Exhibit No.:

Issues:

Sales and Revenues

Rate Design

Witness:

Janice Pyatte

Sponsoring Party:

MO PSC

Type of Exhibit:

True-Up Direct

Testimony

Case No.:

ER-2001-299

Date Testimony Prepared:

August 7, 2001

MISSOURI PUBLIC SERVICE COMMISSION UTILITY OPERATIONS DIVISION

TRUE-UP DIRECT TESTIMONY

OF

JANICE PYATTE

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2001-299

Jefferson City, Missouri August 2001

Date 8/23/61 Case No. ER-201/259
Reporter Kem

1	TRUE-UP DIRECT TESTIMONY
2	OF
3	JANICE PYATTE
4	THE EMPIRE DISTRICT ELECTRIC COMPANY
5	CASE NO. ER-2001-299
6	
7	SALES AND REVENUES
8	RATE DESIGN4
9	

1	TRUE-UP DIRECT TESTIMONY
2	OF
3	JANICE PYATTE
4	THE EMPIRE DISTRICT ELECTRIC COMPANY
5	CASE NO. ER-2001-299
6	Q. Please state your name and business address.
7	A. My name is Janice Pyatte and my business address is Missouri Public Service
8	Commission, P. O. Box 360, Jefferson City, Missouri 65102.
9	Q. Are you the same Janice Pyatte who previously filed testimony in this case?
0	A. Yes, I am.
1	SALES AND REVENUES
2	Q. What is the purpose of your true-up direct testimony on the issue of Sales and
3	Revenues in this case?
4	A. My true-up direct testimony on the issue of Sales and Revenues presents two
5	schedules that summarize The Empire District Electric Company's (Company or EDE)
16	Missouri jurisdictional, test year kilowatt-hour sales (kWh sales) and revenues from kWh
17	sales (rate revenues) in this case, as updated through June 30, 2001. I will describe my role
18	in updating certain adjustments to kWh sales and rate revenues that have been made since my
19	direct testimony filing on this issue on April 3, 2001.
20	Q. What updates to test year kWh sales and revenues have been made since
21	Staff's direct filing on April 3, 2001?
22	A. KWh sales and rate revenues have been updated to account for four specific
23	items:

- (1) Staff witness Roy M. Boltz, Jr. is sponsoring the additional kWh sales and rate revenues to reflect growth in the number of customers between the end of the test year (December 31, 2000) and the end of the update period (June 30, 2001). These numbers are shown in Schedules 1 and 2, attached to this testimony.
- (2) I have verified that, as of June 30, EDE has not contracted with any customers for interruptible service via Rider IR for the summer of 2001. I have adjusted EDE's revenues relating to interruptible credits accordingly.
- (3) I have added an adjustment to booked rate revenues to reflect a discrepancy of \$366,207 between EDE's recorded test year booked revenues and the sum of actual test year billed and unbilled revenues. This discrepancy existed in Staff's April 3, 2001 direct filing, but was not explicitly identified as such. My subsequent discussions with the Company on this issue leads me to believe that billed plus unbilled is the proper starting point for test year rate revenues.
- (4) I have revised the annualization for a specific large customer to account for more recent information on that customer's operation.
 - Q. Please describe the revisions you made to the large customer annualization?
- A. In my direct testimony on the issue of Sales and Revenues, filed April 3, 2001, I made an annualization to both kWh sales and rate revenues to reflect a significant drop in electric load and an associated switch in rate schedule for one large industrial customer. The customer in question was included in the kWh sales and rate revenue of the Large Power class (the rate schedule it switched to) for the entire year, at load levels that I estimated as being representative of its current operating situation. It was

removed entirely from the Special Contracts class (the rate schedule it switched from). The overall effect of this annualization was to reduce both kWh sales and rate revenues.

More recent information indicates that the large industrial customer in question has announced the permanent closing of a substantial portion of its Joplin plant. The electric load remaining at the plant is considerably lower than my first estimate and the customer will switch to the General Power, rather than the Large Power, rate schedule. The annualization to test year billed kWh sales and rate revenues shown on Schedules 1 and 2, attached to this testimony, reflects this new information.

- Q. Please describe Schedule 1, entitled <u>Missouri Retail Sales by Rate Schedule</u> and Cost of Service Class.
- A. Schedule 1 summarizes Staff's computation of EDE's Missouri jurisdictional, test year kWh sales by cost-of-service class and by rate schedule. The columns of Schedule 1 display the adjustments to kWh sales related to the various annualizations, normalizations, and customer growth.
- Q. Please describe Schedule 2, entitled <u>Missouri Retail Rate Revenues by Rate Schedule and Cost of Service Class</u>.
- A. Schedule 2 summarizes Staff's computation of EDE's Missouri jurisdictional, test year rate revenues from kWh sales. Rate revenues are presented by cost-of-service class and by rate schedule. The columns of Schedule 2 display the adjustments to rate revenues related to the various annualizations, normalizations, and customer growth.
- Q. Why is it important to determine EDE's Missouri kWh sales and rate revenues at this stage of the case?

