

Exhibit No.:  
Issues: Open Access Pilot Program  
Revenue, Production, Transmission  
Witness: Donald Johnstone  
Type of Exhibit: Direct Testimony  
Sponsoring Party: ICI Explosives USA Inc. and Praxair, Inc.  
Company: Empire District Electric Company  
Case No.: ER-97-81

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the matter of **THE EMPIRE DISTRICT ELECTRIC** )  
**COMPANY** of Joplin, Missouri for authority to file )  
tariffs increasing rates for electric service provided )  
to customers in the Missouri service area of the )  
Company )

Case No. ER-97-81

Direct Testimony of  
**Donald E. Johnstone**

On Behalf of  
**ICI Explosives USA Inc.**  
and  
**Praxair, Inc.**

**FILED**  
**FEB 13 1997**  
**MISSOURI**  
**PUBLIC SERVICE COMMISSION**

February 1997  
Project 6630

**Brubaker & Associates, Inc.**  
**St. Louis, MO 63141-2000**

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**


In the matter of The Empire District Electric Company     )  
of Joplin, Missouri for authority to file tariffs increasing     )  
rates for electric service provided to customers in the     )  
Missouri service areas of the Company     )     Case No. ER-97-81

**Affidavit of Donald Johnstone**

State of Missouri     )  
                              ) SS  
County of St. Louis     )

Donald Johnstone, being first duly sworn on his oath, states:

1. My name is Donald Johnstone. My business address is 1215 Fern Ridge Parkway, Suite 208, P. O. Box 412000, St. Louis, Missouri 63141-2000. I am a consultant in the field of public utility regulation and a principal in the firm of Brubaker & Associates, Inc.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony and Schedule 1, inclusive, all of which testimony has been prepared in written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

  
Donald E. Johnstone

Subscribed and sworn to before me this 12th day of February, 1997.

  
Notary Public

My Commission expires February 26, 2000.

1                   **BEFORE THE PUBLIC SERVICE COMMISSION**  
2                   **OF THE STATE OF MISSOURI**

3   In the matter of **THE EMPIRE DISTRICT ELECTRIC**                   )  
4   **COMPANY** of Joplin, Missouri for authority to file tariffs       )   Case No. ER-97-81  
5   increasing rates for electric service provided to customers   )  
6   in the Missouri service area of the Company                   )

7                   **Direct Testimony of Donald E. Johnstone**

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

9   **A       Donald E. Johnstone; 1215 Fern Ridge Parkway, Suite 208; St. Louis, MO 63141-2000.**

10  **Q       BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

11  **A       I am a principal with the firm of Brubaker & Associates, Inc. Brubaker & Associates, Inc.**  
12           **and its predecessor firms have provided a wide range of economic and regulatory**  
13           **consulting services for many years. More details are set forth in Schedule 1 to this**  
14           **testimony.**

15  **Q       ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

16  **A       I am appearing on behalf of ICI Explosives USA Inc. and Praxair, Inc.**

1 Q PLEASE DESCRIBE IN GENERAL TERMS THE NATURE OF THE SERVICE  
2 PROVIDED TO THESE CUSTOMERS BY EMPIRE DISTRICT ELECTRIC COMPANY  
3 (EMPIRE).

4 A ICI purchases electric power and energy from Empire under a firm service agreement.  
5 The service is provided at transmission voltage, 69 kV. Thus, ICI provides transformation  
6 of the power at a substation it owns down to lower voltage levels for distribution and  
7 consumption in its facility. The power and energy consumption requirements of ICI are  
8 quite consistent from day-to-day and throughout the year. The average load factor is  
9 81%. That means that the average power consumption for all hours of the year is 81%  
10 of the highest power consumption that occurred at any time during the year. It is very  
11 important to ICI to obtain service at the lowest possible cost.

