SURREBUTTAL TESTIMONY
OF
BARBARA MEISENHEIMER

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2004-0570

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. 2230, Jefferson City, Missouri 65102.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?

A. Yes, I submitted direct testimony on the issue of revenue requirement on September 20, 2004 and initial direct testimony on cost of service and rate design issues on September 27, 2004. On October 4, 2004, I submitted updated cost of service studies. On November 4, 2004, I filed rebuttal testimony.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Explorer Pipeline Company and Praxair, Inc. (Explorer and Praxair).

I. RESPONSE TO EXPLORER AND PRAXAIR

Q. IN REBUTTAL TESTIMONY, MR. BRUBAKER RAISED A NUMBER OF CONCERNS WITH YOUR CLASS COST OF STUDY. UPON REVIEW OF HIS CRITICISMS, DO YOU ACKNOWLEDGE THAT SOME OF HIS CONCERNS ARE VALID?

A. Yes, I believe that two of Mr. Brubaker's concerns are valid and I have made adjustments to the class cost of service studies I submitted on October 4, 2004, in consideration of his concerns. The adjusted CCOS study results are provided as Schedule 1 and Schedule 2 to this testimony.

Q. PLEASE DISCUSS THE FIRST ADJUSTMENT YOU MADE TO YOUR CCOS STUDY IN RESPONSE TO MR. BRUBAKER'S CONCERNS.

A. The first issue is related to allocating costs to Praxair as if it were a firm customer, but using Praxair's discounted payments to Empire for interruptible power. Mr. Brubaker suggested that it would be a more consistent approach to treat Praxair's load as firm using the revenues collected from Praxair before subtracting the interruptible credit. I revised my CCOS to reallocate the vast majority of the reduction in revenues associated with Praxair's interruptible credits to all classes in recognition that actual interruptions to customers such as Praxair can help to reduce costs during system peaks. Specifically, I distributed the revenues associated with the Praxair credits to all classes based on each class' share of the sum of non-coincident peaks for the month of August, 2003. August, 2003 was the month with the highest sum of non-coincident peaks as well as the month in which Praxair experienced the most curtailments of service.

The redistributed revenue associated with the interruptible credit and the impact on individual class revenues appear on line 9, Schedule 1 and line 9, Schedule 2 of this testimony. The derivation of the allocation factors associated with the interruptible credit is shown in Schedule 3.

Q. PLEASE DISCUSS THE SECOND ADJUSTMENT YOU MADE TO YOUR CCOS STUDY IN RESPONSE TO MR. BRUBAKER'S CONCERNS.

A. The second concern raised by Mr. Brubaker that I believe warrants adjustment relates to the treatment of differences in demand and energy losses among customer classes in constructing my original allocation factors. While the development of my factors for the Peak portion of my Average and Peak allocator did reflect differences in losses at different voltage levels, Mr. Brubaker is correct that my Energy allocator as well as the Average portion of my Average and Peak allocator did not. The Energy allocator directly impacts the assignment of cost associated with Fuel Inventory and Variable Fuel expenses. The Average portion of the Peak and Average allocator directly impacts the assignment of Production Plant, Transmission Plant and the associated expenses. These allocation factors also indirectly impact the assignment of other costs and expenses. To address Mr. Brubaker's concerns, I have adjusted both the Energy allocator and the Average portion of my Average and Peak allocator to reflect losses at different voltage levels based on loss factors developed by the Staff. The development of the adjusted Energy factors is shown in Schedule 4. The development of the adjusted Average portion of the Average and Peak allocation factors is shown in Schedule 5.

Q. **DID THE ADJUSTMENTS YOU MADE TO YOUR CCOS STUDY ALTER THE GENERAL CONCLUSIONS FROM YOUR PREVIOUS CCOS STUDY?**

A. While the magnitude of each class's revenue deficiency/surplus has changed, the general observations have not. The small general service class including commercial, small heating and feed mill are contributing significantly more revenues than the class cost of service on a revenue neutral basis. The residential class is approximately 1 % above cost of service. The special contract class and the large power class are significantly below cost of service.

Q. WHAT ADDITIONAL CRITISISMS DID MR. BRUBAKER HAVE REGARDING YOUR CCOS STUDIES?

Mr. Brubaker claims that the methodology I used for allocating generation and transmission fixed costs is not supported and is materially different from the traditional methodologies that are described in the National Association of Regulatory Utility Commissioners (NARUC) Cost Allocation Manual.

Q. DO YOU AGREE WITH HIS ASSESSMENT?

A. No, I do not. The use of Average and Peak allocation methodologies are an accepted method for allocating generation and transmission fixed costs and associated expenses. Some variations of an Average and Peak method are described beginning on page 57 of the 1992 NARUC Electric Cost Of Service Manual. I disagree with Mr. Brubaker's implication that, since the Average and Peak allocation methodology I used differs in some respects from the examples of Average and Peak allocation methodologies included in the NARUC manual, it should be rejected. I would point out that the NARUC manual does not intend or claim to provide an exhaustive discussion of all possible variations of a particular methodology:

> This manual only discusses the major costing methodologies. It recognizes that no single costing methodology will be superior to any other, and the choice of methodology will depend on the unique circumstances of each utility. Individual costing methodologies are complex and have inspired numerous debates on application, assumptions and data. (NARUC Electric Utility Cost Allocation Manual, January 1992, page 22)

Q. WHAT ARE THE SIGNIFICANT ATTRIBUTES OF AVERAGE AND PEAK ALLOCATION METHODOLOGIES?

A. The significance of using an Average and Peak method is that it produces allocation factors that apportion functionalized costs based on a weighting of energy related as well as demand-related cost classifications.

Q. HOW DO YOUR ALLOCATION FACTORS REFLECT A WEIGHTING OF ENERGY RELATED AND DEMAND-RELATED COSTS CONSISTENT WITH AN AVERAGE AND PEAK ALLOCATION METHODOLOGY?

A. Energy-related costs are costs which vary primarily with the total energy provided by the company. In the development of my allocation factors, each class's proportion of total annual use represents the energy-related apportionment of costs the class is assigned. The load factor (56%) represents the proportion of system capacity that is used on average throughout the year. If customer demands were uniform throughout the year, the load factor would represent a uniform level of capacity the company would need to supply. From a mathematical perspective, the product of the load factor and each class's energy-related apportionment of costs acts as a surrogate for the class's share of total capacity costs that the

company would provide throughout the year absent any fluctuations in the class's usage levels.

Demand-related costs are costs which vary primarily with variation in demand by customers. In the development of my allocation factors, each class's proportion of the sum of monthly non-coincident peaks represents the demand-related apportionment of costs the class is assigned for the month. The capacity in excess of the average load factor (100% - 56%) represents the proportion of total system costs that are caused by additional demand on the system throughout the year. From a mathematical perspective, the product of (100% - 56%) and demand related costs for each class acts as a surrogate for the share of total annual cost that would be incurred due to fluctuations in customer usage levels throughout the year.

Q. WHY DO YOU BELIEVE IT IS APPROPRIATE TO USE NONCOINCIDENT PEAKS AS OPPOSED TO COINCIDENT PEAKS IN APPORTIONING DEMAND RELATED COSTS?

A. The primary reason I believe the use of non-coincident peaks is appropriate is that facilities are designed to accomidate capacity utilization *above* the uniform average load associated with energy related costs. It is reasonable that all classes contribute to the recovery of the additional cost in proportion to the class's above uniform use throughout the year. Using coincident peaks would create a "free rider" problem in that classes that minimize use specifically during coincident peaks could avoid a reasonable apportionment of costs associated with system use during other times.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.