

Exhibit No.:

Issue(s):

Witness/Type of Exhibit:

Sponsoring Party:

Case No.:

Natural Gas Prices

Busch/Surrebuttal

Public Counsel

ER-2001-672

**SURREBUTTAL TESTIMONY
OF**

JAMES A. BUSCH

Submitted on Behalf of the Office of the Public Counsel

FILED³
JAN 22 2002

Missouri Public
Service Commission

UtiliCorp United Inc.

Case No. ER-2001-672


January 22, 2002

NP


In the Matter of the tariff filing of)
 UtiliCorp United Inc., (“UtiliCorp”) to)
 implement a general rate increase for) Case No. ER-2001-672
 retail electric service provided to customers)
 in the Missouri service area.)

STATE OF MISSOURI)
)
COUNTY OF COLE) SS _____

1. My name is James A. Busch. I am the Public Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony consisting of pages 1 through 11 and Schedules JAB-SR-1 and JAB-SR2.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.


James A. Busch

ary, 2002.


Bonnie S. Howard, Notary Public

My commission expires May 3, 2005.

SURREBUTTAL TESTIMONY

OF

JAMES A. BUSCH

CASE NO. ER-2001-672

UTILICORP UNITED, INC

Q. Please state your name and business address.

A. My name is James A. Busch and my business address is P. O. Box 7800,
Jefferson City, MO 65102.

Q. Are you the same James A. Busch who filed direct and rebuttal testimony in this
case?

A. Yes I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to address the rebuttal testimony of
UtiliCorp witness Mr. John W. McKinney.

Q. According to Mr. McKinney's rebuttal testimony, what is UtiliCorp's proposed
methodology for establishing natural gas prices in this rate case?

A. On page 22, lines 16 and 17, and page 24, lines 6 and 7 of his rebuttal testimony,
Mr. McKinney confirms that UtiliCorp is proposing to true-up the price of natural
gas to actual prices paid for the 12-months ended January 31, 2002.

Q. What would the price of natural gas be based on the 12-months ended January 31,
2002?

1 A. As indicated in my rebuttal testimony, the 12-months ended January 31, 2002
2 average for natural gas based on NYMEX (New York Mercantile Exchange)
3 closing prices is \$3.654 per MMBtu.

4 Q. What is UtiliCorp's reasoning for basing the price of natural gas in this rate case
5 on the most recent 12-months prices?

6 A. Mr. McKinney argues on page 25, lines 2 and 3 of his rebuttal testimony that
7 UtiliCorp "should be allowed to recover the cost it paid for natural gas to produce
8 electricity," during the past 12 months.

9 Q. How much did UtiliCorp "under-recover" during the year 2001?

10 A. UtiliCorp has not provided that information in its testimony.

11 Q. Is it possible that UtiliCorp did not recover its cost in regard to natural gas during
12 2001?

13 A. Yes.

14 Q. Is it possibly, that in years when natural gas costs were lower, that UtiliCorp
15 recovered more than its costs with regard to natural gas costs?

16 A. Yes.

17 Q. Please explain.

18 A. For electric firms, a price for natural gas is built into the ultimate rate charged by
19 the company to its customers. In years when the price of natural gas is below the
20 built in price, the electric company may "over-recover" its natural gas costs. In
21 years when the price is above the built in price, the electric company may "under-
22 recover" its natural gas costs. Therefore, since the prices of natural gas between

1 the years of 1996 – 2001 were generally low, it can be assumed that UtiliCorp
2 “over-recovered” its natural gas costs.

3 Q. Did UtiliCorp, at any point when it “over-recovered” its natural gas costs, propose
4 a mechanism to give back the excess revenues it might have collected?

5 A. Not that I am aware of.

6 Q. Are there other factors that need to be considered when determining the harm, if
7 any, to the Company if natural gas prices were higher than expected?

8 A. Yes. In the fuel run that is used to help determine the ultimate electric rates that
9 are charged to consumers, a price for natural gas is assumed along with an
10 assumed amount of natural gas that will be used. There are also other factors such
11 as coal prices and volumes, purchased power contracts, spot purchases, and fuel
12 oil that is considered when establishing electric rates. When the price of natural
13 gas is higher then the assumed price, the Company may switch between fuels to
14 lower the reliance on the more expensive input while taking advantage of
15 relatively lower prices in other inputs. Further, the price of natural gas may have
16 gone up when usage of natural gas was low due to the time of the year. This
17 would diminish the effect the higher natural gas prices had on the utility.
18 Therefore, just because the price of one input resource has gone up in the short-
19 term, other factors may also change to insulate the Company from harm.

