

**EXECUTIVE SUMMARY
FOR THE DIRECT TESTIMONY OF MICHAEL E. PALMER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO.**

Purpose of Testimony

The testimony addresses changes in the tree trimming program and related costs, requests implementation of a storm damage tracking mechanism and suggests changes to our street lighting tariff.

Summary

Tree Trimming is the primary component of vegetation management. Section II of my testimony provides information on Empire's current program and recent changes implemented. These changes include how the work is planned, performed and reimbursed. It also includes changes to the Company's primary vegetation control contractor and the retaining of an outside consultant to assist in the planning of vegetation control projects.

A Storm Damage Tracking Mechanism is being requested in Section III. The mechanism to assist Empire in the recovery of the expenses related to the rebuilding of our system in the event of a natural disaster. The approach presented is believed to help lessen the potential financial burden of the natural disaster for both customers and shareholders. The recommendation is supported by the Edison Electric Institute report, "After the Disaster, Utility Restoration Cost." A copy is included in exhibit MP1.

Additionally, a change to the Street Lighting tariff is requested in Section IV. The change will allow cities to have the option of continuing to be billed directly for street lighting or allocating the cost of the street lighting to customers within the city. This request is due to competition from electric cooperatives in several subdivisions within the Empire service territory.

Conclusion

The vegetation control costs included in this rate case are \$5,350,689, which is approximately the same level of expenditure incurred during 2004. This level of expenditure is not expected to decrease and therefore no adjustment was made to the test year level.

The Storm Damage Tracking Mechanism will be based on test year storm expense. Each year's actual storm damage expenses will be compared to the test year level of expense with the difference being captured as a regulatory asset or regulatory liability. The resulting regulatory asset or liability will be included in the calculation of rate base and the balance amortized in the next rate case.

Exhibit No.
Issue: Vegetation Control, Storm Damage
Reserve
Witness: Michael E. Palmer
Type of Exhibit: Direct Testimony
Sponsoring Party: Empire District
Case No.
Date Testimony Prepared: February 2006

**Before the Public Service Commission
of the State of Missouri**

**Direct Testimony
of**

Michael E. Palmer

February 2006

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OF
MICHAEL E. PALMER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION

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DIRECT TESTIMONY
OF
MICHAEL E. PALMER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO.

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. Michael E. Palmer, 602 Joplin Street, Joplin, Missouri 64802.

4 **Q. WHO IS YOUR EMPLOYER AND WHAT POSITION DO YOU HOLD?**

5 A. The Empire District Electric Company (“Empire” or “Company”) is my employer. I
6 hold the position of Vice President – Commercial Operations.

7 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.**

8 A. I hold a Bachelor of Science Degree in Construction Management Technology from
9 Pittsburg State University.

10 **Q. PLEASE DESCRIBE YOUR EMPLOYMENT BACKGROUND WITH**
11 **EMPIRE.**

12 A. I joined the staff at Empire in June 1986 as a Customer Service Consultant. I later
13 served as District Manager in Aurora and Director of Operations in Branson. My
14 employment with Empire has been continuous since 1986.

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE BEFORE**
16 **THE MISSOURI PUBLIC SERVICE COMMISSION (“COMMISSION”)?**

1 A. My testimony will address changes in our tree trimming program, related costs and
2 request to implement a storm damage tracking mechanism and requested changes to
3 our street lighting tariff.

4 **II. VEGETATION CONTROL EXPENDITURES**

5 **Q. PLEASE DESCRIBE EMPIRE'S CURRENT TREE TRIMMING PROGRAM.**

6 A. Tree trimming is a major maintenance activity and results of this program can have a
7 significant impact on Empire's system reliability. We employ a variety of techniques,
8 use many different pieces of equipment, and spend a very significant portion of our
9 maintenance funds on this effort.

10 Our distribution trimming program includes planned maintenance work, work
11 required for construction as well as activities pertaining to the unexpected vegetation
12 problems that occur. All of these functions must be performed to maintain good
13 service continuity.

