Knoxville Utilities Board
Board Meeting
Minutes
Thursday, November 15, 2018, Noon

Call to Order

The Knoxville Utilities Board met in regular session in the Larry A. Fleming Board Room at 445 S. Gay Street, on Thursday, November 15, 2018, pursuant to the public notice published in the January 6, 2018, edition of the News Sentinel. Chair Herbert called the meeting to order at 12:00 p.m.

Roll Call

Commissioners Present: Jerry Askew, Kathy Hamilton, Celeste Herbert, Sara Pinnell, Adrienne Simpson-Brown, Tyvi Small, and John Worden

Commissioners Absent: None

Approval of Minutes

The Minutes of the October 18, 2018, Board Meeting were approved as distributed upon a motion by Commissioner Pinnell and seconded by Commissioner Small.

Old Business

None

New Business

Resolution 1387, A Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas and Repealing Resolution No. 970, A Prior Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas, and All Resolutions Amendatory Thereto Adopted Prior to This Resolution

November 15, 2018

President Bolas advised Commissioners that staff recently completed a review of several gas system operating policies and identified needed housekeeping changes for the Gas Contracting Authority and Gas Price Risk Management policies. He recognized Sherri Ottinger, Manager of Rates, to provide the Board with an overview of the proposed changes. Ms. Ottinger also provided a follow-up on energy bill information which she shared with the Board last month.

President Bolas recommended adoption of Resolution 1387 on first and final reading. His written recommendation is included in Attachment 1.

Upon a motion by Commissioner Askew and a second by Commissioner Hamilton, Resolution 1387 (Attachment 1) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted “nay”.

President Bolas recommended adoption of Resolution 1388 on first and final reading. His written recommendation is included in Attachment 2.

Upon a motion by Commissioner Pinnell and a second by Commissioner Worden, Resolution 1388 (Attachment 2) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted “nay”.

President’s Report

Gas Cost of Service Study

President Bolas reminded Commissioners that KUB is conducting a cost of service study for each of its utility systems. The Electric Cost of Service Study was completed earlier this year and shared with the Board in the spring. The Gas study has now been completed and he recognized Mike Bolin, Vice President of Utility Advancement, to provide the results.

Kuwahee Composite Correction Plan Phase 2

President Bolas advised Commissioners that KUB recently started the largest and final wastewater project required under the federal consent decree, the Biologically Enhanced High Rate Clarification system, at Kuwahee. He recognized Billie Jo McCarley, Director of Engineering, to provide an update on the project status.
November 15, 2018

November Storm Update

President Bolas recognized John Gresham, Vice President of Operations, to provide a brief update on last week's storm event and restoration efforts.

Residential Home Weatherization Update

President Bolas advised Commissioners that with the winter heating season approaching, it was an appropriate time to provide the Board with an update on the progress made in weatherizing homes of lower income residential customers. He recognized Tiffany Martin, Director of Customer Service, for the update.

Public Comment

Jennifer Dunn – 7004 E. Arbor Trace Lane – Knoxville, TN 37909

Bri Knisley – 5316 Pinnacle Dive – Knoxville, TN 37914

Juniper Stinnett – 241 Hawthorne – Knoxville, TN 37920

Other Business

None

Adjournment

There being nothing further to come before the Board, Chair Herbert declared the meeting adjourned at 1:18 p.m.

Celeste Herbert, Chair

Mark Walker, Board Secretary
## Attachments

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<th>Attachment</th>
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<td>Attachment 1</td>
<td>Recommendation Letter and Resolution 1387, A Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas and Repealing Resolution No. 970, A Prior Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas, and All Resolutions Amendatory Thereto Adopted Prior to This Resolution</td>
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Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Commissioners:

KUB staff periodically reviews our various operating policies to see if any changes or updates are warranted.

A recent review of the Board approved Gas Contracting Authority and Price Risk Management Policies indicated certain housekeeping changes are needed to reflect KUB’s current business environment.

The Gas Contracting Authority Policy authorizes the execution of contracts for the purchase, sale, transportation, and storage of natural gas under certain terms and conditions. The Gas Contracting Authority Policy was last updated in 1998.

