Exhibit No.:

Issues:

FAS 87, FAS 106 and Funding

of Pension and OPEB Plans

Witness:

C. KENNETH VOGL

Sponsoring Party:

Empire Dist. Electric Company Rebuttal Testimony

Type of Exhibit: Case No.:

ER-2004-0570

Date Testimony Prepared: November 4, 2004

FILED³

DEC 2 8 2004

MISSOURI PUBLIC SERVICE COMMISSION

Missouri Public Service Commission

CASE NO. ER-2004-0570

REBUTTAL TESTIMONY

OF

C. KENNETH VOGL

ON

BEHALF OF

THE EMPIRE DISTRICT ELECTRIC COMPANY

Joplin, Missouri November 2004

Exhibit No. 22

Case No(s). 22 - 2004-0516

Date 2-06-01 Rptr 45

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MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2004-0570

REBUTTAL TESTIMONY

OF

C. KENNETH VOGL

ON

BEHALF OF

THE EMPIRE DISTRICT ELECTRIC COMPANY

Joplin, Missouri November 2004

AFFIDAVIT

STATE OF MISSOURI		
COUNTY OF JASPER	•	S

On the 2 day of November, 2004, before me appeared Charles Kenneth Vogl, to me personally known, who, being by me first duly sworn, states that he is a Principal of Towers Perrin that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

(Name)

Subscribed and sworn to before me this 3 day of November, 2004.

(Name), Notary Public

My commission expires: 3-18-07

Notary Seal

ANDREA AGNE St. Louis County My Commission Expires February 18, 2007

1		REBUTTAL TESTIMONY
2		OF
3		C. KENNETH VOGL
4		CASE NO. ER-2004-0570
5	Q.	Please state your name and business address.
6	A.	My name is C. Kenneth Vogl. My business address is 101 South Hanley,
7	Suite 900, St	t. Louis, Missouri 63105.
8	Q.	By whom and in what capacity are you employed?
9	A.	I am a Principal with Towers Perrin. I serve as an actuary and employee
10	benefits con	sultant to a number of clients in the firm's St. Louis office.
11	Q.	Please describe Towers Perrin.
12	A.	Towers Perrin is an international management and actuarial consulting firm
13	with offices	in 79 locations throughout the world. We serve approximately 7,000 clients
14	worldwide ii	n virtually every industry as well as in the government, education, and not-for-
15	profit sectors	s.
16	Q.	Please describe your education.
17	Α.	I received a Bachelor of Science degree in mathematics from University of
18	Missouri, Co	olumbia in 1988 and a Doctorate of Philosophy in mathematics from Washington
19	University in	n 1994. I completed the examination requirements for designation as a Fellow of
20	the Society of	of Actuaries and received such designation in August 2000. I completed both the
21	examination	and experience requirements for designation as an Enrolled Actuary under the
22	Employee R	etirement Income Security Act of 1974 (ERISA) and received such designation
23	in 1998.	
24	Q.	Please describe your qualifications.

1	A.	I have been employed with Towers Perrin as a consulting actuary since 1995;
2	I was employ	ed by William Mercer in St. Louis from 1994 to 1995. I have substantial
3	technical and	consulting experience relative to employee benefit plans — including the
4	design, fundi	ng, accounting, and communication of pension and postretirement welfare
5	programs.	
6	Q.	What is the purpose of your testimony?
7	A .	The purpose of my testimony is to rebut the Staff's direct testimony of Doyle
8	L. Gibbs and	the OPC's direct testimony of Ted Robertson, which propose that The Empire
9	District Elect	ric Company ("Empire") should recover the cost of pension benefits it provides
10	to its employ	ees based on the ERISA minimum contribution requirement.
11		My direct testimony submitted on April 30, 2004, demonstrated that the
12	"ERISA min	imum contribution method" is not a preferable method of cost recovery. Some
13	of that testim	ony has been included here, but the reader is referred to my direct testimony for
14	a more thoro	ugh discussion.
15	Q.	Why shouldn't the "ERISA minimum contribution method" be used for
16	regulatory p	ourposes?
17	Α.	The "ERISA minimum contribution method" is unacceptable because:
18		1) the excessive year-to-year volatility inherent in the ERISA calculations
19		can create test-year costs that are significantly higher or lower than actual
20		costs incurred during the recovery period;
21		2) it will create inequities between generations of rate payers;
22		3) it is not consistent with Generally Accepted Accounting Principles
23		("GAAP") and, therefore, cannot be used for shareholder financial
24		reporting purposes; and

