

a

**Board Meeting Agenda
Thursday, October 20, 2016
Noon**

Call to Order

Roll Call

Approval of Minutes

Official Action

Consideration of Nominees for Commissioner Term beginning January 1, 2017

1350 - Authorizing the Condemnation and the Taking of Electric Utility Easements as May Be Necessary in Support of KUB's Hogskin Valley Electric System Upgrade

President's Report

Other Business

Public Comments

Adjournment



Knoxville Utilities Board

October 14, 2016

Knoxville Utilities Board
445 S. Gay Street
Knoxville, Tennessee 37902-1109

Commissioners:

Resolution 1350 requests condemnation authority of one parcel, representing one property owner, in the Hogskin Valley area of Union County. The authority is needed in order to upgrade an existing electric distribution line serving customers in both Union and Grainger counties.

We have obtained 4 easements from property owners for this project and are continuing to work to on reaching an agreement with the remaining property owner. However, to avoid delays to the construction schedule, KUB would like to be in a position to move forward with condemnation if necessary. Further information about the parcel is included for your review.

I recommend adoption of Resolution 1350.

Respectfully submitted,

A handwritten signature in cursive script that reads 'Mintha E. Roach'.

Mintha E. Roach
President and CEO

Property List

Owner

Workman, Arnold Ray

Address

147 Hogskin Valley Road
Washburn TN

Map and Parcel Number

CLT 044 Parcel 080.00

RESOLUTION NO. 1350

A Resolution Authorizing the Condemnation and the Taking of Electric Utility Easements as May Be Necessary in Support of KUB's Hogskin Valley Electric System Upgrade

Whereas, supplying the public need and demand for electric service makes it necessary and desirable for KUB to rehabilitate and improve the electric system and all related equipment (the "Facilities") on a portion of one certain property located in the Hogskin Valley area of Union County, Tennessee and being more particularly described on Union County Tax Maps: CLT 044 Parcel 080.00; and

Whereas, KUB is making improvements to the Facilities in the Hogskin Valley area to serve the needs of the community; and

Whereas, permanent utility easements and temporary construction easements across the aforesaid property must be obtained for the construction and location of the Facilities; and

Whereas, in the opinion of this Board, the easements for the properties described in this resolution best meet the needs and requirements of the public for the location of the Facilities; and

Whereas, time is of the essence in constructing the Facilities and it is advantageous for KUB officials to be authorized to condemn and acquire the necessary easements in the event that they cannot be acquired by negotiations at prices that KUB considers reasonably representative of the value of such property interests.

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

Section 1. That this Board finds and declares:

- (a) That public convenience and necessity require the installation of the Facilities in the easements for the properties described herein, so as to provide adequate utility service to the public, including the present and prospective customers of KUB's electric system.
- (b) That the cost of the easements, as mentioned in the preceding paragraph, shall be paid from appropriations heretofore made by this Board for the operation and construction program of the Electric Division.

- (c) That for the purpose of placing, constructing, repairing, maintaining, rehabilitating, improving and replacing the Facilities on the properties described herein, there shall be condemned such permanent utility and access easements and such temporary construction easements across the aforementioned properties, as may be determined to be necessary by the President and CEO or her designee.

Section 2. That the President and Chief Executive Officer or the Executive Vice President and Chief Operating Officer and the General Counsel for KUB, are hereby authorized and directed to take all action and do all things necessary or desirable for the acquisition of said easements described in this resolution, by condemnation or otherwise, including, without limitation, the institution of a suit in the name of KUB against any and all persons having any interest in the affected easement properties, for the condemnation thereof, and the determination of the amount of any deposit to be made in connection with any such suit.

Section 3. That this resolution shall take effect upon its passage.

Nikitia Thompson, Chair

Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: _____
EFFECTIVE DATE: _____
MINUTE BOOK ____ PAGE _____

**Knoxville Utilities Board
Board Meeting
Minutes
Thursday, September 15, 2016, 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, September 15, 2016, pursuant to the public notice published in the January 2, 2016, edition of the *News Sentinel*. Chair Thompson called the meeting to order at 12:00 p.m.

Roll Call

Commissioners Present: Jerry Askew, Kathy Hamilton, Celeste Herbert, Sara Pinnell, Nikitia Thompson, Eston Williams, and John Worden

Commissioners Absent: None

Approval of Minutes

The Minutes of the August 18, 2016, Board Meeting were approved as distributed upon a motion by Commissioner Askew and seconded by Commissioner Herbert.

