

Exhibit No.:  
Witness: Martin O. Penning  
Sponsoring Party: Empire District Electric  
Type of Exhibit: Direct/Rebuttal  
Case Nos: EO-2007-0029 and  
EE-2007-0030 consolidated  
Date Testimony Prepared: November 20, 2006

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

**PREPARED TESTIMONY OF  
Martin O. Penning**

Jefferson City, Missouri  
November 2006

1  
2 **Direct /Rebuttal Testimony for Martin Penning**

3 **Case Nos. EO-2007-0029 and EE-2007-0030**  
4  
5

6 **Q. Please state your name and business address.**

7 A. Martin Penning; 215 W. Main; Branson, Missouri.

8 **Q. By whom and in what capacity are you employed?**

9 A. I am the Director of Commercial Operations-Eastern Division of the Empire District Electric Company.

10 **Q. Please briefly describe your professional experience.**

11 A. I received a Bachelors Degree in Electrical Engineering from the University of Missouri-Rolla in 1980  
12 after which I began my career at Empire District Electric Company. I have worked in numerous positions  
13 at Empire including: engineer, Staff Engineer, Manager of Planning and Protection, Manager of System  
14 Planning, Director of Strategic Planning, Director of Planning & Regulatory, Director of Engineering &  
15 Line Services and now most recently as the Director of Commercial Operations-Eastern Division. I am a  
16 member of the Institute of Electrical and Electronics Engineers and have served on numerous Southwest  
17 Power Pool committees and task forces. I have also performed numerous cost-benefit analyses in my  
18 career.

19 **Q. Does that professional experience entail making estimates and cost projections for the provision of electric**  
20 **service to residential subdivisions?**

21 A. I do not personally make these estimates and projections although I am familiar with them. The  
22 individuals responsible for making those estimates are under my purview.

23 **Q. Are you generally familiar with the terms of Empire's tariff as approved by the**  
24 **Missouri Public Service Commission?**

25 A. Yes, I am.

26 **Q. Have you previously testified before the Missouri Public Service Commission?**

27 A. No.

28 **Q On whose behalf are you sponsoring testimony in this proceeding?**

29 A. The Empire District Electric Company

30 **Q. What is the purpose of your testimony?**

31 A. The purpose of my testimony is to provide evidence in support of the application for approval of a  
32 proposed territorial agreement jointly filed by Empire and Ozark Electric Cooperative on July 18, 2006,  
33 and the accompanying application for variance Empire filed at the same time. In particular, I sponsor the  
34 attachments to the application for variance. Although I did not prepare the original documents, I have  
35 reviewed them. I agree with the notation in the Staff's recommendation that there is a typographical error  
36 in Appendix B where the cost of Empire obtaining the existing Ozark facilities in the subdivision is listed  
37 as \$117,921.74. The correct figure should be \$177, 921.74.

38 I will also respond to comments that have been made about the two applications by the Staff of the  
39 Missouri Public Service Commission in the memorandum and recommendation that was filed on October  
40 10, 2006.

41 My testimony is being presented in conjunction with that of Mike Palmer.

42 In summary, my testimony will be that I believe there is sufficient good cause for the Commission to  
43 approve the variance being sought by Empire so that the proposed First Territorial Agreement between  
44 Empire and Ozark can be approved and implemented.

45 **Q. Have you reviewed what was attached as Appendix B to the variance application filed by Empire?**

46 A. Yes, I have. I have checked with Ozark Electric and I have confirmed that a typographical error was  
47 made by Empire when it was originally prepared. As I said, this is the error that was mentioned by the  
48 Staff in its memorandum. The error resulted in an understatement of the cost to purchase the Ozark  
49 facilities by \$60,000. I have re-run the spreadsheets with that change and corrected the spelling of the word  
50 'Shuyler' only and I have attached the corrected version, identified as Appendix B First Revised, to my  
51 testimony.