12 Praxair consumes power and energy in the production of industrial gases. Again,  
13 the power and energy requirements are quite consistent on a day-to-day basis and  
14 throughout the year. The average load factor of Praxair is 93%. Praxair is very sensitive  
15 to the cost of electricity and has taken important steps to minimize costs including, in  
16 particular, an interruptible service agreement with Empire. Under this agreement, Praxair  
17 has made a commitment to reduce its load to less than 5% of its typical peak  
18 requirements when requested to do so by Empire during peak load periods. Thus, the  
19 amount of generation capacity that must be installed to serve this load is reduced by over  
20 95%. A portion of the savings are passed through to Praxair. While any industrial plant  
21 manager would prefer firm service so as to avoid the operational problems and costs  
22 associated with power interruptions, power costs are so important to Praxair that it has  
23 accepted this type of arrangement in order to reduce power costs.

1 Q ARE ICI AND PRAXAIR CONTINUALLY SEEKING WAYS TO REDUCE THEIR COST  
2 OF ELECTRICITY?

3 A Yes. For example, in the last proceeding, ICI and Praxair entered into discussions with  
4 Empire in regard to real time pricing. The thought was that real time pricing could provide  
5 prices based upon the hourly incremental cost to produce power. Depending upon the  
6 design of the rate and the ability to alter consumption patterns, it would be feasible to  
7 reduce the average cost of power under such an arrangement. Empire, ICI and Praxair  
8 agreed to continue discussions after the implementation of the rates approved by the  
9 Commission in ER-95-279.

10 While discussions of real time pricing alternatives were contemplated to take place  
11 in early 1996, the discussions were renewed in earnest in the fall of 1996 after the filing  
12 of the instant rate proceeding.

13 Q HAS ANY AGREEMENT BEEN REACHED IN THESE DISCUSSIONS?

14 A No. But, as a consequence of these discussions and other developments, I will be  
15 proposing a pilot retail open access tariff in my rate design testimony which is to be filed  
16 February 20, 1997. While I am hopeful that Empire will support by proposal, the Company  
17 has made no commitments to support or oppose any such proposal.

18 Q DOES A PILOT RETAIL OPEN ACCESS TARIFF HAVE AN IMPACT ON THE  
19 COMPANY'S REVENUES IN THIS PROCEEDING?

20 A Yes, it does. Under the pilot program the Missouri jurisdictional service provided by  
21 Empire to ICI and Praxair would change very substantially. Conceptually, Empire would  
22 be obligated to provide only delivery services to the companies. These services would  
23 be regulated by this Commission and the Federal Energy Regulatory Commission (FERC).  
24 The electric power and energy that would be delivered to the companies under this

1 arrangement would be procured in an unregulated market, a market which ICI and Praxair  
2 hope would be sufficiently competitive to produce relatively lower cost power and energy.

3 **Q HOW WILL THE PILOT RETAIL OPEN ACCESS PROGRAM IMPACT THIS**  
4 **PROCEEDING?**

5 **A** Generally, the program will reduce the amount of Missouri jurisdictional load. Reduction  
6 in the Missouri jurisdictional load would reduce Company and Missouri jurisdictional  
7 generation and transmission requirements, and generally reduce the allocation factors  
8 applied to production and transmission. I recommend such adjustments be incorporated  
9 into the determination of revenue requirements in this proceeding based on 100% of the  
10 load of the customers being served by non-jurisdictional generation.

11 **Q WOULD THE CUSTOMERS TAKING SERVICE UNDER THE PILOT RETAIL OPEN**  
12 **ACCESS PROGRAM BE REQUIRED TO TAKE TRANSMISSION SERVICE UNDER THE**  
13 **FERC APPROVED OPEN ACCESS TARIFF?**

14 **A** Yes. I will note that the FERC tariff includes all transmission costs so that there would  
15 be no reason or basis to allocate transmission system costs to any retail service provided  
16 under the pilot open access program. It is for this reason that I recommend that the loads  
17 of the pilot customers be removed from the allocation of transmission cost to the Missouri  
18 jurisdiction in this proceeding.

19 **Q WHY DO YOU RECOMMEND THE IMPLEMENTATION OF A PILOT RETAIL OPEN**  
20 **ACCESS PROGRAM AT THIS TIME?**

21 **A** There are several reasons. First is the simple fact that we have a market-based economy  
22 in this country. While one of the roles of regulation has been to operate as a surrogate  
23 for competition, in the generation sector of the electric utility industry there is now a rapidly

1 emerging consensus that a change to a market-based approach will lead to greater  
2 efficiency, improved service, and reduced costs.