Old Business

Resolution 1349, A Resolution Amending the Rate Schedules of the Gas Division Providing for Certain Changes to the Gas Transportation Rate Schedules, By Amending Section 2 of Resolution No. 1060, as Heretofore Amended

President Roach reminded Commissioners the Board approved changes to KUB's natural gas transportation service rate schedules to accommodate recent pricing changes from East Tennessee Natural Gas. Prior to consideration on second reading, she recognized Sherri Ottinger, Manager of Rates and Analytical Services, to provide a brief overview of the changes.

President Roach recommended adoption of Resolution 1349 on second and final reading. Her written recommendation is included in Attachment 1.

September 15, 2016

Upon a motion by Commissioner Williams and a second by Commissioner Hamilton, Resolution 1349 (*Attachment 1*) was adopted by a roll call vote on second and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Thompson, Williams, and Worden. No Commissioner voted “nay”. Commissioner Pinnell joined the meeting after the vote on Resolution 1349 and therefore did not vote.

New Business

None

Other Business

Nominating Committee

Commissioner Herbert advised the Board that the Nominating Committee received 21 applications for the term beginning in January 2017. The Nominating Committee has reviewed the applications and will conduct interviews later this month. Pursuant to City Charter, at least five candidates will be submitted to the Mayor, and those candidates will be nominated at next month’s meeting.

President’s Report

Century II Financial Workshop

President Roach reminded the Board this workshop is a prelude to upcoming discussions regarding the next 10 years and continued funding for the Century II program. She noted the funding strategy for PACE 10 and later Century II was developed largely by prior boards, and that it was important to begin this planning process by reviewing the past 12 years of system capital work and funding.

President Roach introduced Bill Elmore, Executive Vice President and COO, to review the progress KUB has made with the PACE 10 and Century II programs over the past 10 years and Mark Walker, Senior Vice President and Chief Financial Officer, to review how the Board has funded the programs.

President Roach recognized Chair Thompson for recently being nominated for the YWCA’s Tribute to Women award and Commissioner Askew for being named one of this year’s Healthcare Heroes.

September 15, 2016

Adjournment

There being nothing further to come before the Board, Chair Thompson declared the meeting adjourned at 1:45 p.m.

Nikitia Thompson, Chair

Mark Walker, Board Secretary

Attachments

Attachment 1	Recommendation Letter and Resolution 1349, A Resolution Amending the Rate Schedules of the Gas Division Providing for Certain Changes to the Gas Transportation Rate Schedules, By Amending Section 2 of Resolution No. 1060, as Heretofore Amended	<u>Page(s)</u> 7669 – 7688
--------------	---	--------------------------------------



Knoxville Utilities Board

September 9, 2016

Knoxville Utilities Board
445 S. Gay Street
Knoxville, Tennessee 37902-1109

Commissioners:

As you may recall, KUB's Gas Division Rate Schedules include rate schedules for firm and interruptible transportation service, which allow large commercial and industrial customers to purchase gas from suppliers other than KUB, with such gas in turn delivered (or transported) by KUB to the customers' facilities.

KUB's transportation service rate schedules provide for KUB, under certain conditions, to assess penalty charges for gas used by a customer in excess of the amount delivered by their supplier to KUB. The basis for these unauthorized gas charges is pricing indices used by KUB's connecting interstate pipeline, East Tennessee Natural Gas (ETNG), in assessing unauthorized gas charges to shippers on the pipeline.

ETNG recently had modifications to its tariff rates approved by the Federal Energy Regulatory Commission (FERC), which, among other things, changed the pricing indices associated with determining unauthorized gas charges. As a result, KUB needs to modify its transportation rate schedules to remain consistent with ETNG's pricing of such charges.

Resolution 1349 amends the rate schedules for transportation service to provide for changes in the pricing of unauthorized gas charges in order to remain consistent with ETNG's pricing of such charges.

I recommend approval of Resolution 1349 on second and final reading.

Respectfully submitted,

A handwritten signature in cursive script that reads "Mintha E. Roach".