A. The kWh sales shown in Schedule 1 and the rate revenues shown in Schedule 2, if adopted by the Commission, will be used to compute the rates that ultimately result from this case.

RATE DESIGN

- Q. What is the purpose of your true-up direct testimony on the issue of Rate Design in this case?
- A. My rate design testimony will describe the outcome of applying the Stipulation and Agreement Regarding Fuel and Purchased Power Expense and Class Cost of Service and Rate Design (Rate Design Stipulation) to the overall revenue increase shown in Staff's Accounting Schedule in this filing. My testimony will answer three basic questions:
- (1) What distribution of class revenue increases would result if the Commission were to adopt both the stipulated rate design and Staff's calculation of the overall revenue increase?
- (2) What rate levels would result if the Commission were to adopt both the stipulated rate design and Staff's calculation of the overall revenue increase?
- (3) What would be the impact on the typical residential customer if the Commission were to adopt both the stipulated rate design and Staff's calculation of the overall revenue increase?

DISTRIBUTION OF OVERALL REVENUE INCREASE TO CLASSES

Q. What distribution of class revenue increases would result if the Commission were to adopt both the stipulated rate design and Staff's calculation of the overall revenue increase?

True-Up Direct Testimony of Janice Pyatte

A. According to the Rate Design Stipulation, page 2, section 5, each class's share of the overall revenue increase will be determined as follows:

"The parties agree that the difference between an increase in the Company's revenue requirement that is approved by the Commission and the revenues collected by the IEC [interim energy charge] will be allocated to each customer class on an equal-percent-of-revenues basis . . ."

The attached Schedule 3, entitled <u>Calculation of Revenue Increases by Cost of Service Class and Rate Schedule</u>, displays the results of applying the above methodology to Staff's trued-up overall revenue increase, kWh sales, and rate revenue. Column 5 on Schedule 3 shows the dollar amount associated with the interim energy charge. The interim energy charge of 0.54 cents per kWh, which will be collected from all customers, will collect \$19,643,484, which represents a 9.65% increase in overall revenues. The percentage increase that will be experienced by each cost of service class and rate schedule, if the interim energy charge is implemented, varies from the overall 9.65% and is shown in Column 6 of Schedule 3. The remaining \$12,420,734 of the total revenue increase will be recovered through a 6.10% increase in existing rates, in accordance with the stipulation and agreement quoted above. The corresponding dollar increase to rate revenues for each cost of service class and rate schedule is shown in Column 3 of Schedule 3.

The combined result of both the 6.10% increase in existing rates and the interim energy charge is shown on Schedule 3 as dollar amount (column 7) and percentage (column 8). The overall increase of \$32,064,218 represents a 15.75% average increase in EDE's rate revenues. The Residential, Small General Service, and Lighting classes will experience less-than-system-average increases, while the Large General Service, Large Power, and Special Contract classes will experience increases that are greater than the system average.

	True-Up Direct Janice Pyatte	et Testimony of
1	RATE LEVELS	
2	Q.	How will the specific rates to be charged customers be determined under
3	the Rate Desig	n Stipulation?
4	A.	The Rate Design Stipulation, page 2, section 5, states that:
5 6 7 8 9		"The parties agree that the difference between an increase in the Company's revenue requirement that is approved by the Commission and the revenues collected by the IEC will be reflected on all Empire Missouri rate schedules as an equal percentage increase (or decrease) to each rate component on each tariff.
11	Q.	What rate levels would result if the Commission were to adopt both the
12	stipulated rate	design and Staff's calculation of the overall revenue increase?
13	Α.	In accordance with the Rate Design Stipulation quoted above, all existing rate
14	levels will in	crease by 6.10%. Schedule 4 displays the trued-up EDE rates and the
15	differences bet	tween the trued-up EDE rates and the existing rates, measured in terms of both
16	dollars and per	rcent.
17	IMPACT ON T	YPICAL RESIDENTIAL ELECTRIC BILLS
18	Q.	Have you conducted an analysis of the impact that adopting Staff's trued-up
19	rates would ha	ive on EDE's residential customers?
20	A.	Yes, I have. Schedule 5 consists of two tables that present information on the
21	rate impact on	EDE's residential customers. These two tables, taken together, present three
22	comparisons:	
23		(1) A comparison between the electric bills on existing EDE residential

A comparison between the electric bills on Staff's trued-up residential

rates and the electric bills on Staff's trued-up residential rates (including the interim energy

24

25

26

charge) presented in this testimony.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

True-Up Direct Testimony of Janice Pvatte

rates (including the interim energy charge) and the rates the Company proposed in its original filing in this case.

