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Acquisition
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Sponsoring Party: Praxair, Inc.
Case No.: EM-2000-369

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Missouri Public
Service Commission

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY DIVISION

THE EMPIRE DISTRICT ELECTRIC COMPANY
AND UTILICORP UNITED, INC.

CASE NO. EM-2000-369

PREPARED REBUTTAL TESTIMONY OF

DAVID MEADE

June 21, 2000

Exhibit No. 500
Date 7-11-00 Case No. EM-2000-369
Reporter *af*

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of the Joint Applica-)
tion of UtiliCorp United Inc. and)
The Empire District Electric Compa-)
ny for authority to merge the Em-)
pire District Electric Company with)
and into UtiliCorp United Inc. and,)
in connection therewith, certain)
other related transactions.)

ER-2000-369

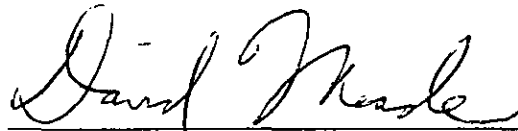
AFFIDAVIT OF DAVID MEADE

STATE OF NEW YORK)

) SS


COUNTY OF ERIE)

David Meade, 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.



David Meade

Subscribed and sworn to before me this 19th day of June, 2000.



Notary Public

[SEAL]

My Commission expires: 5/6/01

NOREEN E. BALLA
NOTARY PUBLIC, State of New York
Qualified in Erie County
My Commission Expires May 6, 2001

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PREPARED REBUTTAL TESTIMONY OF
DAVID MEADE

INTRODUCTION AND PERSONAL QUALIFICATIONS

Q. Please state your name and business address.

A. David Meade, Praxair, Inc., 175 East Park Drive, Tonawanda,
New York, 14151

Q. What is your professional employment?

A. I am energy manager of Praxair, Inc.

Q. What is your educational background?

A. I graduated from Cornell University, Ithaca, New York, in 1981
and received a Bachelor of Science degree in Operations
Research and Industrial Engineering. In 1986 I received a
Master of Business Administration degree with a major in
Finance from New York University, New York, New York.

Q. What is your prior experience?

A. Upon graduation from college in 1981, I joined Praxair, then
known as the Linde Division of Union Carbide Corporation, as
an operations engineer in the National Logistics Center. My
responsibilities included conducting performance audits and
developing projects and systems to reduce distribution costs

1 and improve customer service. In 1986, I joined Linde's
2 energy management department as a senior analyst, and managed
3 an information systems and analysis group responsible for
4 competitive assessment and modelling, verifying, analyzing,
5 planning and forecasting energy use and costs. In 1990, I
6 became an energy manager and took on additional responsibilities
7 to currently include management of electricity use and
8 procurement in Missouri, Illinois, Indiana, Ohio, Michigan,
9 Iowa, West Virginia, Kentucky, and Minnesota. In that capacity,
10 I am actively involved in seeking appropriate electricity
11 pricing and the development of innovative power supply agreements.
12 I am also responsible for optimizing plant tactical
13 and operating strategies to minimize electricity costs. I
14 have spoken at various conferences and seminars on topics of
15 energy management and procurement, most recently in 2000 at
16 events organized by Electricity Consumers Resource Council
17 (ELCON).

18
19 Q. Who is Praxair?

20 A. Praxair is the largest producer of industrial gases in North
21 and South America, third largest on a worldwide basis.
22 Formerly the industrial gases division of Union Carbide, known
23 in North America as Linde, Praxair was spun off as a separate,
24 independent company in June, 1992. In 1996, the company

1 completed the acquisition of Liquid Carbonic making it the
2 world's largest producer of carbon dioxide. Praxair began
3 operations in 1907 with its first plant in Buffalo, New York
4 and now has a worldwide network of plants.

