1 2 3 4 5 6 7 8	Licking Valle Case No. Computation Octobe	Exhibit K page 1 of 7 Witness: Jim Adkins			
9					
10			Actual		Adjusted
11			<u>Test Year</u>		<u>Test Year</u>
12	Net margins	\$	599,912	\$	533,695
13 14	Net margins	φ	399,912	¢	555,095
14	Non-cash patronage dividends		(1,394,546)		_
16	Tion cush puronage arriaonas		(1,5) 1,5 10)		
17	Interest on long-term debt		430,627		533,695
18	-				
19	Total	\$	(364,007)	\$	1,067,390
20					
21	Net rate base	\$	44,790,484	\$	36,300,796
22					
23	Rate of return		<u>-0.81%</u>		<u>2.94%</u>
24		.		đ	
25	Equity Capitalization	\$	43,036,534	\$	42,863,578
26			0.050/		2 400/
27	Rate of return		<u>-0.85%</u>		<u>2.49%</u>
28 29					
29 30					
00					

1 2 3					Witne	Exhibit K page 2 of 7 ss: Jim Adkins			
4	Licking Valley Rural Electric								
5	Case No. 2016-00174								
6	Determination of Rate Base								
7	October 31, 2015								
8									
9				Actual		Adjusted			
10				Test Year		Test Year			
11	Gross rate base:								
12									
13	Total electric plant		\$	68,782,735	\$	68,782,735			
14	Material and supplies			518,267		518,267			
15	(13 months average for t	est year)		125 7(0		125 760			
16	Prepayments	act year)		125,769		125,769			
17	(13 months average for t Working capital:	est year)							
18	12.5% of operating expe	nsa							
19 20	less cost of power	1150		887,743		901,563			
20	less cost of power			007,745		701,505			
22				70,314,514		70,328,334			
23	Deductions from rate base:			, 0,01 ,01		, 0,020,000			
24	Accumulated depreciation	1		25,241,298		33,744,806			
25	Consumer advances			282,732		282,732			
26									
27	Net rate base		\$	44,790,484	\$	36,300,796			
28									
29 30		<u>Material</u>	ł	Prepayments					
30 31	October 2014	438,287		33,369					
32	November	472,800		14,743					
33	December	457,502		244,153					
34	January	512,614		227,232					
35	February	578,307		206,574					
36	March	613,290		185,917					
37	April	659,822		165,259					
38	May	661,930		144,602					
39	June	646,281		123,944					
40	July	494,563		103,287					
41	August	475,616		82,630					
42	September	370,971		61,972					
43	October	355,489		41,315					
44 45	Average	518,267		125,769					
45 46	11,01450	510,207		123,107					
40 47									

1	Licking Valley Rural Electric						
2	Case No. 2016-00174						
3	Computation of Rate of Return						
4	October 31, 2015						
5	Calendar Year						
7	Test Year	1st	2nd	4th	5th		
8	2015	2014	2013	3rd 2012	2011	2010	
9	2015	2014	2015	2012	2011	2010	
10 Net margins	\$599,912	\$1,323,349	\$2,392,305	\$1,466,274	\$2,086,245	\$2,125,788	
11 Interest on long-term debt	430,627	482,034	508,943	543,200	582,861	631,698	
12 Total	1,030,539	1,805,383	2,901,248	2,009,474	2,669,106	2,757,486	
13							
14 Net rate base	44,790,484	43,701,256	42,835,533	41,857,203	41,343,309	40,170,944	
15							
16 Rate of return	<u>2.30%</u>	4.13%	<u>6.77%</u>	<u>4.80%</u>	<u>6.46%</u>	<u>6.86%</u>	
17							
18 Return excluding G & T	ſ	Calendar Year					
19 patronage dividends:	Test Year	1st	2nd	3rd	4th	5th	
20	2015	2014	2013	2012	2011	2010	
21	¢500.010	¢1.000.040	\$2,202,205		\$2 ,00, 6 , 2 ,1 5	#2 125 5 00	
22 Net margins	\$599,912	\$1,323,349	\$2,392,305	\$1,466,274	\$2,086,245	\$2,125,788	
23 G & T patronage dividends	1,394,546	1,394,546	1,649,431	1,272,091	1,420,511	793,799	
24 Interest on long-term debt	430,627	482,034	508,943	543,200	582,861	631,698	
25 Total	(364,007)	410,837	1,251,817	737,383	1,248,595	1,963,687	
26							
27 Net rate base	44,790,484	43,701,256	42,835,533	41,857,203	41,343,309	40,170,944	
28							
29 Rate of return, excluding G &	& Τ <u>-0.81%</u>	<u>0.94%</u>	<u>2.92%</u>	<u>1.76%</u>	<u>3.02%</u>	<u>4.89%</u>	
30							