- A comparison between the electric bills on Staff's trued-up residential rates (including the interim energy charge) and the residential rates charged at the five other Missouri regulated utilities.
- Please briefly describe the methodology used to measure the impact that adopting Staff's trued-up rates would have on EDE's residential customers?
- To ensure that the results being presented are only attributable to differences in rates, rather than to differences in electric usage or to a combination of both rates and usage, I defined a "typical customer" who "used" the average monthly residential electric usage, on a normal-weather basis, in EDE's service territory. This typical customer's usage was then priced on the set of residential rates being compared.
- How do the Staff's trued-up residential rates (including the interim energy Q. charge) compare to the existing EDE residential rates?
- A. The comparison between the trued-up residential rates (including the interim energy charge) and the existing EDE residential rates is shown on the top table of Schedule 5. The comparison is shown by season (summer, winter) and on an annual average basis. If the Commission were to adopt both the Rate Design Stipulation and the \$32,064,218 overall revenue increase proposed by the Staff, the electricity bill paid by the typical residential customer served by EDE would increase by approximately 14.49% (\$10.35) per month. A portion of this amount could be refunded to customers at a later date.
- How do the Staff's trued-up residential rates (including the interim energy Q. charge) compare to the rates the Company proposed in its original filing in this case?

- A. The comparison between the Staff's trued-up residential rates (including the interim energy charge) and the residential rates the Company proposed in its original filing is shown on the bottom table of Schedule 5. The comparison is shown by season (summer, winter) and on an annual average basis. If the Commission were to adopt the Company's originally proposed residential rates, the electricity bill paid by the typical residential customer served by EDE would increase by approximately 19.36% (\$14.76) per month on a permanent (non-refundable) basis.
- Q. How do the Staff's trued-up residential rates (including the interim energy charge) compare to the residential rates charged at the five other Missouri regulated utilities.
- A. The second table on Schedule 5 presents a comparison of the electricity bills that the EDE typical customer would experience if billed on the applicable residential rate schedule of each of the other five regulated Missouri electric utilities. The information in this table has been ranked from the lowest monthly bill to the highest. This table demonstrates that the electric bills of EDE's typical residential customer will move from the second lowest electricity bill in the state to the highest. This is true for both the Staff's trued-up rates and the Company's originally proposed rates.
 - Q. What recommendation are you making to the Commission in this testimony?
- A. I recommend that the Commission adopt the kWh sales displayed on Schedule 1, the rate revenues shown on Schedule 2, and the rate levels shown on Schedule 4.
 - Q. Does this conclude your true-up direct testimony in this case?
 - A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Empire District Electric Co)	Case No. ER-2001-299
General Rate Increase	mipany 1 or 1)	Case 140. ER-2001-239
	i	·	
A	AFFIDAVIT O	F JANICE	PYATTE
STATE OF MISSOURI)		
) ss		
COUNTY OF COLE)		
of the foregoing Direct testing True-Up Direct testimony to	mony in question be presented in by her; that she	on and answ the above on the has know	at she has participated in the preparation ver form, consisting of 8 pages of case, that the answers in the foregoing yledge of the matters set forth in such knowledge and belief.
			Janice Pyatte
			Jaince Fyatte
Subscribed and sworn to bef	ore me this	7th d	ay of August, 2001.
·	MICHELLE SO NOTARY PUBLIC STA COLE CO	ATE OF MISSOU DUNTY	T Julius Manual
My commission expires	MY COMMISSION E	XP. APR. 25,200	6 - [Notary Public
mij commission expires			