1	4) it discourages funding policies that are consistent with good pension plan
2	management.
3	Q. Can you explain what you mean when you say the "ERISA minimum
4	contribution method" produces excessive year-to-year volatility?
5	A. Yes. Essentially, under current funding rules, a low interest rate environment
6	coupled with investment losses on plan assets can create ERISA minimum required
7	contributions that are four-to-five times greater than the average long-term cost of a plan. In
8	fact, it's not uncommon for a plan today to have a minimum required contribution in excess
9	of 25% of payroll when only three years ago this same plan would not have been allowed to
10	make a deductible contribution. I will illustrate the year-to-year volatility by looking at
11	projected costs (see Schedule 1 for additional detail) under two future economic scenarios:
12	1) Scenario 1 (adverse returns) assumes that the investment returns on plan
13	assets from 2004 through 2006 equal the returns from 2000 through 2002,
14	and that the plan assets will earn 8.5% thereafter. As you can see from the
15	projected costs contained in Schedule 1, a very large contribution of \$12.9
16	million would be required in 2007 as a result of the additional funding
17	charge (see my direct testimony for a discussion of this item). In fact,
18	contributions for 2007 through 2009 total about \$31.5 million under this
19	scenario. The large 2007 contribution represents about 33% of payroll fo
20	plan participants, and the contributions for 2007 through 2009 average
21	over 25% of payroll.
22	2) Scenario 2 (volatile returns) assumes that the investment return on plan
23	assets from 2004 alternate between 0% and 17%. Note that this scenario'
24	compound return over the forecast period will average out to the expected

return of 8.5%. As you can see from the projected costs in Schedule 1, the incidence and amount of contributions is closely correlated to the return.

Although four of the ten forecast years show minimum contributions of \$0, contributions for three of the remaining six years are about three times the ten-year average.

This volatility is clearly inappropriate for regulatory purposes. If a large increase in contributions occurs during a test-year, then rate payers will be overcharged. Similarly, if the increase occurs during a non-test-year, the company will be required to make a large cash contribution despite collecting a smaller amount (or even nothing) in rates. Even though a regulatory asset/liability may be established to account for these differences, the "ERISA minimum contribution method" is likely to result in very large regulatory assets, which will need to be addressed in future rate cases by future Staffs.

Q. You also state that the "ERISA minimum contribution method" creates inequities between generations of rate payers. Please explain.

A. Given the long-term nature of pension obligations, the ideal method would allocate the true cost of the plan evenly over this long-term period. However, since the "true cost" cannot be determined in advance, the next best approach is to choose a method that produces a stable cost recognition pattern (i.e., is less volatile) in various economic environments. Due to the volatility discussed in the previous question, the "ERISA minimum contribution method" does not produce this stable pattern of cost recognition. As demonstrated by the cost projections in Schedule 1, the "ERISA minimum contribution method" would produce costs over the next several years well below the average cost over the next ten years.

I have used the investment scenarios described above to illustrate this point.