5
6 SUMMARY OF PRAXAIR OPERATIONS
7

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

9 A. Praxair's major products include the products of air separa-
10 tion: oxygen, nitrogen and argon. These products are manu-
11 factured by separating air into its component parts. These
12 gases are used in production and to improve efficiency,
13 quality, and environmental compliance in a variety of indus-
14 tries, including steel, chemicals, metals, electronics, paper,
15 food, glass and medical care. Customers generally receive
16 Praxair's products in one of three ways: (1) by truck delivery
17 from regional bulk liquid production plants into tanks at the
18 customer site, (2) by pipeline from large bulk production
19 plants, or (3) from smaller "on-site" non-cryogenic production
20 facilities dedicated to an individual customer (vacuum pres-
21 sure swing adsorption plants for oxygen supply, membrane
22 plants for nitrogen supply). Praxair also produces and
23 distributes carbon dioxide, hydrogen, helium and specialty
24 gases, and operates a surface technologies business.

1 Q. Please describe Praxair's operations in the Empire District
2 Electric Company ("Empire") service area.

3 A. Praxair has operated a bulk production plant and distribution
4 center in Neosho, Missouri since 1960. The plant produces
5 liquid oxygen and nitrogen for the regional industrial gas
6 merchant market, and has a liquid production capacity of 325
7 tons per day. Praxair's Neosho plant provides nitrogen and
8 oxygen to the food processing, metal fabrication, steel,
9 health care and petroleum industries in Missouri, Oklahoma,
10 Arkansas and Kansas. A \$6 million expansion and modernization
11 completed in 1992 doubled plant capacity. The expansion was
12 done with long-term expectations of competitively priced
13 power. This facility has 16 employees and an annual payroll
14 of \$900,000. In the state of Missouri, Praxair has a total of
15 383 employees and a payroll of over \$12 million. Praxair
16 recently paid over \$160,000 in property taxes, collected and
17 paid to Missouri over \$200,000 in sales and use taxes from its
18 Missouri customers and paid over \$300,000 in sales and use
19 taxes on its own purchases.

20
21 Q. What is the general nature of competition which Praxair faces
22 in the industrial gas industry?

23 A. The industrial gases business is an extremely competitive
24 business, with several large companies operating with pro-

1 duction networks throughout North America and the world.

2 There are also many regional companies and distributors adding
3 to the competition in specific markets. The distribution
4 radius of a plant is generally within a range of 250 miles.

5 Industrial gases prices are held to competitive levels due to
6 increased overall supply and the demands of customers, many of
7 whom face intense and relentless competition in national and
8 global markets. The development of alternative non-cryogenic
9 industrial gas production technologies is providing more
10 supply options and adding to competitive pressures.

11
12 Q. What competitive challenges does Praxair face at its Neosho
13 plant in particular, and how are these challenges evolving?

14 A. The competition is intense and continues to become more so.
15 There are several other industrial gas companies and facili-
16 ties capable of competitively serving the same customers as
17 our Neosho plant. In many cases they do. These include
18 facilities located in Missouri, Arkansas, Oklahoma, Illinois,
19 and Tennessee. Due to the competitive situation, our Neosho
20 plant is no longer fully loaded. Of continuing concern is the
21 potential of higher power prices at Neosho while prices at our
22 other facilities and those of our competitors are stable or in
23 decline. It is also noteworthy that Praxair has electrical

1 pricing at or below the levels at our Neosho plant at various
2 other locations
3

4 Q. Is there potential for expansion or contraction of Praxair's
5 business at Neosho?

6 A. There is potential for either expansion or contraction at
7 Neosho, based upon the relative competitiveness of our costs
8 here vis-a-vis those of our other current and future produc-
9 tion facilities and those of our competitors. Operations have
10 expanded or contracted based on markets and our ability to win
11 continuing competitive battles for business. In past years,
12 we have even recaptured some load and expanded through up-
13 grades and additions at our existing plant site. More recent-
14 ly, we have seen substantial business migrate to new competi-
15 tor plants. As a result, the utilization of our Neosho plant
16 has dramatically decreased. Growth and retention opportunities
17 are dependent upon the extent that current and potential
18 customers choose to use industrial gases, the extent they
19 choose to use our products instead of those of our competi-
20 tors, and the extent that we source our requirements from our
21 Neosho plant.
22