EMPIRE DISTRICT ELECTRIC CO - CASE NO ER-2001-299 MISSOURI RETAIL SALES BY COST OF SERVICE CLASS

Cost of Service Class/Tariff	TY Booked Sales (kWh)	Annualization Adjustment(1)	Normalization Adjustment (2)	Growth Adjustment (3)	Total Test Year Booked Sales (kWh)
RESIDENTIAL	1,457,134,358	, , , , , , , , , , , , , , , , , , , ,	(26,307,294)	19,271,413	1,450,098,477
RESIDENTIAL	1,437,134,330		(20,307,234)	17,271,413	1, 130,030, 477
SMALL GENERAL SERVICE:					
Commercial Service	314,196,522		(3,315,333)	10,035,421	320,916,610
Small Heating	108,442,256		(1,017,233)	(13,245,780)	94,179,243
Feed Mills	1,291,512				1,291,512
Traffic Signals	456,549				456,549
Total Small GS	424,386,839		(4,332,566)	(3,210,358)	416,843,915
LARGE GENERAL SERVICE:		· · · · · ·			
Total Electric Buildings	302,944,254		(2,616,566)	(702,217)	299,625,471
General Power	700,599,253	3,600,000	(4,024,636)	40,970,329	741,144,946
Total Large GS	1,003,543,507	3,600,000	(6,641,202)	40,268,111	1,040,770,416
LARGE POWER	644,913,500	(6,208,800)			638,704,700
SPECIAL CONTRACTS	61,663,973	(6,565,800)			55,098,173
ELECTRIC FURNACE	2,081,160				2,081,160
LIGHTING					
Street Lighting	15,350,916				15,350,916
Private Lighting	17,149,283				17,149,283
Special Lighting	1,585,158				1,585,158
Total Lighting	34,085,357	-	-	•	34,085,357
TOTAL MO RETAIL SALES	3,627,808,694	(9,174,600)	(37,281,062)	56,329,166	3,637,682,198

Adjustments to sales to reflect significant customer load changes and rate switching.
 Adjustment to sales resulting from the normalization of sales for weather and calendar year.

^{3.} Adjustment to sales resulting from growth in the number of customers.

EMPIRE DISTRICT ELECTRIC CO - CASE NO ER-2001-299 MISSOURI RETAIL RATE REVENUES BY COST OF SERVICE CLASS

Cost of Service Class/Tariff	TY Booked Revenues	Annualization Adjustment(1)	Normalization Adjustment (2)	Growth Adjustment (3)	Test Year Retail Rate Revenue
RESIDENTIAL	\$92,473,518		(\$1,191,175)	\$1,228,683	\$92,511,026
SMALL GENERAL SERVICE:					
Commercial Service	\$22,443,951		(\$182,011)	\$713,990	\$22,975,930
Small Heating	\$6,338,400		(\$46,706)	(\$755,082)	\$5,536,613
Feed Mills	\$117,329				\$117,329
Traffic Signals	\$24,170				\$24,170
Total Small GS	\$28,923,850	\$0	(\$228,717)	(\$41,092)	\$28,654,041
LARGE GENERAL SERVICE:					
Total Electric Buildings	\$15,370,417		(\$86,014)	(\$16,369)	\$15,268,034
General Power	\$34,880,522	\$169,507	(\$197,767)	\$2,028,744	\$36,881,006
Total Large GS	\$50,250,939	\$169,507	(\$283,780)	\$2,012,374	\$52,149,040
LARGE POWER	\$24,687,223	(\$240,831)			\$24,446,392
SPECIAL CONTRACTS	\$2,187,513	(\$319,509)			\$1,868,004
ELECTRIC FURNACE	\$94,693				\$94,693
LIGHTING					
Street Lighting	\$904,535				\$904,535
Private Lighting	\$2,770,142				\$2,770,142
Special Lighting	\$132,482				\$132,482
Total Lighting	\$3,807,158	\$0	\$0	\$0	\$3,807,158
OTHER RATE REVENUE:					
Interruptible Credits (4)	(\$529,599)	\$186,687			(\$342,912)
Excess Facilities Revenue	\$990,968	\$34,542			\$1,025,511
Other Facilities Revenue	\$517,091				\$517,091
Total Other Rate Revenue	\$978,460	\$221,229	\$0	\$0	\$1,199,690
TOTAL MO RATE REVENUE	\$203,403,354	(\$169,604)	(\$1,703,672)	\$3,199,965	\$204,730,043

^{1.} Adjustments to revenues to reflect significant customer load changes, rate switching and revenue credits.

^{2.} Adjustment to revenues resulting from the normalization of sales for weather and calendar year.

^{3.} Adjustment to revenues resulting from growth in the number of customers.

^{4.} Assumes the Commission determines that the Combined Cycle Unit is "in service".

