Minimum System Study
 (w/ Handy Whitman Adjusted Costs)

<u>Minimum Size System</u>	
Min Cable Cost (ACSR, 6/1, 1/0) (\$ per Ft	\$ 2.14
Total Cable Quantity	80,583,470
Min Cable Cost	<u>\$ 172,448,626</u>
Minimum System Cost	\$ 172,448,626
<u>Total System Costs</u>	\$ 592,350,955
Min-System Result	<u>29.1%</u>
<i>Reflects customer-related portion of costs</i>	

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Account 366 - Underground Conduit

Zero-Intercept Study

X: Conduit Size %, Y: LN (HW Adjusted Average Cost)

X-Variable	0.382	1.51	Intercept
X-Variable SE	0.05	0.20	Intercept SE
R-Square	94.51%	0.19	Model SE
F	51.62	3	df
SumSq (reg)	2	0	SumSq (resid)
X-Variable t-stat	7.18	7.60	Intercept t-stat

Intercept \$ 4.54
Reflects a Zero Conduit Cost

Zero System Costs

Total Conduit Quantity 2,844,344
Zero Conduit Cost \$ 4.54

Conduit Costs \$ 12,913,753
Other Costs \$ 24,222,570
Total Zero System \$ 37,136,323

Total System Costs \$ 81,510,706

Zero-Intercept Result 45.6%
Reflects customer-related portion of costs

Minimum System Study

Min Conduit Avg. Cost \$ 7.43
Total Quantity 2,844,344

Conduit Costs \$ 21,130,639
Other Costs \$ 24,222,570
Total Minimum System \$ 45,353,209

Total System Costs \$ 81,510,706

Min-System Result 55.6%
Reflects customer-related portion of costs

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Account 367 - Underground Conductors & Devices

Account 367 - Minimum System Study
(w/ Handy Whitman Adjusted Costs)

<u>Minimum Size System</u>		
CABLE, AA, DB JCKTD CONC NEUTR, 1/0	\$	6.47
Total Cable Quantity		9,088,793
Min Cable Cost	\$	<u>58,804,491</u>
Minimum System Cost	\$	58,804,491
<u>Total System Costs</u>	\$	152,926,221
Min-System Result		<u>38.5%</u>
<i>Reflects customer-related portion of costs</i>		

Account 368 - Line Transformers

Account 368 - Minimum System Study
(w/ Handy Whitman Adjusted Costs)

<u>Minimum Size System</u>		
Min Size Transformer	\$	1,510.45
Total Quantity		94,465
Min Size Transfer Cost	\$	<u>142,684,224</u>
Other Costs	\$	366.15
Other Costs	\$	<u>34,588,518</u>
Minimum System Cost	\$	177,272,742
<u>Total System Costs</u>	\$	416,730,866
Min-System Result		<u>42.5%</u>
<i>Reflects customer-related portion of costs</i>		