52 **Q. Is Appendix B First Revised, as you have attached it, true and correct to the best of your knowledge,**  
53 **information and belief?**

54 A. Yes, it is.

55 **Q. How many acres are there in a square mile?**

56 A. 640

57 **Q. How many acres are there in The Lakes at Shuyler Ridge subdivision?**

58 A. According to the legal description I saw, approximately 245.

59 **Q. How many acres would Empire obtain as an exclusive service territory if the proposed territorial**  
60 **agreement and variance are approved by the Commission?**

61 A. The proposed area covers approximately 4.5 square miles, which would be 2,880 acres.

62 **Q. Do you agree with the observation in the Staff memo that the area subject to the proposed variance is**  
63 **approximately one-twelfth of the size of the exclusive service territory Empire would obtain under the**  
64 **territorial agreement?**

65 A. Yes. If you divide 2,880 acres by 12 you get 240, which is five acres less than that contained in the  
66 subdivision.

67 **Q. Does the proposed variance apply to the cost of electricity itself?**

68 A. No. The variance only applies to the costs of the electrical facilities themselves and to some decorative  
69 street lights that the developer of the subdivision requires. There would not be any deviation from the tariff  
70 for any locations outside of this one particular 245 acre subdivision. And, that is only necessary so Empire  
71 can meet the terms that Ozark Electric Cooperative has contractually agreed to provide to the developer.

72 **Q. From the perspective of an electrical engineer, are you aware of any engineering reason why the granting**  
73 **of the variance would be inappropriate?**

74 A. No. While it may call for Empire to do things in a different manner than the tariff, it is not that  
75 different from what we normally do.

76 **Q. From the perspective of an electrical engineer who has done cost/benefit analyses for a public utility, are**  
77 **you aware of any economic reason why the granting of the variance would be inappropriate?**

78 A. No. It appears to be a comparatively small price to obtain the exclusive right to serve an area twelve  
79 times larger than the subdivision for the indefinite future at the normal tariff rate and terms. It also does not  
80 appear unreasonable to me because all Empire is seeking is the ability to match the price of a competitor.  
81 That takes place in the non-regulated retail world all the time. I wouldn't call that unreasonable or  
82 inappropriate.

83

84 **Q. Does Empire have any tariffs that allow some people to receive a particular service while denying that**  
85 **same service to others who might want it?**

86 A. Empire has a program tailored to specific elderly customers to ensure that their bills are handled  
87 properly. Some of the special services provided include: allowing them to choose their own payment date,  
88 the option of sending a third party notification if the elderly individual's account becomes delinquent, the  
89 waiver of late payment charges, etc.

90 **Q. Have you read the Staff's memorandum and recommendation in this case?**

91 A. Yes, I have.

92 **Q. Do you have any comments on its content?**

93 A. Yes. Comments made in the Staff memorandum suggest that Empire believes there is no difference in  
94 the outcome of this request versus our normal business practice. That is not the case. Empire fully  
95 understands there are differences, but believes that in this special case the request for variance is justified.  
96 The projected total cost for the facilities to serve this development is approximately \$1.8M. The projected  
97 10-year revenue is \$5.6M. Empire believes this project provides a good return on investment.

98 **Q. Do you agree with the observation in the Staff memo that this "appears to be a unique exception that was**  
99 **prompted by the events surrounding the territorial agreement and variance request"?**

100 A. Yes, I do. As noted by the Staff, it has not been Empire's policy in the last decade or so to more  
101 aggressively compete with rural electric cooperatives for new residential customers. From what I know  
102 and have read regarding this situation south of Republic, this is unique and involves a lot of different  
103 interests.

104 Empire has to have permission from the Commission to treat this one specific area (the subdivision of The  
105 Lakes at Shuyler Ridge) differently from other subdivisions in order to make the deal made by all the  
106 parties work. None of the other parties have to seek the permission of any sort of regulatory body to be  
107 able to make their agreement take effect.