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299

CALCULATION OF REVENUE INCREASES BY COST OF SERVICE CLASS AND RATE SCHEDULE (ASSUMES \$32,064,218 INCREASE IN OVERALL REVENUES)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
i I					\$ to Refundable	% Change due		True-up
	Current	% Change to	\$ Change to	Current	\$0.0054	to Refundable	Overall \$	Overall %
Cost of Service Class/Tariff	Revenues	Rate Schedules	Rate Schedules	kWh Sales	Fuel Charge	Fuel Charge	Increase	Increase
RESIDENTIAL	\$92,511,026	6.10%	\$5,645,619	1,450,098,477	\$7,830,532	8.46%	\$13,476,151	14.57%
SMALL GENERAL SERVICE:								
Commercial Service	\$22,975,930	6.10%	\$1,402,139	320,916,610	\$1,732,950	7.54%	\$3,135,089	. 13.65%
Small Heating	\$5,536,613	6.10%	\$337,880	94,179,243	\$508,568	9.19%	\$846,448	15.29%
Feed Mills	\$117,329	6.10%	\$7,160	1,291,512	\$6,974	5.94%	\$14,134	12.05%
Traffic Signals	\$24,170	6.10%	\$1,475	456,549	\$2,465	10.20%	\$3,940	16.30%
Total Small GS	\$28,654,041		\$1,748,654	416,843,915	\$2,250,957	7.86%	\$3,999,611	13.96%
LARGE GENERAL SERVICE:								,
Total Electric Buildings	\$15,268,034	6.10%	\$931,754	299,625,471	\$1,617,978	10.60%	\$2,549,731	16.70%
General Power	\$36,881,006	6.10%	\$2,250,717	741,144,946	\$4,002,183	10.85%	\$6,252,899	16.95%
Total Large GS	\$52,149,040		\$3,182,471	1,040,770,416	\$5,620,160	10.78%	\$8,802,631	16.88%
LABOE BOWER	\$24 44E 202	6.10%	\$1,491,876	638,704,700	\$3,449,005	14.11%	\$4,940,882	20.21%
LARGE POWER	\$24,446,392	0.10%	\$1,491,670	030,704,700	\$5,449,005	14.1170	\$4, 9 40,002	20.2176
SPECIAL CONTRACTS	\$1,868,004	6.10%	\$113,998	55,098,173	\$297,530	15.93%	\$411,528	22.03%
ELECTRIC FURNACE	\$94,693	6.10%	\$5,779	2,081,160	\$11,238	11.87%	\$17,017	17.97%
LIGHTING								
Street Lighting	\$904,535	6.10%	\$55,201	15,350,916	\$82,895	9.16%	\$138,095	15.27%
Private Lighting	\$2,770,142	6.10%	\$169,052	17,149,283	\$92,606	3.34%	\$261,658	9.45%
Special Lighting	\$132,482	6.10%	\$8,085	1,585,158	\$8,560	6.46%	\$16,645	12.56%
Total Lighting	\$3,807,158		\$232,337	34,085,357	\$184,061	4.83%	\$416,398	10.94%
TOTAL MO RETAIL	\$203,530,354	6.10%	\$12,420,734	3,637,682,198	\$19,643,484	9.65%	\$32,064,218	15.75%

4

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299 CURRENT AND TRUED-UP RATES - BY RATE SCHEDULE (ASSUMES \$32,064,218 INCREASE IN OVERALL REVENUES)

	RESIDEN	TIAL SERVICE		COMMERCIAL SERVICE					
CUSTOMER CHARGE	CURRENT <u>RATES</u> \$7.58	PROPOSED RATES \$8.04	DIFFERE <u>(\$)</u> \$0.46	ENCE (%) 6.10%	CUSTOMER CHARGE	CURRENT <u>RATES</u> \$10.83	PROPOSED RATES \$11.49	DIFFERE (\$) \$0.66	NCE (%) 6.10%
ENERGY CHARGES SUMMER					ENERGY CHARGE: SUMMER				
FIRST 600 KWH	\$0.0643	\$0.0682	\$0.0039	6.10%	FIRST 700 KWH	\$0.0736	\$0.0781	\$0.0045	6.10%
OVER 600 KWH WINTER	\$0.0643	\$0.0682	\$0.0039	6.10%	OVER 700 KWH WINTER	\$0.0736	\$0.0781	\$0.0045	6.10%
FIRST 600 KWH	\$0.0643	\$0.0682	\$0.0039	6.10%	FIRST 700 KWH	\$0.0736	\$0.0781	\$0.0045	6.10%
OVER 600 KWH	\$0.0379	\$0.0402	\$0.0023	6.10%	OVER 700 KWH	\$0.0501	\$0.0532	\$0.0031	6.10%
	SMALL HEA	TING SERVICE			F	EED MILL & GR	AIN ELEVATOR	(67)	
	CURRENT RATES	PROPOSED RATES	DIFFERE	NCE (%)		CURRENT RATES	PROPOSED RATES	DIFFERE	
CUSTOMER CHARGE	\$10.83	\$11.49	(<u>\$)</u> \$0.66	6.10%	CUSTOMER CHARGE	\$16.24	\$17.23	(\$) \$0.99	<u>(%)</u> 6.10%
ENERGY CHARGE: SUMMER					ENERGY CHARGE: SUMMER				
FIRST 700 KWH	\$0.0736	\$0.0781	\$0.0045	6.10%	FIRST 700 KWH	\$0.0942	\$0.0999	\$0.0057	6.10%
OVER 700 KWH WINTER	\$0.0736	\$0.0781	\$0.0045	6.10%	OVER 700 KWH WINTER	\$0.0942	\$0.0999	\$0.0057	6.10%
FIRST 700 KWH	\$0.0736	\$0.0781	\$0.0045	6.10%	FIRST 700 KWH	\$0.0942	\$0.0999	\$0.0057	6.10%
OVER 700 KWH	\$0.0383	\$0.0406	\$0.0023	6.10%	OVER 700 KWH	\$0.0855	\$0.0907	\$0.0052	6.10%

e 4

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299 CURRENT AND TRUED-UP RATES - BY RATE SCHEDULE (ASSUMES \$32,064,218 INCREASE IN OVERALL REVENUES)