3 A second consideration is that the vast majority of the states are actively  
4 considering the appropriateness of a competitive electric generation market.

5 A third point is that Federal legislation is being actively considered in the absence  
6 of action by the states or perhaps in addition to any such state action there may be  
7 Federal legislation.

8 A fourth point is that there is a need for experience on the part of utilities,  
9 regulatory authorities, and customers.

10 A fifth point is that Empire, as one of the lower cost producers in the state, is in  
11 a better position than most to move forward with an open access program.

12 Thus there are a variety of reasons that support the appropriateness of a pilot  
13 retail open access program at this time.

14 Q YOU MENTION THAT THERE HAVE BEEN DISCUSSIONS AMONG ICI, PRAXAIR, AND  
15 EMPIRE IN THIS REGARD. HAS ANY DEFINITIVE AGREEMENT BEEN REACHED AT  
16 THIS TIME?

17 A No. The discussions have been in the nature of settlement discussions, and there has  
18 been an agreement that the substance of these discussions would be confidential. ICI  
19 and Praxair have made Empire aware of their intent to propose a pilot program in this  
20 proceeding. However, there is neither a definitive agreement nor a commitment by  
21 Empire to support any pilot program that may be proposed on behalf of my clients.

1 Q WHEN DO YOU PLAN TO MAKE THE PARTIES AWARE OF THE DETAILS OF THE  
2 PROPOSED PILOT PROGRAM?

3 A The details of the proposal will be a part of my direct testimony in the rate design phase  
4 of this proceeding. Testimony is currently scheduled to be filed with the Commission and  
5 the parties on February 20.

6 Q WHY ARE YOU RAISING THIS ISSUE AT THIS TIME RATHER THAN IN THE  
7 SUBSEQUENT RATE DESIGN TESTIMONY?

8 A The Commission directed that testimony be divided between rate design issues and  
9 revenue requirement issues. Since the proposal has implications in the revenue  
10 requirement area, I wish to take the earliest opportunity to alert the other parties as well  
11 as Empire to these implications.

12 Q HAVE THE REVENUE REQUIREMENT IMPLICATIONS BEEN FULLY QUANTIFIED?

13 A Not at this time. It should be possible to clarify these implications in later stages of this  
14 proceeding.

15 Q DOES YOUR SILENCE ON OTHER ISSUES THAT MAY RELATE TO REVENUE  
16 REQUIREMENTS PROPOSED BY EMPIRE MEAN THAT YOU ARE IN AGREEMENT  
17 WITH THE PROPOSAL?

18 A No. My silence should not be construed as any agreement whatsoever. ICI and Praxair  
19 may choose to respond to Empire in rebuttal testimony and at other appropriate times in  
20 this proceeding.



1 Q DOES THIS CONCLUDE YOUR TESTIMONY?

2 A Yes, it does.



1 included developmental work on a generation expansion planning program and work on  
2 the peak demand and sales forecasts. From 1977 through 1981, I was Supervisor of the  
3 Load Forecasting Group where my responsibilities included the Company's sales and  
4 peak demand forecasts and the weather normalization of sales.

5 In November 1981, I joined Drazen-Brubaker & Associates, Inc. In April 1995, the  
6 firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA  
7 principals and staff. Since 1981, I have participated in the analysis of various utility rate  
8 cases, including the analysis and preparation of cost of service studies and rate analyses.  
9 In addition to rate cases, I have participated in electric fuel and gas cost reviews, generic  
10 policy proceedings, and least-cost planning proceedings.

11 I have testified before the state regulatory commissions of Delaware, Hawaii,  
12 Illinois, Iowa, Kansas, Massachusetts, Missouri, Montana, New Hampshire, Ohio,  
13 Pennsylvania, Tennessee, Virginia and West Virginia.

14 The firm of Brubaker & Associates, Inc. provides consulting services in the field  
15 of public utility regulation to many clients, including large industrial and institutional  
16 customers, some utilities, and on occasion, state regulatory agencies. In addition, we  
17 have also prepared depreciation and feasibility studies relating to utility service. We also  
18 assist in the negotiation of contracts for utility services for large users. In general, we are  
19 engaged in regulatory consulting, rate work, feasibility, economic and cost of service  
20 studies, design of rates for utility service and contract negotiations.