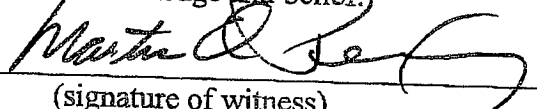
108 **Q. Does this conclude your prepared testimony in this case?**

109 A. Yes.

AFFIDAVIT


STATE OF MISSOURI )  
 ) ss  
COUNTY OF JASPER )

Martin Penning, of lawful age, on his oath sates that he has participated in the preparation of the preceding prepared testimony; that he has knowledge of the matters set forth therein; and that such matters are true and correct to the best of his knowledge and belief.

  
(signature of witness)

Subscribed and sworn to before me this 20th day of November, 2006.

(notary seal)

  
(signature of notary)



SHAWN M. PINGLETON  
Taney County  
My Commission Expires  
March 9, 2007

# LAKEs AT SHUYLER RIDGE

Development Phases	Primary & Secondary Electrical Facilities Expense	Service Electrical Facilities Expense	Lighting Electrical Facilities Expense	Total Electrical Facilities Expense	Number of Services	Normal Subdiv. Rebate Amount	Cost Difference (Elec. Facilities & Rebate Amount)	Generated Electricity Revenue/Year	Generated Lighting Revenue/Year	Total Generated Revenue/Year	Total Generated Revenue/5-Year	Difference b/w Elec. Facilities Expense & Generated Revenue/5-Year
Phase I	\$ 545,896.74	\$ 45,876.00	\$ 57,000.00	\$ 648,772.74	163	\$ 436,677.00	\$ 109,219.74	\$ 244,500.00	\$ 2,672.16	\$ 247,172.16	\$ 1,235,860.80	\$ (587,088.06)
Phase II	\$ 321,900.00	\$ 31,080.00	\$ 33,000.00	\$ 385,980.00	111	\$ 297,369.00	\$ 24,531.00	\$ 166,500.00	\$ 1,547.04	\$ 168,047.04	\$ 840,235.20	\$ (454,255.20)
Phase III	\$ 400,200.00	\$ 38,640.00	\$ 42,000.00	\$ 480,840.00	138	\$ 369,702.00	\$ 30,498.00	\$ 207,000.00	\$ 1,968.96	\$ 208,968.96	\$ 1,044,844.80	\$ (564,004.80)
Phase IV	\$ 304,500.00	\$ 29,400.00	\$ 31,500.00	\$ 365,400.00	105	\$ 281,295.00	\$ 23,205.00	\$ 157,500.00	\$ 1,476.72	\$ 158,976.72	\$ 794,883.60	\$ (429,483.60)
<b>TOTAL</b>	<b>\$ 1,572,496.74</b>	<b>\$ 144,996.00</b>	<b>\$ 163,500.00</b>	<b>\$ 1,880,992.74</b>	<b>\$ 517.00</b>	<b>\$ 1,385,043.00</b>	<b>\$ 187,453.74</b>	<b>\$ 775,500.00</b>	<b>\$ 7,664.88</b>	<b>\$ 783,164.88</b>	<b>\$ 3,915,824.40</b>	<b>\$ (2,034,831.66)</b>

Residential Annual Revenue Estimate: \$ 1,500.00 /year  
Normal Subdivision Rebate Amount: \$ 2,679.00 /lot

Services, Meters, Service Labor, and Meter Labor: \$ 280.00 /lot  
Primary & Secondary Facilities: \$ 2,900.00 /lot

Street Lighting:  
Empire's Cost Per Street Light: 1 light / 5 lots Phase I 38  
Customer's Cost Per Street Light: \$ 1,500.00 Phase II 22  
City Cost Per Light: \$ 100.00 Phase III 28  
\$ 70.32 /year Phase VI 21

Phase I Number Based on Actual Design Cost Estimate and Amount charge by the COOP for Conduit and Trenching

Services, Meters, Service Labor, and Meter Labor: \$ 45,876.00  
Primary & Secondary Facilities: \$ 367,975.00  
Ozark Electric CO-OP facilities: \$ 177,921.74  
**TOTAL \$ 591,772.74**