2 3					Witn	page 4 of ´ ess: Jim Adkin				
4	Licking Valley Rural Electric									
5	Case No. 2016-00174									
Determination of Rate Base										
7		October 31	, 2015							
8										
9				Calendar Year						
10	Test Year	1 st	2nd	3rd	4th	5th				
11	2015	2014	2013	2012	2011	2010				
12 Gross rate base:										
13 Total electric plant	\$68,782,735	\$66,856,977	\$64,584,820	\$62,183,720	\$60,536,072	\$58,140,565				
14 Material and supplies (13 mo. ave te	518,267	457,502	386,676	538,490	452,570	439,857				
15 Prepayments (13 mo. ave test year)	125,769	244,153	223,511	221,911	214,747	230,032				
16 Working capital:										
17 12.5% of operating expense										
18 less cost of power	887,743	860,806	770,441	719,502	688,319	689,997				
19	70,314,514	68,419,438	65,965,448	63,663,623	61,891,708	59,500,451				
20										
21 Deductions from rate base:										
22 Accumulated depreciation	25,241,298	24,423,220	22,807,812	21,489,222	20,213,836	19,012,829				
23 Consumer advances	282,732	294,962	322,103	317,198	334,563	316,678				
24										
25 Net rate base	\$44,790,484	\$43,701,256	\$42,835,533	\$41,857,203	\$41,343,309	\$40,170,944				
26										

1 2 3			Exhibit K page 5 of 7 Witness: Jim Adkins					
4	Licking Valley	Rural Electric	Withess. Jim / Kikins					
5	Case No. 2							
6	TIER and DSC Calculations							
	October							
7 8	October	31, 2013						
o 9		Actual	Adjusted					
10		<u>Test Year</u>	<u>Test Year</u>					
11								
12	TIER:							
13								
14	Margins, excluding G&T capital credits	(\$794,634)	\$533,695					
15	Interest on long term debt	430,627	533,695					
16			2 00					
17	TIER	(0.85)	2.00					
18								
19 20	DSC:							
20	DSC.							
22	Margins, excluding G&T capital credits	(\$794,634)	\$533,695					
23	Depreciation expense	2,189,646	2,227,561					
24	Interest on long term debt	430,627	533,695					
25	Principal payment on							
26	long term debt	1,274,310	1,274,310					
27								
28	DSC	1.07	1.82					
29								