23 Q. What is the significance of electricity to Praxair and how is
24 it used in the Neosho plant?

1 A. The industrial gas business is extremely electricity-inten-
2 sive, more so than any other industry. The production of
3 liquid oxygen and nitrogen at Neosho is accomplished by the
4 filtering, liquefaction and separation of large volumes of
5 air, followed by liquefaction of nitrogen through a compres-
6 sion/expansion process. The entire process utilizes three
7 large compressors, which are powered by large electric motors.
8 Over 96% of the electricity at Neosho is consumed in the
9 production process by these large motors. Electricity com-
10 prises over 70% of our operating costs. Since our expansion
11 in 1992, we are Empire's largest customer. Nationally, we
12 spend over \$250 million per year on electricity.

13
14 Q. Are there unique aspects to your Neosho operation which relate
15 to electricity use?

16 A. Our Neosho operation has been designed to operate with great
17 flexibility in its power consumption. While capable of
18 running at a very high load factor, the Neosho plant can
19 quickly adjust its production output while maintaining effi-
20 ciency, and change power demand by over two thousand kilo-
21 watts. Our Neosho plant has also been designed to interrupt
22 over 95% of its demand load on very short notice.

23
24 Q. How is Praxair dealing with its competitive challenges?

1 A. There is a continuing emphasis on customers and marketing
2 throughout the company. We aggressively seek a better under-
3 standing of our customers and what is important to them.
4 Determining and providing for customers' needs and wants has
5 is a perpetual priority. The demands of our customers are
6 often unique and varied, but if we do not accommodate them,
7 someone else will. One general theme we see is that virtually
8 all customers want options and choices.

9
10 It is important to realize that Praxair does not operate in a
11 marketplace where we can simply add additional costs to the
12 current pricing of our products and pass those costs through
13 without market impact. We must meet market clearing prices
14 for our products or lose sales and ultimately our markets to
15 competitors. Our prices are set, not with respect to our
16 costs, but rather with respect to our markets. The business
17 of particular customers may be won, retained or lost often on
18 differences of mere pennies per 100 cubic feet of product.
19 Our costs do not determine the market or the prices we charge.
20 The market is insensitive to our cost of production. Thus
21 cost of production is extremely relevant, not from a pricing
22 standpoint, but as to whether we can make a profit or even
23 continue our business. This is quite different from how
24 regulation has historically functioned.

1 It follows from this that another theme is the key Praxair
2 strategy of cost minimization. Maintenance of superior
3 product quality is a given, otherwise one would go out of
4 business in a competitive marketplace. Low costs are thus
5 imperative to success in the industrial gas industry, and we
6 must give constant attention to the reduction of costs in all
7 areas. Work processes have been re-engineered and overhead
8 reduced. Continuous improvement is demanded, as it is for
9 most industries today. For the years preceding our acquisi-
10 tion of Liquid Carbonic, our worldwide and U.S. employment had
11 declined by more than 6,500 and 2,200 employees respectively,
12 a proportion of over 25%. Competitive pressures have forced
13 significant cuts in our management, operational and clerical
14 staff at Neosho as well.

15
16 Many supplier agreements have been renegotiated with lower
17 pricing and better terms. Competitive bidding is being
18 actively employed. In fact, electricity is the one major cost
19 input in our business which can not yet be competitively
20 sourced on a universal basis even though the overall economic
21 benefits of doing so should be apparent.

22
23 In other areas, competition for our business had assured us
24 wide choices of products and services at attractive pricing.