GENERAL POWER SERVICE

TOTAL ELECTRIC BUILDINGS

	CURRENT	PROPOSED	DIFFERE	NCE		CURRENT	PROPOSED	DIFFERE	NCE
	RATES	RATES	(\$)	(%)		<u>RATES</u>	<u>RATES</u>	(\$)	(%)
CUSTOMER CHARGE:			—		CUSTOMER CHARGE:				
REG MTR BILLS	\$39.31	\$41.71	\$2.40	6.10%	REG MTR BILLS	\$39.31	\$41.71	\$2.40	6.10%
IDR MTR BILLS	\$144.60	\$153.42	\$8.82	6.10%	IDR MTR BILLS	\$144.60	\$153.42	\$8.82	6.10%
DEMAND CHARGE:					DEMAND CHARGE:				
SUMMER KW	\$5.35	\$5.68	\$0.33	6.10%	SUMMER KW	\$3.35	\$3.55	\$0.20	6.10%
WINTER KW	\$4.18	\$4.44	\$0.26	6.10%	WINTER KW	\$2.75	\$2.92	\$0.17	6.10%
			· · · · ·	4			,		
PRIMARY DISCOUNT:					PRIMARY DISCOUNT:				
SUMMER KW	(\$0.185)	(\$0.196)	(\$0.011)	6.10%	SUMMER KW	(\$0.185)	(\$0.196)	(\$0.011)	6.10%
WINTER KW	(\$0.185)	(\$0.196)	(\$0.011)	6.10%	WINTER KW	(\$0.185)	(\$0.196)	(\$0.011)	6.10%
ENERGY CHARGE:					ENERGY CHARGE:				
SUMMER					SUMMER				
FIRST 150 HU	\$0.0550	\$0.0584	\$0.0034	6.10%	FIRST 150 HU	\$0.0645	\$0.0684	\$0.0039	6.10%
NEXT 200 HU	\$0.0347	\$0.0368	\$0.0021	6.10%	NEXT 200 HU	\$0.0408	\$0.0433	\$0.0025	6.10%
OVER 350 HU	\$0.0317	\$0.0331	\$0.0019	6.10%	OVER 350 HU	\$0.0367	\$0.0389	\$0.0022	6.10%
	\$0.0312	40.0331	40.00.2	0.20.0	WINTER	•	,	·	
WINTER	¢0.0274	\$0.0344	\$0.0020	6,10%	FIRST 150 HU	\$0.0338	\$0.0359	\$0.0021	6.10%
FIRST 150 HU	\$0.0324	\$0.0331	\$0.0020	6.10%	NEXT 200 HU	\$0.0318	\$0.0337	\$0.0019	6.10%
NEXT 200 HU	\$0.0312	,	•	6.10%	OVER 350 HU	\$0,0307	\$0.0326	\$0.0019	6.10%
OVER 350 HU	\$0.030 4	\$0.0323	\$0.0019	0.1070	O4EK 330 110	40.0201	¥0.0520	40,0012	5.1070

le 4-

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299 CURRENT AND TRUED-UP RATES - BY RATE SCHEDULE (ASSUMES \$32,064,218 INCREASE IN OVERALL REVENUES)