20 Q. What is the current 12-month futures strip price for natural gas?

21 A. Based on the January 17, 2002 close, the 12-month futures strip is \$2.54 per
22 MMBtu.

23 Q. Briefly describe some key market fundamentals for natural gas.

1 A. Currently, the biggest factor in the natural gas market is the abundance of storage
2 that remains in the market. As of the week ended January 11, 2002, there was
3 2,529 Bcf (Billion Cubic Feet) of natural gas in storage nationwide. This is more
4 than 1 Bcf greater than the same period last year and reflects a storage level of
5 77% of capacity. Further, this storage level is approximately 25% greater than the
6 5-year average storage level of approximately 2,000 Bcf.

7
8 Another key market fundamental is the weather. There are no major forecasts for
9 a significant cold spell in the near future across the United States. The weather,
10 coupled with the high storage levels, is keeping pressure on the price of natural
11 gas to remain steady or fall somewhat.

12 Q. Should the Commission adopt UtiliCorp's proposal of taking the last 12-month
13 actuals to determine natural gas prices on a going forward basis?

14 A. No. Establishing the proper price for natural gas in this rate case, or any rate case,
15 on a simple 12-month average is inappropriate. The 12 months chosen could have
16 prices that are artificially or unrealistically high compared to a more normal range
17 of natural gas prices, or artificially or unrealistically low compared to a more
18 normal range of natural gas prices. In the course of 12 months, short-term
19 fluctuations in the market can cause the price to move substantially away from
20 normal prices. An extremely cold winter, an extremely warm summer, a
21 hurricane, or unusually low storage levels, are but a few factors that can affect the
22 price of natural gas in the short-term, causing prices to jump higher than normal.
23 If the 12-months chosen include these types of events, the price that is ultimately

1 used in the establishment of rates will not be representative of more normal
2 natural gas prices.

3 Q. What is a "normal" range for natural gas prices?

4 A. In today's market, natural gas prices fluctuate within a normal range between
5 \$2.00 and \$4.00 per MMBtu.

6 Q. Does the time frame that UtiliCorp proposes to use include any one-time factors
7 as described above?

8 A. Yes. The period that UtiliCorp proposes to use begins with February 2001. As
9 we all remember, the prices for natural gas in the winter of 2000/2001 were the
10 highest on record, due to extremely cold weather in November and December and
11 unusually low storage levels. Therefore, the prices at the beginning of UtiliCorp's
12 proposed period are unrealistically high compared to current market conditions
13 and above those that should be reasonably anticipated in the foreseeable future.
14 This can be seen by Schedule JAB-SR1. This schedule is a chart showing
15 NYMEX prices all the way back to 1990. As can be seen in this chart, a majority
16 of the month's prices fall in the range from \$1.75 to \$3.00 per MMBtu. The
17 major exceptions on the high end of the price scale are the months of December
18 1996 and January 1997 and the price run-up of 2000/2001 that began in early May
19 of 2000.

20 Q. Is UtiliCorp's proposed methodology and anticipated price appropriate?

21 A. No. UtiliCorp's proposed price, based on NYMEX closing prices, is about \$1.00
22 above current prices. UtiliCorp has a very active trading operation. If UtiliCorp
23 was awarded a price of nearly \$1.00 above current costs, UtiliCorp could merely

1 enter into various long-term fixed price contracts to guarantee extra profit,
2 holding all other factors constant, which I described in my rebuttal testimony.
3 Further, UtiliCorp's ability to hedge against adverse natural gas price movements
4 should help insulate it from any potential future price movements.

5 Q. Do you have any information regarding UtiliCorp's potential use of financial
6 instruments to hedge against adverse price movements?

7 A. Yes. Attached to my surrebuttal testimony as Highly Confidential Schedule JAB-
8 SR2 are UtiliCorp's responses to Public Counsel Data Requests (DRs) Nos. 624
9 and 636. These DR responses indicate the strategy that UtiliCorp has begun to
10 incorporate into its purchasing activity for natural gas. It indicates that for the
11 year 2001 the Company had started to use financial instruments to protect against
12 price movements and that it may already be hedging for the year 2002.

13 Q. On page 23, lines 12 and 13, Mr. McKinney criticizes your methodology by
14 stating that it appears to have been selected to produce a low price and thereby
15 minimize cost recovery. Please comment.

16 A. My methodology was selected to produce a reasonable price for natural gas in this
17 rate case. My methodology, unlike UtiliCorp's, was not selected to recover any
18 excess costs from previous periods. The price of natural gas is volatile, meaning
19 the price can move dramatically up and down in short periods of time. My
20 methodology tries to account for this volatility by examining historical prices that
21 have been realized and averaging those prices with current market prices.

22 Q. Mr. McKinney claims that you have changed your methodology from the Empire
23 rate case. Did you change your methodology?