1	1) Scenario 1 (adverse returns) projects an average contribution of \$5.5
2	million over the next 10 years. It also projects an ERISA minimum
3	required contribution of \$0 for 2004 and \$0.5 million for 2005. Based on
4	the average contribution (\$5.3 million), roughly \$10.1 million of costs that
5	should be borne by rate payers for 2004 and 2005 will be deferred to rate
6	payers after 2005.
7	2) Scenario 2 (volatile returns) projects an average contribution of \$3.2
8	million over the next 10 years. It also projects total ERISA minimum
9	required contributions of just \$0.5 million for 2004 through 2006. Based
10	on the average contribution (\$3.2 million), roughly \$9.1 million of costs
11	that should be borne by rate payers for 2004 through 2006 will be deferred
12	to rate payers after 2006.
13	Even though it currently generates a lower level of cost, the Staff's (and the OPC's)
14	proposed method does not eliminate or reduce costs. It simply defers the recognition of
15	those costs to a future period, resulting in larger future costs and the generational inequity
16	discussed in the above illustrations. In fact, continuing the "ERISA minimum contribution
17	method" will exacerbate the generational inequity that was produced by the rate recovery
18	methodology used since 1994.
19	Q. What do you mean by the generational inequity that was produced by the
20	rate recovery methodology since 1994?
21	A. In 1994, when FAS 87 was accepted by the PSC staff as the basis for rate
22	recovery, the PSC staff required ten-year amortization of gains and losses (PSC staff moved
23	to a five-year amortization period in 1995). This requirement, coupled with the use of the fair

1 value of plan assets, accelerated the recognition of the "paper gains" at that time and as a 2 result produced "pension credits," not costs, of about \$12.9 million. 3 As a result of the market correction during 2000, 2001, and 2002, these "paper 4 gains" no longer exist, and the credits passed through to rate payers of the 1990's must be 5 "paid back" by future rate payers per the stipulation agreement of 2002. 6 Q. Is Empire able to use the "ERISA minimum contribution method" for 7 purposes of financial reporting to shareholders? 8 A. No. Under Generally Accepted Accounting Principles ("GAAP"), Empire 9 must recognize pension cost in accordance with Statement of Financial Accounting 10 Standards No. 87 ("FAS 87"). The "ERISA minimum contribution method" does not satisfy 11 the requirements of FAS 87. A detailed description of both FAS 87 and the ERISA minimum 12 contribution requirements, including the differences between the two, is included in my 13 direct testimony. 14 Q. Even though the "ERISA minimum contribution method" cannot be used 15 for shareholder reporting purposes, will it produce costs similar to that recognized 16 under FAS 87? 17 A. Over the life of the plan, both methods must generate the same total employer cost. However, annual costs are often very different over the shorter-term. For example, the 18 19 2003 ERISA minimum required contribution was approximately \$0.3 million, while the FAS 20 87 cost was \$3.8 million for 2003. 21 Generally, FAS 87 can spread the cost of a plan as evenly as possibly over a long 22 period of time, whereas the "ERISA minimum contribution method" reacts abruptly to

changing economic conditions by generating very high costs for underfunded plans and zero

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cost for only slightly overfunded plans.

1	In addition, both the methodology and the economic assumptions used to
2	calculate the ERISA minimum contribution are very different from those used to determine
3	FAS 87 cost. These differences are discussed in detail in my direct testimony.
4	Q. How does the "ERISA minimum contribution method" discourage
5	funding policies that are consistent with good pension plan management?
6	A. Since only the ERISA minimum contribution is reflected in rates,
7	contributions in excess of the minimum required have no means of being recovered in rates.
8	The inflexibility of the "ERISA minimum contribution method" makes it extremely difficult
9	to manage the pension plan properly. For example, many organizations often make
10	voluntary contributions in excess of the ERISA minimum requirements in order to reduce the
11	premiums that must be paid to the Pension Benefit Guaranty Corporation. However, such
12	larger contributions would not be recognized costs under the current regulatory method for
13	Empire. In fact, making a larger contribution now would actually reduce future ERISA
14	minimum contribution requirements on a dollar-for-dollar basis and may never be
15	recoverable under the current method.
16	As another example, many organizations also make voluntary contributions in
17	excess of the ERISA minimum requirement in order to avoid the extreme volatility illustrated
18	previously. This is done by keeping the plan funded sufficiently to avoid the "additional
19	funding charge" that makes the ERISA contribution requirement so volatile. While this is
20	often a good business practice, additional contributions would not be recognized costs under
21	the "ERISA minimum contribution method".
22	In essence, the "ERISA minimum contribution method" discourages voluntary
23	contributions that are consistent with good business and pension plan management practices.
24	Q. Is there anything else?