The Price Risk Management Policy provides guidelines and oversight for the management of price risk associated with KUB’s wholesale natural gas purchases. The Price Risk Management Policy was last updated in 2004.

Resolution 1387 provides for the adoption of a revised Gas Contracting Authority Policy. Resolution 1388 provides for the adoption of a revised Price Risk Management Policy. The revised policies reflect the needed housekeeping updates. Draft resolutions have been enclosed for your review along with clean and red-lined versions of the revised policies.

I recommend the approval of Resolutions 1387 and 1388 on first and final reading.

Respectfully submitted,

Gabriel J. Bolas II
President and CEO

Enclosures
RESOLUTION NO. 1387

A Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas and Repealing Resolution No. 970, a Prior Resolution Authorizing the Purchase, Sale, Transportation and Storage of Natural Gas, and All Resolutions Amendatory Thereto Adopted Prior to This Resolution

Whereas, historically the Knoxville Utilities Board ("KUB") purchased all or a major part of its natural gas supply from East Tennessee Natural Gas Company ("ETNG"); and

Whereas, in 1992 the Federal Energy Regulatory Commission issued orders which deregulated the sale and restructured the transportation of natural gas; and

Whereas, recognizing the necessity of maintaining an economic and reliable supply of natural gas in a rapidly changing market environment, the Board of Commissioners of the Knoxville Utilities Board (the "Board") adopted Resolution No. 817 and, subject to certain limitations, thereby temporarily authorized the negotiation and execution of contracts for the supply and transportation of natural gas without the further approval of the Board; and

Whereas, in Resolution No. 817, the Board instructed the President and Chief Executive Officer (CEO) to recommend to the Board a long-term policy with respect to the purchase and transportation of natural gas; and

Whereas, by Resolutions No. 856 and 970, the Board authorized the President and CEO, the Senior Vice President of the Gas System, and/or the Chief Financial Officer to contract for the purchase, sale, transportation, and storage of natural gas; and

Whereas, certain administrative updates are needed to the existing policy for contracting for the purchase, sale, transportation, and storage of natural gas; and

Whereas, the Board desires to repeal Resolution No. 970, as heretofore amended, and adopt a resolution providing for a revised policy for contracting for the purchase, sale, transportation, and storage of natural gas.

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. That the Board hereby adopts the Gas Contracting Authority Policy attached hereto as Exhibit A providing for the authority to contract for the purchase, sale, transportation and storage of natural gas.
Section 2. That, periodically, the President and CEO shall report to the Board in such detail as may reasonably be required to permit the Board to monitor the purchase, sale, transportation and storage of gas by KUB under this resolution.

Section 3. That Resolution No.970, authorizing the purchase, sale, transportation, and storage of natural gas, and all resolutions amendatory thereto adopted prior to this resolution are hereby repealed.

Section 4. That this resolution shall take effect immediately upon its passage.

Celeste Herbert/s
Celeste Herbert, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING:  11-15-18
EFFECTIVE DATE:  11-15-18
MINUTE BOOK 40 PAGE 9282-9286
Knoxville Utilities Board
Gas Contracting Authority Policy

November 2018

The President and Chief Executive Officer (CEO) and the Chief Financial Officer (CFO) be and they hereby are each authorized to contract for the purchase, sale, transportation and storage of natural gas on such terms and conditions as such officer determines are in the best interests of KUB and its customers, all subject to the following conditions:

A. PURCHASE AND TRANSPORTATION

Authority is hereby granted to purchase and transport up to One Hundred Sixty Thousand (160,000) dekatherms of natural gas per day (the "Maximum Capacity"), subject to the following limitations and conditions:

(i) Authority is granted to contract from time to time for the purchase and transportation of up to the Maximum Capacity of natural gas under contracts having a term from the date of such contract of two (2) years or less.

(ii) Authority is granted to contract from time to time for the purchase and transportation of natural gas under contracts having a term from the date of such contract of more than two (2) years but in no event more than six (6) years, provided that the total supply and capacity of natural gas provided for under any such contract executed after the date of this Resolution shall not exceed Fifteen Thousand (15,000) dekatherms per day.