14 Our transmission system trimming program is primarily planned work, and because
15 most transmission lines traverse cross country and have wider rights-of-way, we
16 employ larger pieces of equipment and use herbicides to a much greater extent than
17 we do at the distribution level.

18 **Q. HAS EMPIRE MADE ANY RECENT CHANGES TO ITS TREE TRIMMING**
19 **PROGRAM?**

20 A. Yes. In 2005, Empire made extensive changes to its tree trimming program. The
21 changes were primarily related to distribution vegetation control, but refinements to
22 our transmission trimming program have also been made. These changes include
23 how the work is planned, how it is performed and the way it is reimbursed. We have

1 also changed our primary vegetation control contractor and retained an outside
2 consultant to assist us in the planning of our vegetation control projects.

3 **Q. HAVE THESE CHANGES IMPROVED YOUR PROCESS?**

4 A. Yes. Our regular distribution trimming projects are now planned by Job Planners.
5 These Job Planners are contract employees of Environmental Consultants
6 Incorporated ("ECI") of Stoughton, Wisconsin. ECI focus is on the science and
7 management of vegetation control programs. The work plans ECI prepares specify
8 exactly which trees are to be trimmed or removed and when and where herbicide is to
9 be used, rather than physical trimming. In addition, ECI has as a goal, to secure
10 written permission for all tree removals.

11 Another improvement in our vegetation control program involves the manner in
12 which the actual physical trimming is performed. We now employ directional
13 pruning techniques. This method results in trees that are not only healthier, but it also
14 discourages re-growth toward the power lines. Empire has received recognition from
15 the Missouri Department of Conservation for this new trimming practice.

16 **Q. HAS EMPIRE MADE ANY OTHER CHANGES IN THIS AREA?**

17 A. Yes. Empire has changed its outside tree trimming contractor. By way of
18 background in 2005, after an exhaustive evaluation process, Wright Tree Service of
19 Des Moines, Iowa was selected to be our tree trimming contractor. The evaluation
20 process used to award the contract included the usual request for time and equipment
21 rates; but, in support of our new processes, we also required the bidders to provide
22 unit-cost rates. In this case, the unit-cost rates were associated with different types of
23 trims (e.g., side trims, V-trims, etc.), the removal cost for different diameters of trees,

brush removal, herbicide application, etc. We believe the additional refinement of unit-cost billing will help ensure a higher level performance from our contractor.

Q. WHAT HAS EMPIRE SPENT ON VEGETATION CONTROL IN RECENT YEARS?

A. Our tree trimming expenditures have consistently increased growing by approximately 31 percent since 2000. The following table displays our vegetation control costs by year for the period 2000 through 2004:

2000	\$4,176,899
2001	\$4,597,474
2002	\$4,482,817
2003	\$5,037,155
2004	\$5,467,370

Q. WHAT LEVEL OF VEGETATION CONTROL COSTS ARE INCLUDED IN EMPIRE'S RATE CASE?

A. We have included \$5,350,689 of vegetation control costs (tree trimming) in our Missouri rate case filing. This level of expenditure is approximately the same level of expenditure we had during calendar year 2004. We have been able to maintain our level of costs in this area due to the new tree trimming process I previously described and the new tree trimming contract implemented in 2005.

Q. DO YOU BELIEVE THAT TREE TRIMMING EXPENSES WILL RETURN TO THE LOWER LEVELS OF YEARS THE YEARS PRIOR TO 2004?

A. No. We have finished installing a new Outage Management System ("OMS") and now have nearly a full year of system reliability data, including a full range of reliability statistics. The new OMS has enhanced our ability to gain insight into how efficiently our system is performing. The initial information we have gathered from

1 this new system indicates that an additional increase in trimming expenditures may be
2 warranted. In any event, we see no indications that any reductions in expenditures in
3 this area are forthcoming in the near future. If the Commission Staff were to make a
4 visual inspection of the vegetation conditions Empire is facing, it would support our
5 recommendation that our Missouri revenue requirement include at the very least our
6 actual expenditures in this area.

