

Exhibit No.:
Witness: Emil Mosora
Type of Exhibit: Rebuttal Testimony
Issue: Intervenor Issues;
Business Issues;
Competitive Impact
Sponsoring Party: Praxair, Inc.
Case No.: ER-2004-0570

MISSOURI PUBLIC SERVICE COMMISSION
UTILITY DIVISION

THE EMPIRE DISTRICT ELECTRIC COMPANY
CASE NO. ER-2004-0570

PREPARED REBUTTAL TESTIMONY OF
EMIL MOSORA

November 4, 2004

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of the Application of)
The Empire District Electric Compa-)
ny for authority to file tariffs)
reflecting increased charges for)
electric service within its Mis-)
souri service area)

ER-2004-0570

AFFIDAVIT OF EMIL MOSORA

STATE OF INDIANA)


COUNTY OF LAKE)

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Emil Mosora, of lawful age, on his oath states: That he has reviewed the attached written testimony in question and answer form, all to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; that such matters are true to the best of his knowledge, information and belief.


Emil Mosora

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


Notary Public
Christine Toth

[SEAL]

My Commission expires: 10/21/06

PREPARED DIRECT TESTIMONY OF
EMIL MOSORA

1 **Q. Please state your name and business address.**

2 A. Emil Mosora Jr., 4400 Kennedy Ave., East Chicago, Indiana
3 46312.
4

5 **Q. What is your professional employment?**

6 A. I am a regional energy manager at Praxair, Inc.
7

8 **Q. What is your educational background?**

9 A. I graduated from Purdue University Calumet Campus, Hammond,
10 Indiana, in 1975 with a Bachelor of Science degree in
11 Mathematics.
12

13 **Q. What is your prior experience?**

14 A. In 1977 I joined Praxair, known then as the Linde Division of
15 Union Carbide Corporation, as a pipeline controller in the
16 Calumet Area Pipeline Operation Center (CAPOC) located in
17 Gary, Indiana. The CAPOC system at the time consisted of
18 approximately 12 customers along 110 miles of pipeline fed by
19 four production facilities. My primary responsibility was to
20 ensure the pipeline customers along the 110 miles of pipeline,
21 received the product they required as cost effectively as
22 possible for Praxair. In 1979 I joined the computer

1 department and worked on control systems to monitor and
2 optimize the pipeline system as well as administer the utility
3 contracts. In 1981 I went into supervision and became the
4 CAPOC manager overseeing the dispatch center and computer
5 group. For several years in the 1990's, I also had added
6 duties as plant manager for the Gary and Whiting production
7 facilities. In 2001, I became an energy manager with
8 responsibilities for management of electricity use and
9 procurement in Missouri, Illinois, Indiana, Wisconsin,
10 Minnesota, Ohio, and Michigan. In that capacity, I am
11 involved in seeking appropriate electricity pricing and the
12 development of innovative power supply agreements. I am also
13 involved in optimizing plant tactical and operating strategies
14 to minimize electricity costs.

15
16 **Q. What is the purpose of this rebuttal testimony?**

17 A. I want to respond from a business perspective to the cost
18 allocation proposals that have been made by witnesses for the
19 Commission Staff and the Missouri Office of the Public
20 Counsel. Along with Explorer Pipeline, we are sponsoring
21 testimony and analysis from Maurice Brubaker on the technical
22 aspects of these proposals. I believe that these proposals
23 would detrimentally impact our operations in Missouri and in
24 the Empire District service territory from a business

1 management and competitive point of view. To do that I also
2 feel I need to provide the Commission with some information
3 about my company and the nature of its operations including
4 those in Empire's service territory.
5

6 **Q. Who is Praxair?**

7 A. Praxair is the largest industrial gases company in North and
8 South America, and one of the largest worldwide, with 2003
9 sales of \$5.6 billion. The company produces, sells and
10 distributes atmospheric, process and specialty gases, and
11 high-performance surface coatings. Praxair products, services
12 and technologies bring productivity and environmental benefits
13 to a wide variety of industries, including aerospace,
14 chemicals, food and beverage, electronics, energy, healthcare,
15 manufacturing, metals and others.
16

17 **Q. What is the nature of Praxair's products?**

18 A. Praxair's major products include the products of air separa-
19 tion: oxygen, nitrogen and argon. These products are manufac-
20 tured by separating air into its component parts. These gases
21 are used in production and to improve efficiency, quality, and
22 environmental compliance in a variety of industries, including
23 steel, chemicals, metals, electronics, paper, food, glass and
24 medical care. Customers generally receive Praxair's products

1 in one of three ways: 1) by truck delivery from regional bulk
2 liquid production plants into tanks at the customer site, 2)
3 by pipeline from large bulk production plants, or 3) from
4 smaller "on-site" non-cryogenic production facilities
5 dedicated to an individual customer (vacuum pressure swing
6 adsorption plants for oxygen supply, and membrane plants for
7 nitrogen supply). Praxair also produces and distributes
8 carbon dioxide, hydrogen, helium and specialty gases, and
9 operates a surface technologies business.