(iii) The Maximum Capacity at any point in time shall be inclusive of all the then currently executed firm contracts in service at that point in time for the purchase and/or transportation of natural gas to the facilities of KUB.

(iv) Authority is hereby granted to purchase and transport natural gas for the operation of KUB’s system on an interruptible basis.

(v) Authority is hereby granted for KUB to assign its capacity, accept an assignment of capacity (in cases of reciprocal agreements), and/or sell its capacity for the transportation and/or storage of natural gas in connection with entering into contracts for the purchase, transportation, and/or storage of natural gas with suppliers of natural gas and/or suppliers of capacity for the transportation and/or storage of natural gas. The term of any sale or assignment of capacity shall not exceed the term of the corresponding supply contract. Any sale or assignment of capacity shall be on terms and conditions which are determined to be in the best interest of KUB.
B. STORAGE

Authority is granted to store up to Five Million dekatherms of natural gas. In addition thereto, authority is granted to contract from time to time for a term of not more than six (6) years from the date of such contract for the firm right to demand delivery from storage of up to Ten Thousand (10,000) dekatherms of natural gas per day. Any such contract shall be in addition to the then current contractual firm rights to demand delivery from storage. Authority is hereby granted to take such actions and adopt such policies and procedures as are necessary to assure KUB’s right to withdraw natural gas which has been placed in storage.

C. SALES OF EXCESS CAPACITY

Authority is hereby granted for KUB to sell excess quantities of its capacity for the transportation and/or storage of natural gas to other governmental or private natural gas distributors, other resellers and other industrial users. The price at which the transportation and/or storage capacity for natural gas is sold by KUB shall be a negotiated price which is determined to be in the best interest of KUB after considering the then current market prices and conditions. Contracts for the sale of transportation and/or storage capacity may be for a term not to exceed six (6) years. The contracts may provide that from time to time the sale may be terminated and/or recalled by KUB if KUB determines such action is necessary in order to adequately supply the customers on KUB’s system. Non-recallable sales of transportation and/or storage capacity shall not exceed 25% of the Maximum Capacity at any point in time.

D. SALES OF EXCESS GAS

Authority is hereby granted for KUB to sell excess quantities of natural gas: (i) to Middle Tennessee Natural Gas, and other natural gas distributors or resellers doing business on the ETNG Pipeline system; (ii) to Resolute Forest Products, ALCOA, Eastman Chemical Company, the Department of Energy (for its East Tennessee operations) and similar directly connected industrial users on the ETNG Pipeline system; (iii) to the Tennessee Valley Authority; (iv) to KUB’s current suppliers and other suppliers with whom KUB has had a substantial relationship in the past and (v) to other governmental or private natural gas distributors, other resellers and other industrial users, provided that before entering into any such transaction the President and CEO, and/or the CFO shall determine that the buyer is credit worthy. The price at which excess natural gas is sold by KUB shall be a negotiated price which is determined to be in the best interest of KUB after considering KUB’s obligations to take the excess gas and the then current market prices and conditions. Contracts for the sale of natural gas shall not have a term in excess of two (2) years.
E. DEFINITIONS

As used in this Policy: (i) "excess quantities of natural gas" shall mean the difference between: (a) the quantities of gas that KUB contracts to purchase from time to time to meet the reasonably anticipated requirements of the customers on KUB's gas system, and (b) the actual quantities of gas that are used by the customers on KUB's gas system; and (ii) "excess capacity" shall mean the difference between: (x) the capacity for transportation or storage that from time to time is contracted for by KUB to meet the reasonably anticipated requirements of the customers on KUB's gas system, and (y) the actual capacity for the transportation or storage that is used by KUB to serve the customers on KUB's gas system. To the extent reasonably necessary to assure the availability of customers who are willing to purchase KUB's excess quantities of natural gas, as defined above, additional quantities of gas may be purchased on an infrequent basis to meet the reasonable needs of KUB's excess supply customers.