Mintha E. Roach
President and CEO

Enclosures

RESOLUTION NO. 1349

A Resolution Amending the Rate Schedules of the Gas Division Providing for Certain Changes to the Gas Transportation Rate Schedules, By Amending Section 2 of Resolution No. 1060, as Heretofore Amended

Whereas, the Knoxville Utilities Board of Commissioners (“Board”) previously adopted Resolution 1060, as heretofore amended, providing rate schedules for the Gas Division of the Knoxville Utilities Board (“KUB”); and

Whereas, the rate schedules of the Gas Division include transportation rate schedules which allow large commercial and industrial customers to purchase gas from suppliers other than KUB, and such gas is in turn delivered (transported) by KUB to the customer’s facilities; and

Whereas, KUB is served by East Tennessee Natural Gas pipeline (“ETNG”) which is owned by Spectra Energy; and

Whereas, ETNG may from time to time restrict deliveries on its system through use of an “Operational Flow Order” (OFO) and assess charges for unauthorized gas deliveries associated with the OFO; and

Whereas, the Federal Energy Regulatory Commission (“FERC”) recently approved changes to ETNG tariff rates associated with charges for such unauthorized gas deliveries; and

Whereas, KUB may from time to time restrict deliveries on its system through use of an OFO and assess charges for unauthorized gas deliveries associated with the OFO; and

Whereas, KUB has historically utilized the same pricing indices as ETNG when assessing unauthorized gas charges; and

Whereas, the Board has determined, upon recommendation from KUB Staff, that it is appropriate to amend the “Unauthorized Gas Charge” specified in Gas Division Rate Schedules G-11 and G-12 in order to remain consistent with ETNG’s pricing of such charges; and

Whereas, in accordance with Section 1107(L) of the Charter of the City of Knoxville, KUB has provided the required public notice of not less than five (5) days prior to a meeting of the Board when a rate schedule change is to be considered.

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

Section 1. That the Gas Division Rate Schedules entitled “G-11 Interruptible Transportation Gas Service” and “G-12 Commercial and Industrial Firm Transportation Gas Service” as set forth in Section 2 of Resolution No. 1060, as heretofore amended, are deleted in their entirety and replaced with the rate schedules set forth in Exhibit A to this Resolution, to be effective October 1, 2016.

Nikitia Thompson/s
Nikitia Thompson, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
READING: 8-18-16
APPROVED ON 2nd
READING: 9-15-16
EFFECTIVE DATE: 10-1-16
MINUTE BOOK 37 PAGE 7670-7688

**RESOLUTION 1349
EXHIBIT A
TRANSPORTATION RATE SCHEDULES OF THE GAS DIVISION
EFFECTIVE OCTOBER 1, 2016**

RATE SCHEDULE G-11

INTERRUPTIBLE TRANSPORTATION GAS SERVICE

Definitions

“Customer” means a person or entity contracting with or otherwise receiving service from KUB for interruptible transportation gas service under Rate Schedule G-11.

“Day” means a period of twenty-four (24) consecutive hours, beginning and ending at 10:00 A.M. prevailing Knoxville time or such other period as may be established by the applicable connecting pipeline(s) to KUB’s system.

“Delivery” means the delivery of Transport Gas or Standby Gas to KUB.

“Firm Gas” means the amount of gas designated as such in a written contract between KUB and the Customer; Firm Gas is not subject to interruption or curtailment except for emergency or other causes as provided for in KUB’s Rules and Regulations.

“Imbalance” means the difference between Deliveries to KUB for a Customer and Redeliveries by KUB to the Customer.

“Notice of Interruption” means the notice given by KUB to a Customer that a Period of Interruption has commenced or will commence.

“Operational Flow Order” means any directive issued to a Customer by KUB which requires the Customer to adjust Deliveries to KUB or deliveries of non-Firm gas to the Customer by KUB.

“Period of Interruption” means any period of time during which KUB shall interrupt or curtail the delivery of gas to the Customer.

“Redelivery” means the delivery of gas, excluding Firm Gas and Unauthorized Gas, to a Customer by KUB.

“Scheduled Daily Amount” means the amount of Transport Gas approved by KUB from time to time to be Delivered by a Customer to KUB and delivered to the Customer by KUB on a daily basis.

“Standby Gas” means gas procured by KUB for the account of a Customer in the event of failure of the Customer’s supplier to Deliver Transport Gas to KUB.

“Transport Gas” means the gas purchased by a Customer from a supplier other than KUB that Customer has arranged to have Delivered to KUB for delivery to the Customer by KUB.