	LARGE PO	WER SERVICE			5	SPECIAL TRANS	MISSION SERVI	CE	
	CURRENT	PROPOSED	DIFFERE			CURRENT	PROPOSED	DIFFERE	
	RATES	<u>RATES</u>	(\$)	<u>(%)</u>		<u>RATES</u>	RATES	<u>(\$)</u>	(%)
CUSTOMER CHARGE	\$144.60	\$153.42	\$8.82	6.10%	CUSTOMER CHARGE	\$144.60	\$153.42	\$8.82	6.10%
DEMAND CHARGE:					FACILITIES CHARGE:				
SUMMER KW	\$8.55	\$9.07	\$0.52	6.10%	SUMMER KW	\$0.27	\$0.29	\$0.02	6.10%
WINTER KW	\$4.72	\$5.01	\$0.29	6.10%	WINTER KW	\$0.27	\$0.29	\$0.02	6.10%
SECONDARY ADDER:	•		-		DEMAND CHARGE:			•	
SUMMER KW	(\$0.180)	(\$0.191)	(\$0.011)	6.10%	SUMMER ON-PEAK KW	\$13.02	\$13.81	\$0.79	6.10%
WINTER KW	(\$0.180)	(\$0.191)	(\$0.011)	6.10%	WINTER ON-PEAK KW	\$8.85	\$9.39	\$0.54	6.10%
ENERGY CHARGE:					ENERGY CHARGE:				
SUMMER					SUMMER				
FIRST 350 HU	\$0.0340	\$0.0361	\$0.0021	6.10%	ON-PEAK KWH	\$ 0.0259	\$0.0275	\$0.0016	6.10%
OVER 350 HU	\$0.0176	\$0.0187	\$0.0011	6.10%	Shoulder KWH	\$0.0206	\$0.0219	\$0.0013	6.10%
WINTER					OFF-PEAK KWH	\$0.0155	\$0.0164	\$0.0009	6.10%
FIRST 350 HU	\$0.0300	\$0.0318	\$0.0018	6.10%	WINTER				
OVER 350 HU	\$0.0169	\$0.0179	\$0.0010	6.10%	ON-PEAK KWH	\$0.0179	\$0.0190	\$0.0011	6.10%
					OFF-PEAK KWH	\$0.0146	\$0.0155	\$0.0009	6.10%
	POWER	FURNACE				MISCELLANEOU	JS SERVICE (33))	
	CURRENT	PROPOSED	DIFFERE			CURRENT	PROPOSED	DIFFERE	NCE
	RATES	RATES	(\$)	<u>(%)</u>		RATES	RATES	(\$)	(%)
CUSTOMER CHARGE	\$0.00	\$0.00	\$0.00	0.00%	CUSTOMER CHARGE	\$10.83	\$11.49	\$0.66	6.10%
ENERGY CHARGE:					ENERGY CHARGE:				
SUMMER KWH	\$0.0455	\$0.0483	\$0.0028	6.10%	SUMMER KWH	\$0.0526	\$0.0558	\$0.0032	6.10%
WINTER KWH	\$0.0455	\$0.0483	\$0.0028	6.10%	WINTER KWH	\$0.0526	\$0.0558	\$0.0032	6.10%
	•	*					•	•	

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299 CURRENT AND TRUED-UP RATES - BY RATE SCHEDULE (ASSUMES \$32,064,218 INCREASE IN OVERALL REVENUES)