7 **Q. WHAT ARE THE POTENTIAL CONSEQUENCES IF EMPIRE'S**
8 **VEGETATION MANAGEMENT IS NOT FUNDED AT THE TEST YEAR**
9 **LEVELS?**

10 A. An increase in customer dissatisfaction with service and the potential for increased
11 expenses due to an increase in actual outage restoration efforts.

12 **Q. WHAT EVIDENCE CAN YOU POINT TO THAT A REDUCTION IN**
13 **VEGETATION CONTROL EFFORTS CAN LEAD TO AN INCREASE IN**
14 **OUTAGE RESTORATION COSTS?**

15 A. In my opinion, the blackout that occurred in the Northeastern United States in August
16 of 2003 is a prime example of what can occur if a high level of vegetation control is
17 not maintained. The primary cause of the August 14, 2003, northeast blackout was
18 inadequate tree trimming. Both NERC and this Commission believed this event was
19 important enough to increase the reporting requirements related to tree trimming and
20 reliability. Additionally, the Federal Energy Regulatory Commission ("FERC") was
21 interested enough to open a special docket (Docket No. EL04-52-000) and direct that
22 all entities that own, control or operate certain transmission facilities report on the
23 vegetation management practices they use for transmission lines and right of ways.

1 **III. STORM DAMAGE TRACKING MECHANISM**

2 **Q. PLEASE EXPLAIN THE IMPACT STORM DAMAGE MAY HAVE ON A**
3 **UTILITY AND CONSUMERS.**

4 A. The damage to utility property and the impact on customers can be catastrophic.
5 During the last year we have witnessed catastrophic damage to utility systems due to
6 natural disasters. This has forced both utilities and their regulators to consider
7 methods that might be used to mitigate the financial impact of storms while
8 maintaining the speed of the restoration process.

9 **Q. HAS EMPIRE HAD OCCASIONS WHERE IT HAD TO DEAL WITH**
10 **SIGNIFICANT STORM DAMAGE AND THE RELATED CUSTOMER**
11 **OUTAGES?**

12 A. Yes. On July 4, 2004 heavy lightning and strong winds moved throughout our
13 service territory causing widespread outages. At the height of the storm,
14 approximately 35,000 customers or about 22 percent of our customers were without
15 service. We were successful in restoring service to about one-half of these customers
16 on the same day of the storm. The cost of the storm repairs totaled nearly \$1.3M. It
17 should be noted that the physical damage from this particular storm, while certainly
18 significant, pales in comparison to what would almost certainly occur in the event of
19 a wide-spread ice storm.

20 Because we realize that these disasters create both emotional and economic hardship
21 on our customers, it is Empire's goal to handle these situations quickly and in the

1 most economical manner possible while maintaining the safety of our customers and
2 employees. In order to help meet this goal, we are requesting, as part of this rate
3 case, the authority to implement a storm damage tracking mechanism.

4 **Q. PLEASE CONTINUE.**

5 A. Empire is requesting a tracker mechanism to assist in the recovery of the expenses
6 related to the rebuilding of our system in the event of a natural disaster. We believe
7 this approach will help lessen the potential financial burden of a natural disaster for
8 both customers and shareholders.

9 **Q. HAS THE ELECTRIC UTILITY INDUSTRY PERFORMED ANY STUDIES**
10 **ON THE RAMIFICATIONS OF STORM DAMAGE?**

11 A. Yes. Empire's recommendation for such an approach to storm damage recovery is
12 supported by a report issued by the Edison Electric Institute "After the Disaster,
13 Utility Restoration Cost." A copy of the study is included in exhibit MP1. The report
14 lists the summary points as follows:

- 15
16 ■ Utilities incur substantial costs to repair their systems after disasters strike. Based
17 on survey data obtained for 81 major storms from 14 utility respondents, these
18 disasters cost utilities approximately \$2.7 billion (in constant \$2003) between
19 1994 and 2004.
- 20 ■ The economic impact of not having electric service in an area hit by a disaster is
21 much larger than the cost of repairing the damage. This suggests that the utilities'
22 current practice of incurring additional costs to mobilize outside resources to
23 restore power as quickly as possible is appropriate.
- 24 ■ The financial impact of disaster restoration can be devastating if it is not
25 mitigated. For some companies, restoration costs can exceed net operating income
26 for the year
- 27 ■ Several utilities rely on special storm reserves and/or deferred accounting
28 treatment to lessen the financial impact of disasters.
- 29 ■ In at least one instance, Wall Street changed its credit outlook for a utility, in part
30 because of concerns over how quickly a decision favorable to the utility would be
31 reached to mitigate the financial impact of restoration expenses.

- 1 ▪ There is little consistency in establishing which events do, or do not, qualify for
2 disaster mitigation. For example, one company was required to expense
3 approximately \$160 million of O&M storm costs associated with a major
4 hurricane against current year earnings, while another utility was allowed to
5 recover a \$1 million storm expense over a four-year period.
- 6 ▪ Storm reserves provide a type of self-insurance to pay for major storms, however,
7 they may not be funded sufficiently to pay for catastrophic storms. In most
8 instances these reserves do not provide a ready source of cash to pay for storms.
- 9 ▪ When faced with significant O&M restoration costs that could require a
10 substantial write-off, many companies are granted permission by their
11 commissions to defer these costs, but there is often a lengthy delay in providing
12 this relief and the approval process can become politicized.

14 **Q. WILL THE STORM DAMAGE MECHANISM YOU ARE PROPOSING**
15 **HELP EMPIRE PAY FOR THE RESTORATION AFTER A STORM?**

16 A. Not directly, but it will help mitigate the reaction of Wall Street to storm damage and
17 facilitate Empire's access to the capital necessary to restore service in the event of a
18 natural disaster.

19 **Q. PLEASE EXPLAIN HOW YOUR PROPOSED STORM MECHANISM**
20 **WOULD WORK?**

21 A. Empire proposes using the test year storm expense as the base for storm damage
22 expenses in the cost of service. Each year actual storm damage expenses will be
23 compared to the storm damage expenses included in the test year. The difference
24 between the actual expense and the base expense, test year, will be captured as a
25 regulatory asset or liability. If the actual storm damage expenses during a calendar
26 year are more than the test year expenses, Empire will record the difference as a
27 regulatory asset. If the actual storm damage expenses are less than the test year
28 expense levels, the difference will be used to reduce the regulatory asset or recorded

as a regulatory liability. The resulting regulatory asset or liability will be included in the calculation of rate base and the balance amortized in the next rate case.

Q. DOES EMPIRE HAVE ANY SIMILAR EXPENSE TRACKING MECHANISMS IN PLACE CURRENTLY?

A. Yes. Our proposed storm recovery mechanism is similar to the FAS87 tracking mechanism approved by the Commission in Case No. ER-2004-0570, our most recent electric rate case. Empire believes it is in the best interest of the customers and stockholders to utilize this method for recovery of storm expenses. The mechanism will ensure that the storm related expenses are fully recovered while maintaining rate stability for the customer as the costs associated with storm damage are spread over more than one year.

IV. STREET LIGHTING

Q. WHAT CHANGES ARE YOU PROPOSING FOR THE STREET LIGHTING TARIFF?

A. Competition from electric cooperatives in several subdivisions within the Empire service territory has created a need to modify the street light billing. We are proposing that the cities within our Missouri jurisdiction have the option of continuing to be billed directly for street lighting or allocating the cost of the street lighting to customers within the city and allowing Empire to bill the customers through an adder on their monthly electric invoices.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

Michael E. Palmer
Michael E. Palmer

Patricia A. Settle
Pat Settle, Notary Public

Patricia A. Settle
Notary Public - Notary Seal
State of Missouri
County of Jasper
Expires February 09, 2008