F. DELEGATION OF AUTHORITY

The President and CEO, and the CFO are each hereby authorized: (i) to make written delegations of the authority granted by this Policy to selected employees involved in the day to day operation of the buying and selling of natural gas provided this authority be limited to contracts with a maximum term of one (1) year and (ii) to adopt, modify, amend and revoke such operating policies and procedures as are necessary to protect the interests of KUB and its customers and to assure the economic, orderly and efficient purchase, sale, transportation and storage of natural gas by KUB.
RESOLUTION NO. 1388


Whereas, the Knoxville Utilities Board of Commissioners (the "Board") previously adopted Resolution 928, authorizing the use of certain financial derivatives and physical supply contracts for the purpose of managing the price risk associated with KUB's wholesale natural gas purchases, and establishing a Price Risk Management Policy; and

Whereas, the Board previously adopted Resolution 1101, amending Resolution 928, and approving a revised Price Risk Management Policy; and

Whereas, the current Price Risk Management Policy includes titles and company names that are obsolete and need to be updated; and

Whereas, the Board desires to update the Price Risk Management Policy to provide for such administrative updates; and

Whereas, the Board finds it to be in the best interest of KUB and its customers to effectuate these modifications by replacing the existing Price Risk Management Policy with a new Price Risk Management Policy.

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. That the Price Risk Management Policy attached hereto as Exhibit A is hereby adopted and replaces the existing Price Risk Management Policy previously adopted by the Board through Resolution 1101.

Section 2. That this resolution shall take effect from and after its passage.

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Celeste Herbert/s
Celeste Herbert, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 11-15-18
EFFECTIVE DATE: 11-15-18
MINUTE BOOK 40, PAGE 9287-9291
Knoxville Utilities Board
Price Risk Management Policy

November 2018

I. Objectives

The primary objectives of KUB’s Price Risk Management program are to minimize customers’ exposure to adverse and volatile natural gas prices while providing for a safe and reliable supply of gas service, and to attract and retain high-load factor gas users through the use of flexible pricing alternatives.

II. Price Risk Management Committee

A Price Risk Management Committee (“Committee”) shall be established for the purpose of overseeing the energy price risk management function at KUB. The Committee shall be responsible for ensuring that all price risk management activities are implemented in accordance with this Price Risk Management Policy (“Policy”).

1. Membership. The President and Chief Executive Officer (CEO) shall chair the Committee. In addition to the President and CEO, the Committee shall also include the Chief Financial Officer (CFO), and others as appointed by the President and CEO.

2. Responsibilities. In addition to the responsibilities noted above, the Committee is also charged with the following:

   Developing a price risk (hedge) strategy and ensuring that said strategy is implemented appropriately. Such actions may include, but are not limited to, engaging the service of a brokerage firm, approving over-the-counter (OTC) transactions, ensuring that limitations on the use of authorized price risk instruments and transactions are properly communicated, and engaging the services of consultants from time to time with expertise in the field of price risk management for the purpose of assisting KUB with the implementation of its Price Risk Management program. Engagement of such consultants shall be at the discretion of the Committee.

3. Committee Approval. Approval and/or designation by the Committee shall be constituted by any two signatures of the President and CEO, the CFO, or others appointed to membership of the committee by the President and CEO. One signature must be from either the President and CEO or the CFO.
4. Meetings. The Committee shall meet periodically on an as needed basis; however, the Committee shall meet no less than annually.

III. General Control Requirements

1. Operating and Control Procedures. Detailed operating and control procedures for executing and documenting (accounting for) price risk transactions shall be developed and approved by the Committee. These procedures shall incorporate strong dual controls between the parties executing transactions and those parties documenting and accounting for transactions.

2. Energy Trading Function. The Committee shall designate certain employees to carry out the Energy Trading function. These employees shall be authorized to execute Price Risk Management transactions consistent with the requirements and limitations set forth in this Policy and the Operating and Control Procedures developed and approved by the Committee. A detailed set of duties and responsibilities for the Energy Trading function shall be set forth in the aforementioned Operating and Control Procedures.

3. Risk Management and Control Function. The Committee shall designate certain employees to carry out the Risk Management and Control function. These employees shall be charged with maintaining records of all price risk transactions, reconciling these records with those of the Energy Trading function, and reconciling confirmation reports from brokers and other counterparties. A detailed set of duties and responsibilities of the Risk Management and Control function shall be set forth in the Operating and Control Procedures developed and approved by the Committee.