1	Α.	Yes. It is my understanding that, since my direct testimony, an update to FAS
2	106 has been	reflected in Staff's latest revenue requirement and was agreed to by both
3	parties.	
4	Q.	Please summarize your rebuttal testimony.
5	A .	Currently, Empire recovers a cost equal to the ERISA minimum funding
6	requirement f	for its pension plan. However, this "ERISA minimum contribution method" is
7	unacceptable	because:
8	1)	the excessive year-to-year volatility inherent in the ERISA calculations can
9		create test-year costs that are significantly higher or lower than actual costs
10		incurred during the recovery period;
11	2)	it will create inequities between generations of rate payers;
12	3)	it is not consistent with Generally Accepted Accounting Principles ("GAAP")
13		and, therefore, cannot be used for shareholder financial reporting purposes;
14		and
15	4)	it discourages good pension plan management policy.
16	Unde	r current funding rules, a low interest rate environment coupled with investment
17	losses on plan	n assets can create ERISA minimum required contributions in a given year that
18	are four-to-fi	ve times greater than the average long-term cost of a plan. This result is clearly
19	inappropriate	for regulatory purposes.
20	Q.	Does this conclude your testimony?
21	A.	Yes it does.

Rebuttal Testimony of C. KENNETH VOGL EMPIRE DISTRICT ELECTRIC COMPANY Case No. ER-2005-0570

Schedule 1 - Illustration of Cost Volatility Under the "ERISA Minimum Contribution Method"

A. FAS 87 cost vs. ERISA minimum contribution requirement							
	adverse returns volatile returns stable ret					eturns	
_	FAS 87_	ERISA	FAS 87	ERISA	FAS 87	ERISA	
2004	2.8	0.0	2.8	0.0	2.8	0.0	
2005	3.0	0.5	3.0	0.5	2.8	0.0	
2006	3.7	9.2	3.2	0.0	2.9	0.0	
2007	4.3	12.9	3.5	2.5	3.0	0.3	
2008	4.4	10.2	3.7	2.2	3.2	2.5	
2009	4.6	8.4	3.8	9.2	3.2	2.7	
2010	4.8	2.8	3.5	0.0	3.0	2.8	
2011	5.1	3.0	3.7	9.3	3.1	3.0	
2012	5.1	3.1	3.6	0.0	3.2	3.1	
2013	5.0	3.3	3.7	8.2	3.3	3.3	
average	4.28	5.34	3.45	3.19	3.05	1,77	
B. Absolute	B. Absolute value of change in cost from prior year.						
2005	0.2	0.5	0.2	0.5	0.0	0.0	
2006	0.7	8.7	0.2	0.5	0.1	0.0	
2007	0.6	3.7	0.3	2.5	0.1	0.3	
2008	0.1	2.7	0.2	0.3	0.2	2.2	
2009	0.2	1.8	0.1	7.0	0.0	0.2	
2010	0.2	5.6	0.3	9.2	0.2	0.1	
2011	0.3	0.2	0.2	9.3	0.1	0.2	
2012	0.0	0.1	0.1	9.3	0.1	0.1	
2013	0.1	0.2	0.1	8.2	0.1	0.2	
avg chng	0.27	2.61	0.19	5.20	0.10	0.37	
ratio of avg		9.67	0.10	27.37	5.10	3.70	

^{*}Note that forecasts of costs are based on liabilities provided by Watson Wyatt.