PRIVATE LIGHTING

MUNICIPAL STREET LIGHTING

	CURRENT	PROPOSED	DIFFERE	ENCE		CURRENT	PROPOSED	DIFFERE	NCE
	RATES	RATES	(\$)	(%)		<u>RATES</u>	RATES	(\$)	(%)
STREET LIGHTING LAMPS:					STREET LIGHTING LAMPS:				-
MERCURY VAPOR					INCANDESCENT				
6800 LUMENS	\$8.42	\$8.93	\$0.51	6.10%	4000 LUMENS	\$34.96	\$37.09	\$2.13	6.10%
20000 LUMENS	\$14.01	\$14.86	\$0.85	6.10%	10000 LUMENS	\$71.96	\$76.35	\$4.39	6.10%
54000 LUMENS	\$26.87	\$28.51	\$1.64	6.10%	MERCURY VAPOR	·	,	,	
SODIUM VAPOR	,	•	•		7000 LUMENS	\$47.49	\$50.39	\$2.90	6.10%
6000 LUMENS	\$7.78	\$8.25	\$0.47	6.10%	11000 LUMENS	\$57.00	\$60.48	\$3.48	6.10%
16000 LUMENS	\$11.32	\$12.01	\$0.69	6.10%	20000 LUMENS	\$81.61	\$86.59	\$4.98	6.10%
27500 LUMENS	\$16.37	\$17.37	\$1.00	6.10%	53000 LUMENS	\$137.69	\$146.09	\$8,40	6.10%
50000 LUMENS	\$18.99	\$20.15	\$1.16	6.10%	SODIUM VAPOR	•	•	•	
METAL HALIDE	1	,	•		6000 LUMENS	\$44.50	\$47.22	\$2.72	6.10%
12000 LUMENS	\$13.12	\$13.92	\$0.80	6.10%	16000 LUMENS	\$55.71	\$59.11	\$3.40	6.10%
20500 LUMENS	\$17.51	\$18.58	\$1.07	6.10%	27500 LUMENS	\$72.50	\$76.92	\$4.42	6.10%
36000 LUMENS	\$19.64	\$20.84	\$1.20	6.10%	50000 LUMENS	\$103.34	\$109.65	\$6.31	6.10%
	4	•	,		130000 LUMENS	\$166.76	\$176.94	\$10.18	6.10%
FLOOD LIGHTING LAMPS:					METAL HALIDE		,	·	
MERCURY VAPOR					12000 LUMENS	\$69.80	\$74.06	\$4.26	6.10%
20000 LUMENS	\$19.64	\$20.84	\$1.20	6.10%	20500 LUMENS	\$85.36	\$90.57	\$5.21	6.10%
54000 LUMENS	\$32.44	\$34.42	\$1.98	6.10%	36000 LUMENS	\$114.18	\$121.15	\$6.97	6.10%
SODIUM VAPOR	,	,	,		110000 LUMENS	\$252.33	\$267.73	\$15.40	6.10%
27500 LUMENS	\$19.04	\$20.20	\$1.16	6.10%			•	·	
50000 LUMENS	\$26.10	\$27.69	\$1.59	6.10%		SPECIA	L LIGHTING		
140000 LUMENS	\$38.14	\$40.47	\$2.33	6.10%					
METAL HALIDE	,	•	•			CURRENT	PROPOSED	DIFFERENCE	
12000 LUMENS	\$13.48	\$14.30	\$0.82	6.10%		RATES	RATES	(\$)	(%)
20500 LUMENS	\$18.02	\$19.12	\$1.10	6.10%	MINIMUM CHARGE	\$24.90	\$26.42	\$1.52	6.10%
36000 LUMENS	\$26.59	\$28.21	\$1.62	6.10%					
110000 LUMENS	\$38.84	\$41.21	\$2.37	6.10%	ENERGY CHARGE:				
115000 20. 12.15	100.0	'	,		SUMMER				
OTHER CHARGES:					FIRST 1000 KWH	\$0.0914	\$0.0970	\$0.0056	6.10%
ADDL POLES	\$1.08	\$1.15	\$0.07	6.10%	OVER 1000 KWH	\$0.0714	\$0.0758	\$0.0044	6.10%
ADDL FORES	\$1.08	\$1.15	\$0.07	6.10%	WINTER	•		,	••
ADDL CONDUCTOR	\$0.010	\$0.011	\$0.001	6.10%	FIRST 1000 KWH	\$0.0914	\$0.0970	\$0.0056	6.10%
ADDE CONDUCTOR	40.010	40.022	45.552		OVER 1000 KWH	\$0.0714	\$0.0758	\$0.0044	6.10%
						7	40.0.00	40.0011	014070

THE EMPIRE DISTRICT ELECTRIC COMPANY - CASE NO. ER-2001-299

THE IMPACT OF TRUE-UP RATES ON TYPICAL RESIDENTIAL ELECTRIC BILLS

	SUMMER AVERAGE	WINTER AVERAGE	ANNUAL AVERAGE
NORMALIZED USE (KWH/MONTH)	1,275	1,026	1,109
BILL ON CURRENT RATES (\$/MONTH)	\$89.56	\$62.31	\$71.39
BILL ON PROPOSED RATES (\$/MONTH)	\$101.91	\$71.65	\$81.74
DOLLAR CHANGE FROM CURRENT (\$/MONTH)	\$12.35	\$9.34	\$10.35
PERCENT CHANGE FROM CURRENT (%)	13.79%	14.99%	14.49%
ASSUMES A 6.10% INCREASE IN RATES PLUS AN INTERIM ENERGY C	HARGE OF \$0.0054	PER KWH	ı

A COMPARISON OF TYPICAL RESIDENTIAL ELECTRIC BILLS AT MISSOURI INVESTOR-OWNED UTILITIES

	EFFECTIVE DATE	SUMMER AVERAGE	WINTER AVERAGE	ANNUAL AVERAGE
ST.JOSEPH LIGHT & POWER CO.	10/31/99	\$87.19	\$58.43	\$68.02
EMPIRE DISTRICT ELECTRIC CO.	09/19/97	\$89.56	\$62.31	\$71.39
KANSAS CITY POWER & LIGHT CO.	08/01/99	\$100.46	\$62.24	\$74.98
UNION ELECTRIC CO.	03/30/00	\$109.76	\$60.28	\$76.77
CITIZENS ELECTRIC CORP.	03/28/97	\$90.89	\$72.24	\$78.45
MISSOURI PUBLIC SERVICE	04/17/98	\$98.30	\$69.12	\$78.84
EMPIRE DISTRICT ELECTRIC CO.	True-up	\$101.91	\$71.65	\$81.74
EMPIRE DISTRICT ELECTRIC CO.	EDE Proposal	\$108.09	\$75.18	\$86.15

NOTE: THE TYPICAL RESIDENTIAL CUSTOMER USAGE IS ASSUMED TO AVERAGE 1,275 KWH IN THE SUMMER MONTHS AND 1,026 KWH IN THE WINTER MONTHS.