1 Competitive marketplaces have also resulted in a great deal of
2 useful innovation on the part of suppliers. This has always
3 been the case in competitive markets. As an example, with
4 regard to our substantial natural gas and long-distance
5 telephone usage (industries which were more recently deregulated), we now enjoy much greater customer focus and innovation on the part of suppliers. Deregulation in these industries as well as others has resulted in a plethora of appropriate products and services at competitive prices. We have every reason to believe that similar benefits will be realized in a competitive retail market for electricity.

12
13 Q. Are there other steps that Praxair has taken to better meet
14 its markets?

15 A. We also employ a process that we term "economic dispatch."
16

17 Q. Please explain.

18 A. Economic dispatch refers to our approach to track overall
19 costs and hold them to a minimum on a national basis. Combining Praxair's incremental production and distribution costs determines how much and when to produce at each plant and how to distribute to customers in order to minimize overall costs. Changes in power prices of one mill per kWh can affect our distribution radius by many miles. We do this through a

1 process of tactical planning performed on a monthly basis. A
2 sophisticated program consisting of rigorous models of custom-
3 er demands and of our efficiencies, distribution costs, and
4 electricity costs for each of our production facilities is
5 utilized to perform this optimization. This process results
6 in assigning customers to plants and indicates how much (and
7 when) to produce at each location in order to minimize our
8 total cost over the specified planning period.

9
10 More frequent operational planning is done still within the
11 context of the monthly tactical plan. We adjust plant opera-
12 tions and power consumption on a daily or hourly basis as
13 dictated by revised customer demands, inventory levels,
14 vehicle and driver availability, and real time electricity
15 prices where such information is available, all with the
16 objective of cost minimization.

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

20 A. Given electricity's strategic importance to us, it is mandato-
21 ry that we use and manage it well. High energy efficiencies
22 and competitively priced power are essential for us to com-
23 pete. Improving the efficiencies of our equipment, processes,
24 and technologies is an ongoing process. With regard to

1 competitive power sourcing, strategies which play a role for
2 us include:

- 3
- 4 (1) Development of innovative rates and contracts with
5 utilities, including interruptible rates, economic
6 development incentives, time-of-use and incremental
7 pricing, market-indexed pricing and power sale-back
8 credits.
- 9
- 10 (2) Location of plants and expansion based upon elec-
11 tricity considerations. We have shut down old
12 plants and started new ones a few miles away on
13 several occasions.
- 14
- 15 (3) Economic dispatch among plants based on production
16 and delivery costs to minimize total supply costs to
17 serve our customers. Even small power price changes
18 will affect distribution radius. The equivalent of
19 over 7 million kWh per day are distributed by truck
20 in North America.
- 21
- 22 (4) Use of alternative customer production technologies
23 which minimize the cost of the product.
- 24

1 (5) Large-scale cogeneration plants have been installed
2 by us in California and Texas. Small-scale options
3 are becoming more economical.
4

5 (6) Use of real-time pricing; further development of our
6 operating responsiveness, implementation of real-
7 time metering and communications, centralized opera-
8 tions management and optimization.
9

10 (7) Load aggregation and the use of umbrella agreements
11 which cover multiple facilities.
12

13 (8) Participation in direct access programs. Develop-
14 ment and administration of requests for proposals
15 processes. Development of alternative suppliers,
16 including marketers, developers and other utilities.
17

18 SUMMARY OF CONCERNS REGARDING PROPOSED MERGER
19

20 Q. Please summarize your concerns regarding the proposed merger.

21 A. As I understand the regulatory process pertinent here, a
22 proposed merger of two utilities must not detrimentally affect
23 the interests of ratepayers such as Praxair. In this context,
24 I am concerned about three aspects of the proposed merger,

1 namely the "stealth" rate increase that appears to have been
2 included in the proposal and the proposal to charge the
3 acquisition premium to the ratepayers. I also have concerns
4 about the rate "freeze" that are related to the claims of
5 operational savings.