10
11 **Q. Please describe Praxair's operations in the Empire District**
12 **service area.**

13 A. Praxair has operated a bulk production plant and distribution
14 center in Neosho, Missouri since 1960. The plant produces
15 liquid oxygen and nitrogen for the regional industrial gas
16 merchant market, and has a liquid production capacity of 325
17 tons per day. Praxair's Neosho plant provides nitrogen and
18 oxygen to the food processing, metal fabrication, steel,
19 health care and petroleum industries in Missouri, Oklahoma,
20 Arkansas and Kansas. A \$6 million expansion and modernization
21 completed in 1992 doubled plant capacity. This facility has
22 23 employees and an annual payroll of \$1.3 million. In the
23 state of Missouri, Praxair has a total of 293 employees and a
24 payroll of over \$13 million. In 2003, Praxair paid over

1 \$155,000 in property taxes, collected and paid approximately
2 \$310,000 in sales and use taxes from its Missouri customers
3 and paid an estimated \$30,000 in sales and use taxes on its
4 own purchases.
5

6 **Q. What is the general nature of competition which Praxair faces**
7 **in the industrial gas industry?**

8 A. The industrial gases business is an extremely competitive
9 business, with several large companies operating with
10 production networks throughout North America and the world.
11 There are also many regional companies and distributors adding
12 to the competition in specific markets. The distribution
13 radius of a plant is generally within a range of 250 miles.
14 Industrial gases prices are held to competitive levels due to
15 increased overall supply and the demands of customers, many of
16 whom face intense and relentless competition in national and
17 global markets. The development of alternative non-cryogenic
18 industrial gas production technologies is providing more
19 supply options and adding to competitive pressures.
20

21 **Q. What competitive challenges does Praxair face at its Neosho**
22 **plant in particular?**

23 A. The competition is intense. There are several other industri-
24 al gas companies and facilities capable of competitively

1 serving the same customers as our Neosho plant. These include
2 facilities located in Missouri, Arkansas, Oklahoma, Illinois,
3 and Tennessee. Of great concern is the prospect of higher
4 power prices at Neosho, higher prices that our competitors
5 would not see because they are served by utilities that rely
6 less on natural gas generation in their fuel mix than does
7 Empire District.

8
9 **Q. Is there potential for expansion or contraction of Praxair's**
10 **business at Neosho?**

11 A. There is potential for either expansion or contraction at
12 Neosho, based upon the relative competitiveness of our costs
13 and the health of the economy in the area. There is the
14 opportunity to expand through upgrades and additions at our
15 existing plant site if economic conditions are right. Growth
16 and retention opportunities are dependent upon the extent that
17 current and potential customers choose to use industrial
18 gases, the extent they choose to use our products instead of
19 those of our competitors, and the extent that we source our
20 requirements from our Neosho plant.

1 **Q. What is the significance of electricity to Praxair and how is**
2 **it used in its Neosho plant?**

3 A. The industrial gas business is extremely electricity-inten-
4 sive, more so than almost any other industry. Electricity
5 costs comprise over 70% of our operating costs. The production
6 of liquid oxygen and nitrogen at Neosho is accomplished by the
7 filtering, liquefaction and separation of large volumes of
8 air, followed by liquefaction of nitrogen through a compres-
9 sion/expansion process. The entire process utilizes three
10 large compressors, which are powered by large electric motors.
11 Over 96% of the electricity at Neosho is consumed in the
12 production process by these large motors. Since our
13 expansion in 1992, we are Empire District Electric Company's
14 largest customer. Nationally, we spend over \$300 million per
15 year on electricity.

16
17 **Q. Are there unique aspects to your Neosho operation which relate**
18 **to electricity use?**

19 A. Our Neosho operation has been designed to operate with great
20 flexibility in its power consumption. While capable of
21 running at a very steady level with a very high load factor,
22 the plant can also very quickly adjust its production output
23 while maintaining efficiency, and change power demand by over
24 two thousand kilowatts. Our Neosho plant has also been

1 designed to interrupt over 95% of its demand load on very
2 short notice.