Street Lighting Expenses: \$ 60,800.00  
CO-OP Street Lighting Allowance (\$1,500/light): \$ 57,000.00  
**Amount Due By Developer \$ 3,800.00**

# Cost/Benefit Study if Territorial Agreement Approved

LAKES OF SHUYLER RIDGE SUBDIVISION				
YEAR	PHASE	ESTIMATED GROWTH (# OF METERS ADDED)	COST TO SERVE	ESTIMATED REVENUE
1	I	80	\$ 625,412.74	\$ 122,672.16
2	I	80	\$ 22,516.00	\$ 242,672.16
3	I	3	\$ 844.00	\$ 364,219.20
	II	77	\$ 376,460.00	
4	II	34	\$ 9,520.00	\$ 486,188.16
	III	46	\$ 455,080.00	
	III	80	\$ 22,400.00	
6	III	12	\$ 3,360.00	\$ 727,664.88
	IV	68	\$ 355,040.00	
7	IV	37	\$ 10,360.00	\$ 783,164.88
8	-	-	-	\$ 783,164.88
9	-	-	-	\$ 783,164.88
10	-	-	-	\$ 783,164.88
TOTAL		517	1880992.74	5682264.24
				TOTAL

Revenue/Cost = 3.02

## Assumptions:

Average Growth Rate: 80 lots/year  
 Size of Homes: 2000 ft^2  
 Average Yearly Bill: \$ 1,500.00

All numbers calculated based on current prices.

Phase I	163	lots
Phase II	111	
Phase III	138	
Phase VI	105	
	517	lots



# Cost/Benefit Study if Territorial Agreement "Not" Approved

LAKES OF SHUYLER RIDGE SUBDIVISION					
YEAR	PHASE	ESTIMATED GROWTH (# OF METERS ADDED)	COST TO SERVE	ESTIMATED REVENUE	YEAR
1	I	-	\$ -	\$ -	1
2	I	80	\$ 298,319.68	\$ 121,336.08	2
3	I	3	\$ 840.00	\$ 242,883.12	3
	II	77	\$ 376,460.00		
4	II	34	\$ 9,520.00	\$ 364,852.08	4
	III	46	\$ 455,080.00		
	III	80	\$ 22,400.00		
5	III	12	\$ 3,360.00	\$ 484,852.08	5
	IV	68	\$ 355,040.00		
6	IV	37	\$ 10,360.00	\$ 661,828.80	6
7	-	-	\$ -	\$ 661,828.80	7
8	-	-	\$ -	\$ 661,828.80	8
9	-	-	\$ -	\$ 661,828.80	9
10	-	-	\$ -	\$ 661,828.80	10
TOTAL		437	\$ 1,531,379.68	\$ 4,467,567.36	TOTAL

Revenue/Cost = 2.92

## Assumptions:

CO-OP Serves Year 1  
 Annexation after Year 1  
 Average Growth Rate: 80 lots/year  
 Size of Homes: 2000 ft<sup>2</sup>  
 Average Yearly Bill: \$ 1,500.00

All numbers calculated based on current prices.

Phase I 163 lots  
 Phase II 111  
 Phase III 138  
 Phase VI 105  
 517 lots

# Cost/Benefit Study if Territorial Agreement "Not" Approved

LAKES OF SHUYLER RIDGE SUBDIVISION					
YEAR	PHASE	ESTIMATED GROWTH (# OF METERS ADDED)	COST TO SERVE	ESTIMATED REVENUE	YEAR
1	I	-	\$ -	\$ -	1
2	I	-	\$ -	\$ -	2
3	I	3	\$ 11,040.00	\$ 120,070.32	3
	II	77	\$ 376,460.00		
4	II	34	\$ 9,520.00	\$ 241,617.36	4
	III	46	\$ 455,080.00		
5	III	80	\$ 22,400.00	\$ 361,617.36	5
	III	12	\$ 3,360.00		
6	IV	68	\$ 355,040.00	\$ 483,094.08	6
	IV	37	\$ 10,360.00		
7	-	-	\$ -	\$ 538,594.08	7
8	-	-	\$ -	\$ 538,594.08	8
9	-	-	\$ -	\$ 538,594.08	9
10	-	-	\$ -	\$ 538,594.08	10
TOTAL		357	\$ 1,243,260.00	\$ 3,360,775.44	TOTAL