6
7 **PREAPPROVED RATE INCREASE PROPOSAL**
8

9 Q. Please discuss your concerns regarding the proposed rate
10 increase.

11 A. The applicants have proposed a rate "freeze" preceded, howev-
12 er, by a rate increase. Prior Commission approval for a large
13 number of aspects of this rate case are sought as a part of
14 the merger application. I believe this is incorrect and
15 should be rejected.

16
17 Q. Please explain why the proposed rate increase within the
18 merger proposal should be rejected.

19 A. A merger between these two companies should stand on its own
20 economics at the time the companies performed their due
21 diligence and signed their merger agreement. The economics of
22 the merger either make sense for the entities as of that time
23 or they do not. Subsequent speculation about a rate increase,
24 while perhaps a consideration for the surviving entity's

1 management, do not appear to me to be appropriate consider-
2 ations in connection with the consideration of the merger and
3 its impact on ratepayers. The merger should have been evalu-
4 ated by the respective corporations without regard to a specu-
5 lative future increase and as a result, that portion of the
6 proposal should be disregarded.

7
8 Further, Missouri provides a comprehensive procedure for the
9 submission by a utility of a proposed rate hike. In that
10 procedure, there is ample opportunity for Commission Staff,
11 Office of the Public Counsel, and other interested intervenors
12 to thoroughly investigate and test the utility's claims for
13 additional revenue entitlement. In this case, attention
14 properly turns to the impact of the merger on ratepayers and
15 typical rate case issues are properly not before the Com-
16 mission. Seeking to obtain predetermination of numerous
17 important aspects of a rate case decision as these applicants
18 have done while in the context of a merger case is contrary to
19 this procedure and should be rejected.

20
21 Q. Are there other reasons that Praxair opposes this rate in-
22 crease mechanism?

23 A. Yes there are. Praxair is currently one of the two largest
24 customers on the Empire District electric system and may, in

1 fact, currently be the largest. As I discussed earlier, the
2 cost of electric energy is extremely important to us and
3 represents a very large portion of our costs of production.
4 Praxair is currently served under the terms of an
5 interruptible contract whereby we are able to market our
6 ability to sharply and quickly remove our load from the Empire
7 system, thereby making Empire capacity available for other
8 customers who are perceived to be higher priority. In that
9 contract we have committed our company to operate in such a
10 manner as to be ready and willing to reduce or completely
11 remove our load from Empire's system on short notice. Corre-
12 spondingly, Empire, with the approval of the Commission, has
13 committed to us to supply interruptible power at rates which
14 recognize the removal of some of the capacity costs that would
15 be associated with a firm load of the same size. While we
16 have in the past and may in the future have concerns about
17 this total rate and its components as related to the cost
18 providing that service causes Empire, those issues properly
19 are not before the Commission in this proceeding.

20
21 Q. Is perpetuation of these commitments and pricing important to
22 Praxair's continued operations?

23 A. Absolutely. Because our product cost is significantly based
24 on the value of and resulting energy price from this contract,

1 adverse adjustments in these terms and conditions would be
2 disruptive to our business. Our response to the pricing
3 relationship includes the development of territorial respon-
4 sibility, sales routings and delivery routings and staffing.
5 The current contract would expire in 2004 and its pricing
6 structure should not be disturbed before that time. We
7 believed we bargained in good faith and have acted reasonably
8 in reliance on the pricing in this contract. It would be
9 disruptive to our business if those values were changed in a
10 manner that was adverse to our competitive interests.

11
12 Q. Could not this occur in a rate case filing?

13 A. It certainly could, but that would only be as a result of a
14 deliberate and full proceeding under the applicable laws and
15 Commission procedures complete with adequate opportunity to
16 investigate, obtain evidence and submit alternative consid-
17 erations and appropriate information about our operations for
18 the Commission's consideration. We understand the Applicants'
19 proposal to essentially seek "preapproval" of such rate
20 changes and we oppose that proposal as inappropriate in the
21 context of a merger proceeding.