IV. Authorized Price Risk Management Instruments

The following instruments may be utilized by KUB for the purpose of managing (hedging) the price risk associated with natural gas purchases:

1. Purchasing and selling natural gas futures contracts.
2. Purchasing and selling options on natural gas futures contracts.
3. Price swap agreements with parties of acceptable credit risk.
4. Pricing mechanisms incorporated in physical gas supply contracts.

The use of any other instruments for managing (hedging) the price risk associated with natural gas purchases must be previously approved by the KUB Board of Commissioners as provided for in the authorizing resolution.
V. Limitations on use of Price Risk Management Instruments

1. KUB shall be allowed to hedge the price risk on up to 100 percent of its anticipated gas purchases for a particular month through the use of any combination of price risk management instruments as provided for in Section IV of this Policy, except as otherwise provided for in this Policy.

2. KUB shall be allowed to purchase options on futures contracts as a means of hedging the price risk of contingency gas purchases (i.e. gas which may be purchased due to a colder than normal winter). The purchase of options to hedge price risk on contingency gas purchases must receive the written approval of the Committee prior to the execution of any transactions.

3. Options to purchase futures contracts shall either be exercised or allowed to expire. Sales of options shall be permitted only as a means of setting the floor on a price collar. Options to purchase futures contracts may be purchased or sold either on the NYMEX (New York Mercantile Exchange) or the OTC markets. If purchased/sold on the OTC market, the transaction and counter-party shall require the prior written approval of the Committee.

4. OTC transactions (including price swaps) shall be entered into only with parties of acceptable credit risk, as determined by the Committee and requirements set forth in this Policy.

5. No less than three (3) potential counterparties shall be contacted for price quotes by an Energy Trading representative prior to entering into an OTC transaction.

6. Hedges may be placed for anticipated gas purchases no further than thirty-six (36) months into the future.

VI. Limitations on Closing Hedge Positions

An open position on a futures contract shall be closed only during the activity (spot) month of the respective contract except under the following circumstances:

1. When replaced by a physical supply contract.
2. Upon a revision in the purchased gas volume forecast resulting in a new level of anticipated gas purchases for the applicable time period. Any revision in anticipated gas purchases resulting in the pre-mature closing (sale) of a futures contract must be reported in writing to the Committee.
VII. **Counterparty Requirements**

1. Potential brokers and OTC counterparties should provide KUB with a copy of their most recent audited financial statements for KUB to use to help gauge their credit worthiness.

2. OTC counterparties should maintain a least a "AA" bond rating with a nationally recognized credit rating service.

3. All OTC counterparties and respective OTC agreements must be reviewed and approved by the Committee. Parent companies for counterparties may also be reviewed at the discretion of the Committee.

4. All brokers and respective brokerage agreements must be reviewed and approved by the Committee.

VIII. **Reporting Requirements**

1. **Reporting to the Board.** The Committee shall provide periodic reports to KUB's Board of Commissioners on the Price Risk Management program. The frequency of these reports shall occur at the discretion of the Board; however, a report should be provided no less than annually. In the event KUB utilizes financial derivatives (i.e. futures contracts, options on futures contracts, price swaps) to effectuate hedges on more than one-third of its anticipated gas purchases, the Committee shall be required to provide quarterly updates (in written or oral form) to the Board's Audit and Finance Committee. These reports/updates shall include, but not be limited to, an overview of the current hedging strategy employed by KUB, current price exposure levels, and a summary of the effectiveness of the program in meeting KUB's price risk management objectives. The report/update shall also include verification that all price risk transactions were conducted within the requirements set forth in this Policy. If any transactions did not meet these requirements, the Committee must provide an explanation of the circumstances to the Board.

2. **Monthly Status Reports.** A monthly report detailing all price risk activities for the respective month shall be produced by a representative of the Risk Management and Control function and provided to the Committee.

3. **Other Reports.** The Committee, at its discretion, may require any other price risk related reports as deemed necessary. Any such reports should be provided for in the Operating and Control Procedures developed and approved by the Committee.
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