1 A. No. Mr. McKinney has mischaracterized my testimony in Case No. ER-2001-
2 299. As I stated on page 3, lines 3 and 6 of my direct testimony in that case, "I
3 utilized this hybrid approach of **historical and future** data in recognition of the
4 volatility of the natural gas market. I believe it is important to use **both historical**
5 **and future** information to arrive at the appropriate natural gas cost to build into
6 rates." (emphasis added) Further on page 2, lines 15 – 17 of my direct testimony
7 in that case I state, "**In this case**, I believe that the price of natural gas that should
8 be included for the purpose of reflecting proper fuel costs should be based on a
9 four-year average of natural gas prices." (emphasis added) It is clear that my
10 methodology is to incorporate both historical and future prices.

11
12 Furthermore, when testimony was being written for the Empire rate case, in late
13 March of 2001, the price of natural gas was still higher than more normal levels as
14 it was coming off the record prices of January 2001, plus storage levels were low.
15 At the time I wrote my testimony, it was uncertain whether or not prices would be
16 stabilizing over the next 12 months or so. Therefore, I utilized a four-year
17 average that included a 24-month futures strip. In this case, since natural gas
18 prices have come back to more normal levels, I felt it was more appropriate to use
19 the 12-month futures strip.

20 Q. Why is a 12-month futures strip more appropriate than a 24-month futures strip in
21 this case given the current market for natural gas?

22 A. A futures strip, or for that matter any futures price, is merely a price where one
23 party is willing to buy a commodity today for future delivery and another party is

1 willing to sell a commodity today for future delivery at a price determined today.

2 The information that is available in the market today will change tomorrow,
3 which means that prices will change in the future. When looking at the futures
4 market, the prompt month (the month immediately following the current month)
5 is the most "reliable." This means that the information used by the market to
6 determine what the futures price is today is closer to the actual market
7 fundamentals that will determine the ultimate price for that month. As you move
8 further away from the prompt month, the "reliability" of the futures as a
9 "predictor" drops. Therefore, a 12-month futures strip will generally be more
10 reliable than a 24-month futures strip at gauging where prices may be in the
11 foreseeable future.

12
13 Also, the number of open contracts is greatest in the months nearest to the current
14 month. By the time you get to 13 - 24 months from the current month, there are
15 very little open contracts. This means that there are not a lot of transactions
16 taking place in the market for delivery in those months. This lack of transactions
17 mean that any price set today for a futures contract in those months is more
18 unreliable.

19 Q. Are you arguing that a futures strip alone is a good predictor for natural gas
20 prices?

21 A. Not at all. A futures market establishes a price today that parties will be willing
22 to buy or sell natural gas for on a future date based on the fundamentals of today.
23 Since the fundamentals are constantly changing, the futures price is constantly

1 changing. This can be seen by the volatility associated with the natural gas
2 futures market.

3
4 Further, the fact that I average the futures strip with historical prices should
5 indicate that I do not believe that the futures strip alone should be used to
6 establish the price of natural gas for purposes of this rate case. The reason that I
7 average the historical prices with the futures strip is to try to determine a price
8 that is reasonable. When only one or the other, historical data or futures data, is
9 used, a price could be obtained that is unrealistically high or low compared to
10 current market conditions. A relatively common saying in financial markets is
11 that "the past is no indicator of future performance" meaning that if an historical
12 look results in prices around \$1.75 per MMBtu and there has been a fundamental
13 shift in the market, the \$1.75 price could be unrealistically too low. Conversely,
14 if the price for natural gas was unusually high for reasons that are no longer in
15 affecting the market, a look at the past may provide a price that is too high.

16
17 The same argument holds true if reliance is weighted solely on the futures market
18 for determining natural gas prices. Short-term phenomena such as hurricanes,
19 intense cold spells, unusual storage numbers, or other factors, could cause the
20 futures strip to move dramatically away from "normal" levels, only to fall back
21 when the short-term factor is gone.

1 In this rate case, I am trying to establish an appropriate price for natural gas to be
2 used in the fuel run to help determine the electric rates for this Company.
3 Therefore, I must analyze all available data, historical prices, futures prices, and
4 current market conditions, to determine what price of natural gas is the most
5 appropriate for this rate case. There is not one time frame that can be utilized in a
6 cookie-cutter approach to determine what that price should be in all cases.
7 However, my technique is the most appropriate considering the volatile nature
8 that is inherent in the natural gas market.