3
4 **Q. How is Praxair dealing with its competitive challenges?**

5 A. By getting to know our customers as best we can and doing our
6 best to meet their needs. The demands of our customers are
7 often unique and varied, and if we do not adapt to accommodate
8 them, someone else will. One general theme we see is that
9 virtually all customers want options and choices. No customer
10 likes to be told by a supplier: "This is what we have - take
11 it or leave it".

12
13 One of the customer's needs is low prices, which requires that
14 a key Praxair strategy be cost minimization. Reliability and
15 quality is a given, otherwise one would not even be allowed to
16 bid on business. Low costs are thus imperative to success in
17 the industrial gas industry and we therefore focus attention
18 to the reduction of costs in all areas. Corporate-wide we
19 have instituted a breakthrough strategy called Six Sigma. Six
20 Sigma teaches us to identify what is most important to the
21 customer and then use meaningful data and measurements to
22 systematically drive meaningful improvements in our
23 performance against those criteria. We have many on-going Six
24 Sigma teams reviewing and refining processes in order to

1 prevent defects from occurring. Other world class companies
2 using Six Sigma include GE, Motorola and Honeywell.

3
4 Many supplier agreements have been renegotiated with lower
5 pricing and better terms. Competitive bidding is actively
6 employed. Electricity is the one major cost input in our
7 business which can not be competitively sourced in most areas,
8 Missouri being one of those areas. For other commodities,
9 competition has assured us wide choices of products and
10 services at attractive pricing. Competitive marketplaces have
11 also resulted in a great deal of useful innovation on the part
12 of suppliers. This has always been the case in true
13 competitive markets. With regard to our substantial natural
14 gas and long-distance telephone usage, we now enjoy much
15 greater customer focus and innovation on the part of
16 suppliers.

17
18 **Q. What is the role of electricity in Praxair's strategy for**
19 **addressing its competitive challenges?**

20 A. Being the largest operating expense, it is of utmost impor-
21 tance that we manage our electric purchases and use. High
22 energy efficiencies and low priced power are essential for us
23 to compete. Improving the efficiencies of our equipment,

1 processes, and technologies is an ongoing process. With
2 regard to power sourcing, our strategies include:

- 3
- 4 1) Work with utilities to develop innovative rates and
5 contracts. Examples are interruptible rates and economic
6 development incentives.
- 7
- 8 2) Locate and expand plants based upon electricity consider-
9 ations.
- 10
- 11 3) Economic dispatch among plants based on production and
12 delivery costs to minimize total supply costs to serve
13 our customers. Even small power price changes affect the
14 distribution radius. The equivalent of over 7 million
15 kwh per day are distributed by truck in North America and
16 centrally dispatched from our National Logistics Center
17 in Tonawanda, New York.
- 18
- 19 4) Actively participate in RTO formation where applicable.
- 20
- 21 5) Actively participate in state/regional Industrial Users
22 Groups.
- 23

1 **Q. Please elaborate on the participation in state/regional**
2 **industrial users groups.**

3 A. Although not identical, the needs of industrial customers in
4 general are similar to each other but different from the needs
5 of residential and commercial customers. The residential
6 customers have a state advocate but there are usually no
7 formal groups looking out for the interests of the industrial
8 users.

9
10 In general, the mission of industrial users groups is to work
11 with government, utilities, and other stakeholders to assure
12 consumers have access to reliable, inexpensive energy. All
13 the stakeholders are in this together. To succeed the
14 utilities must make a fair return on their equity and their
15 industrial and commercial customers must be able to do the
16 same. It is becoming more and more important for each
17 customer class to pay its "fair share" and no more due to rate
18 skewing and class subsidization.

19
20 A common area of contention between utilities and industrial
21 customers is in the allocation of costs. I am not a cost of
22 service nor rate design expert by any means but in general my
23 experience has been that when costs are allocated strictly on
24 a kwh basis, high load factor customers, such as Praxair, end

1 up paying more than their 'fair share.' Being a very steady,
2 very high load factor industrial customer, Praxair must be
3 vigilant to prevent this from happening as best it can.
4

5 **Q. What would Praxair like to see happen with regard to its**
6 **electricity supply at Neosho?**

7 A. The regional industrial gas marketplace demands that Praxair's
8 cost of electricity at Neosho be as low as possible. We
9 encourage Empire District to continue to work diligently to
10 hold down/reduce costs and to work with their customers to
11 develop more creative rates that better fit both their needs
12 and the needs of their commercial and industrial customers.
13

14 **Q. Does that complete your testimony at this time?**

15 A. Yes, it does. I thank the Commission for the opportunity to
16 present these comments.