1 2 3 4 5	Licking Valley Rural Electric Case No. 2016-00174 TIER and DSC Calculations October 31, 2015								
6	Calendar Year								
Test Year1st2nd3rd4th5th									
8 TIER calculations:	2015	2014	2013	2012	2011	2010			
⁹ 10 Margins, excluding G&T									
11 capital credits	(794,634)	(71,197)	742,874	194,183	665,734	1,331,989			
12 Interest on long term debt	430,627	482,034	508,943	543,200	582,861	631,698			
13 TIER , excluding G&T capital cre	(0.85)	0.85	2.46	1.36	2.14	3.11			
14									
15 Margins, including G&T									
16 capital credits	599,912	1,323,349	2,392,305	1,466,274	2,086,245	2,125,788			
17 Interest on long term debt	430,627	482,034	508,943	543,200	582,861	631,698			
18 TIER	2.39	3.75	5.70	3.70	4.58	4.37			
19									
20 DSC calculations:									
DSC = ((Margins + depreciation + d	- interest) / (inter	est + principal pa	ayments)						
²² 23 Margins, excluding G&T									
24 capital credits	(794,634)	(71,197)	742,874	194,183	665,734	1,331,989			
25 Depreciation expense	2,189,646	2,130,224	2,055,949	1,978,327	1,917,883	1,858,364			
26 Interest on long term debt	430,627	482,034	508,943	543,200	582,861	631,698			
27 Principal payment on									
28 long term debt	1,274,310	1,212,689	1,105,523	1,185,814	1,177,923	1,199,190			
29 DSC , excluding G&T capital cred	<u>1.07</u>	<u>1.50</u>	<u>2.05</u>	<u>1.57</u>	<u>1.80</u>	<u>2.09</u>			
30									
31 Margins, including G&T									
32 capital credits	599,912	1,323,349	2,392,305	1,466,274	2,086,245	2,125,788			
33 Depreciation expense	2,189,646	2,130,224	2,055,949	1,978,327	1,917,883	1,858,364			
34 Interest on long term debt	430,627	482,034	508,943	543,200	582,861	631,698			
35 Principal payment on									
36 long term debt	1,274,310	1,212,689	1,105,523	1,185,814	1,177,923	1,199,190			
37 DSC	<u>1.89</u>	<u>2.32</u>	<u>3.07</u>	<u>2.31</u>	<u>2.61</u>	<u>2.52</u>			
38									

1 2 3 4		Licking Valley Rural Electric Case No. 2016-00174 Equity Capitalization October 31, 2015						
5	Ĩ	I	Test			Calendar Year]
6 7			Year	1				
8		Proposed	2015	2014	2013	2012	2011	2010
9 10 11	Equity Capitalization: without G&T patronage capital		<u> </u>	<u> </u>	<u> </u>	1		
12	Total margins and equities	29,631,991	29,804,947	31,139,485	29,745,164	27,284,145	25,747,710	23,581,498
13	Less G&T Patronage capital	12,635,508	12,635,508	11,240,962	9,591,531	8,319,440	6,898,929	6,105,130
14		16,996,483	17,169,439	19,898,523	20,153,633	18,964,705	18,848,781	17,476,368
15	Long-term debt	25,867,095	25,867,095	24,426,367	22,641,056	21,682,579	21,868,393	23,046,315
16	Total	42,863,578	43,036,534	44,324,890	42,794,689	40,647,284	40,717,174	40,522,683
17								
18	Equity capitalization ratio	<u>40%</u>	<u>40%</u>	<u>45%</u>	<u>47%</u>	<u>47%</u>	<u>46%</u>	<u>43%</u>
19								
20	Equity Capitalization:							
21	with G&T patronage capital							
22								
23	Total margins and equities	29,631,991	29,804,947	31,139,485	29,745,164	27,284,145	25,747,710	23,581,498
24	Long-term debt	25,867,095	25,867,095	24,426,367	22,641,056	21,682,579	21,868,393	23,046,315
25	Total	55,499,086	55,672,042	55,565,852	52,386,220	48,966,724	47,616,103	46,627,813
26								
27	Equity capitalization ratio	<u>53%</u>	<u>54%</u>	<u>56%</u>	<u>57%</u>	<u>56%</u>	<u>54%</u>	<u>51%</u>
28								
29	Equity to Total Assets:							
30	with G&T patronage capital							
31		20 (21 001	20.004.047	21 120 405	20 745 164	07 004 145	05 7 47 710	00 501 400
32	Total margins and equities	29,631,991	29,804,947	31,139,485	29,745,164	27,284,145	25,747,710	23,581,498
33	Total assets	62,498,407	62,671,363	63,979,839	61,784,498	59,369,289	56,756,650	54,632,246
34 25	Equity to total asset ratio	<u>47%</u>	<u>48%</u>	<u>49%</u>	<u>48%</u>	<u>46%</u>	<u>45%</u>	<u>43%</u>
35 36	Equity to total asset fatto	<u>41%</u>	<u>40%</u>	<u>49%</u>	<u>40%</u>	<u>40%</u>	<u>43%</u>	<u>43%</u>
30								