Revenue/Cost = 2.70

## Assumptions:

CO-OP Serves Year 1 & 2

Annexation after Year 2

Average Growth Rate:

Size of Homes:

Average Yearly Bill:

\$

80 lots/year  
2000 ft<sup>2</sup>  
1,500.00

Phase I 163 lots  
Phase II 111  
Phase III 138  
Phase VI 105  
517 lots

All numbers calculated based on current prices.

# Cost/Benefit Study if Territorial Agreement "Not" Approved

LAKES OF SHUYLER RIDGE SUBDIVISION					
YEAR	PHASE	ESTIMATED GROWTH (# OF METERS ADDED)	COST TO SERVE	ESTIMATED REVENUE	YEAR
1	I	-	\$ -	\$ -	1
2	I	-	\$ -	\$ -	2
3	I	-	\$ -	\$ -	3
	II	-	\$ -	\$ -	
4	II	34	\$ 118,620.00	\$ 122,461.20	4
	III	46	\$ 455,080.00		
5	III	80	\$ 22,400.00	\$ 242,461.20	5
	III	12	\$ 3,360.00		
6	IV	68	\$ 355,040.00	\$ 363,937.92	6
7	IV	37	\$ 10,360.00	\$ 419,437.92	7
8	-	-	-	\$ 419,437.92	8
9	-	-	-	\$ 419,437.92	9
10	-	-	-	\$ 419,437.92	10
TOTAL		277	\$ 964,860.00	\$ 2,406,612.00	TOTAL

Revenue/Cost = 2.49

## Assumptions:

CO-OP Serves Year 1, 2, & 3

Annexation after Year 3

Average Growth Rate:

Size of Homes:

Average Yearly Bill: \$

80 lots/year  
2000 ft<sup>2</sup>  
1,500.00

Phase I	163	lots
Phase II	111	
Phase III	138	
Phase VI	105	
	517	lots

All numbers calculated based on current prices.

# Cost/Benefit Study if Territorial Agreement "Not" Approved

LAKES OF SHUYLER RIDGE SUBDIVISION					
YEAR	PHASE	ESTIMATED GROWTH (# OF METERS ADDED)	COST TO SERVE	ESTIMATED REVENUE	YEAR
1	I	-	\$ -	\$ -	1
2	I	-	\$ -	\$ -	2
3	I	-	\$ -	\$ -	3
	II	-	\$ -	\$ -	
4	II	-	\$ -	\$ -	4
	III	-	\$ -	\$ -	
5	III	80	\$ 281,400.00	\$ 121,265.76	5
6	III	12	\$ 3,360.00	\$ 242,742.48	6
	IV	68	\$ 355,040.00	\$ 298,242.48	
7	IV	37	\$ 10,360.00	\$ 298,242.48	7
8	-	-	-	\$ 298,242.48	8
9	-	-	-	\$ 298,242.48	9
10	-	-	-	\$ 298,242.48	10
TOTAL		197	\$ 650,160.00	\$ 1,556,978.16	TOTAL

Revenue/Cost = 2.39

## Assumptions:

CO-OP Serves Year 1, 2, 3, & 4  
Annexation after Year 4

Average Growth Rate:

Size of Homes:

Average Yearly Bill: \$

80 lots/year  
2000 ft<sup>2</sup>  
1,500.00

Phase I	163	lots
Phase II	111	
Phase III	138	
Phase VI	105	
	517	lots

All numbers calculated based on current prices.