22
23 ACQUISITION PREMIUM RECOVERY
24

1 Q. Please discuss the concern you mentioned regarding the acqui-
2 sition premium recovery.

3 A. I am an energy manager and not a rate expert or accountant.
4 Regardless, I believe I understand that when one utility pays
5 a premium above book for the assets or stock of another
6 utility, the difference in broad terms represents an "acqui-
7 sition premium." Here the Applicant's have sought through a
8 series of mechanisms to charge the cost of that acquisition
9 premium to the ratepayers, including Praxair, and we oppose
10 that proposal.

11
12 Q. Why does Praxair oppose such treatment?

13 A. Because we believe that the service obligation of a public
14 utility includes the responsibility to provide its services to
15 the public at the lowest reasonable cost. As investor-owned
16 utilities, decisions regarding business structure and business
17 ownership, including mergers, are stockholder decisions.
18 However, those decisions are also the responsibility of the
19 shareholders who should be fully informed and accept the costs
20 associated with those decisions. Since the business structure
21 of a public utility should be that which will result in the
22 lowest reasonable cost to its ratepayers, mergers should not
23 be at the cost of the ratepayers but at the cost of the shareholders

1 Q. Are you saying that utilities should not merge?

2 A. No, no more than I am saying that other private or publicly
3 held companies should not merge. When industries in compet-
4 itive markets merge, they typically do so to reduce costs,
5 gain access to additional lines of business, or to additional
6 markets. They recognize that such combinations must result in
7 true benefits since their customers have alternatives and will
8 simply take business to remaining competitors. I believe a
9 similar view is important for utility mergers as we move
10 slowly but definitely into an era of customer choice.

11
12 Q. What do you request that the Commission do in this regard?

13 A. Neither my company nor other ratepayers should be required to
14 absorb any portion of an acquisition premium, regardless of
15 how creatively it is named, camouflaged or characterized.
16 "Shared savings" mechanisms or "split recovery" mechanisms are
17 all equally subject to this criticism and should be rejected
18 by the Commission.

19
20 PROPOSED RATE "FREEZE"

21
22 Q. What about the Applicants' proposal to "freeze" rates?

23 A. It is subject to the same criticism and should also be reject-
24 ed.

1 Q. Please explain.

2 A. As I mentioned earlier, we believe a utility's obligation is
3 to operate in the most economical manner possible consistent
4 with safety and good practice. If a business combination
5 results in savings, those savings should be manifest in
6 reduced costs of operations. Those reduced costs should be
7 returned to the ratepayers in lower rates on as current a
8 basis as possible.
9

10 Q. How could this be accomplished?

11 A. The Commission could use a "show cause" proceeding. In this
12 proceeding the utility would be required after a comparatively
13 short period of time to come before the Commission and show
14 cause why its rates should not be reduced by an amount corre-
15 sponding to the claimed savings that were asserted in the
16 merger proceeding. This would assure the ratepayers that
17 actual cost savings that had been obtained would be passed
18 through to them and the utility's claims regarding savings
19 could be tested.
20

21 Q. Is this the only mechanism that could be used?

22 A. No, others could be devised including a series of automatic
23 rate reductions that would be sequenced in accordance with the
24 utility's claims of cost savings. This would avoid the

1 potential problem of a utility seeking to shift expenses and
2 revenues into or away from a particular test period through
3 various means. It would also have the additional benefit of
4 limiting claims of merger cost savings to amounts that were
5 truly believed achievable.

6
7 SUMMARY AND CONCLUSION

8
9 Q. Please summarize your testimony.

10 A. Praxair is concerned about the "stealth" rate increase that is
11 being proposed by the Applicants because it would affect our
12 existing rate and contract relationships with Empire District.
13 We are also concerned that ratepayers not be required to fund
14 or support utility acquisitions through payment of acquisition
15 premiums and that claimed savings be currently returned to the
16 ratepayers for whom the combined utility is continuing to
17 provide service.

18
19 Q. Does this conclude your testimony at this time?

20 A. Yes it does. I thank the Commission for their attention to
21 Praxair's concerns.

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23