9 Q. Should natural gas be treated like other expenses such as payroll?

10 A. No. Payroll and other expenses are generally less volatile than natural gas prices.
11 It is unlikely that any expense that the Company has changes as dramatically in
12 such a short time frame as the price of natural gas. Due to this volatility, the
13 appropriate price of natural gas to use can not be determined in the same way as
14 payroll or other expenses. It is essential that factors outside of a narrow 12-month
15 focus be considered when establishing the appropriate price level.

16 Q. What could happen if current market conditions were completely ignored when
17 establishing the appropriate natural gas price to help set rates?

18 A. Current market conditions need to be evaluated to ensure that a price is not set too
19 low such that the Company does not have a reasonable opportunity to acquire
20 natural gas near the price that is built into rates. On the other hand, the price of
21 natural gas can not be set so high that the Company can make excess profits,
22 holding all other factors constant, by merely locking in natural gas for the future

1 because current prices are substantially below the price used in establishing rates.

2 I described this problem in my rebuttal testimony.

3 Q. Mr. McKinney, in his rebuttal testimony, claims that you omitted 2001 prices
4 from your calculation because those prices were too high. Is that an accurate
5 characterization of why you omitted those prices?

6 A. No. I used historic prices through December 2000 to align my methodology with
7 the test year. I utilized the 2002 12-month strip because that was the nearest 12-
8 month strip going forward.

9 Q. What would be your result if you updated your methodology to include the 24
10 months ended January 2002 plus the current 12-month futures strip?

11 A. If I updated my methodology to current numbers, and still used my methodology
12 of replacing the months with prices over \$5.00 per MMBtu and was 50% greater
13 than the next highest monthly price with that months next highest price, my
14 methodology would result in a price for natural gas of \$2.90 per MMBtu.

15 Q. Does this conclude your surrebuttal testimony?

16 A. Yes it does.

OFFICE OF PUBLIC COUNSEL

UtiliCorp United, Inc.

Case No. ER-2001-672

Historical NYMEX Prices

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
January		\$ 2.046	\$ 1.695	\$ 2.003	\$ 2.022	\$ 1.639	\$ 3.448	\$ 3.998	\$ 2.309	\$ 1.765	\$ 2.344	\$ 9.978	\$ 2.555
February		\$ 1.538	\$ 1.046	\$ 1.634	\$ 2.470	\$ 1.416	\$ 2.340	\$ 2.986	\$ 2.001	\$ 1.810	\$ 2.610	\$ 6.293	
March		\$ 1.395	\$ 1.249	\$ 1.906	\$ 2.418	\$ 1.428	\$ 2.746	\$ 1.780	\$ 2.286	\$ 1.666	\$ 2.603	\$ 4.998	
April		\$ 1.391	\$ 1.418	\$ 2.224	\$ 1.981	\$ 1.566	\$ 2.779	\$ 1.807	\$ 2.300	\$ 1.852	\$ 2.900	\$ 5.384	
May		\$ 1.350	\$ 1.596	\$ 2.758	\$ 2.076	\$ 1.672	\$ 2.214	\$ 2.122	\$ 2.262	\$ 2.348	\$ 3.089	\$ 4.891	
June	\$ 1.557	\$ 1.336	\$ 1.685	\$ 2.119	\$ 1.851	\$ 1.757	\$ 2.361	\$ 2.346	\$ 2.017	\$ 2.226	\$ 4.406	\$ 3.738	
July	\$ 1.510	\$ 1.167	\$ 1.517	\$ 1.918	\$ 1.966	\$ 1.532	\$ 2.646	\$ 2.145	\$ 2.358	\$ 2.262	\$ 4.369	\$ 3.182	
August	\$ 1.426	\$ 1.195	\$ 1.939	\$ 2.121	\$ 1.789	\$ 1.385	\$ 2.322	\$ 2.161	\$ 1.942	\$ 2.601	\$ 3.820	\$ 3.167	
September	\$ 1.428	\$ 1.420	\$ 1.987	\$ 2.401	\$ 1.484	\$ 1.575	\$ 1.853	\$ 2.515	\$ 1.672	\$ 2.912	\$ 4.618	\$ 2.295	
October	\$ 1.555	\$ 1.800	\$ 2.743	\$ 2.066	\$ 1.406	\$ 1.644	\$ 1.828	\$ 3.346	\$ 2.031	\$ 2.570	\$ 5.310	\$ 1.830	
November	\$ 1.970	\$ 1.772	\$ 2.499	\$ 2.155	\$ 1.683	\$ 1.772	\$ 2.652	\$ 3.266	\$ 1.972	\$ 3.092	\$ 4.541	\$ 3.202	
December	\$ 2.380	\$ 1.987	\$ 2.332	\$ 2.385	\$ 1.661	\$ 2.241	\$ 3.901	\$ 2.577	\$ 2.149	\$ 2.120	\$ 6.016	\$ 2.316	

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