“Transportation Service Agreement” means the contract between KUB and the Customer whereby KUB agrees to provide interruptible transportation gas service to the Customer.

“Unauthorized Gas” means (a) the quantity of gas taken by Customer exceeding the amount which is permitted during a Period of Interruption or (b) the difference (whether positive or negative) between the quantity of gas taken by Customer and the volumes provided for under an Operational Flow Order.

Availability

Service under Rate Schedule G-11 shall be available to any customer who meets the following conditions:

(a) Customer’s annual gas usage (excluding Firm Gas), on an actual or projected basis, shall not be less than 25,000 dekatherms (one dekatherm is equivalent to ten therms);

(b) Customer shall be permitted to purchase only one (1) dekatherm of Firm Gas under Rate Schedule G-11 for each two (2) dekatherms of Transport Gas delivered by KUB to the Customer;

(c) Customer must have standby equipment of sufficient capacity capable of providing Customer’s normal gas service requirements for a period of five (5) working days without replenishment when Transport Gas is completely interrupted. Customer shall maintain such equipment ready for operation at any time and shall utilize a fuel other than gas furnished by KUB and shall be subject to periodic inspections by KUB to ensure compliance with this provision;

Condition (c) shall be optional for any Customer who meets the following requirements: (1) annual gas usage (excluding Firm Gas) is equal to or greater than 25,000 dekatherms; (2) primary use of gas is for industrial or process use; and (3) provides satisfactory evidence to KUB of its ability and willingness to have its gas service interrupted or curtailed by KUB in accordance with the terms and conditions of this Rate Schedule.

(d) Customer’s use under this rate shall not work a hardship on any other customers of KUB, nor adversely affect any other class of KUB’s customers and further provided the Customer’s use under this rate shall not adversely affect KUB’s gas purchase plans and/or effective utilization of the daily demands under KUB’s gas purchase contracts with its suppliers, as solely determined by KUB.

(e) KUB must determine that its existing distribution system facilities are adequate and available for the requested service; and

(f) Customer must execute a Transportation Service Agreement for interruptible transportation gas service.

In the event Customer shall fail at any time to meet conditions (a) through (d) service under Rate Schedule G-11 shall no longer be available; but at KUB's option, gas service may be provided to the Customer under other KUB rate schedules.

Notwithstanding the foregoing, any Customer which received service under Rate Schedule G-11 prior to November 1, 1997 may receive service under Rate Schedule G-11 without fulfilling conditions (a) and (b). Any such Customer shall comply with all other terms and conditions of Rate Schedule G-11.

Character of Service

Pursuant to a Transportation Service Agreement and Rate Schedule G-11, and subject to Periods of Interruption determined by KUB in its sole discretion, KUB shall deliver to the Customer up to the Contract Amount of Transport Gas received from one or more connected interstate natural gas pipelines for Customer's account.

If the Transport Gas cannot be Delivered to KUB by a supplier of the Customer for any reason, Standby Gas service may be available in accordance with the terms and conditions under Rate Schedule G-11.

The first gas delivered to the Customer on a daily basis under Rate Schedule G-11 shall be considered Firm Gas up to the daily quantity contracted for as Firm Gas by the Customer.

Gas purchased or transported under Rate Schedule G-11 shall be used only by the Customer at its facilities and shall be delivered at a single point of delivery located within the service area of KUB and shall not be resold by the Customer.

Net Rates

Customer Charge:	\$450.00
Demand Charge:	\$19.00 per dekatherm of demand.
Firm Gas Charge:	\$6.619 per dekatherm.
Transportation Charge:	\$2.064 per dekatherm for the first 3,000 dekatherms of non-Firm gas delivered to Customer; plus

\$1.477 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of non-Firm gas delivered to Customer; plus
\$.695 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of non-Firm gas delivered to Customer; plus
\$.430 per dekatherm for the excess over 50,000 dekatherms of non-Firm gas delivered to Customer.

Standby Gas Charge:

The charge for Standby Gas shall be the total of:
(a) the cost per dekatherm to KUB for the applicable Day of acquiring Standby Gas on the open market, subject to the approval of the Customer to purchase Standby Gas at or above such price and (b) the costs incurred by KUB in transporting such Standby Gas via connecting pipelines to one or more of KUB's delivery points.

Unauthorized Gas Charge:

\$15.00 per dekatherm of Unauthorized Gas as a penalty, plus (a), the total cost per dekatherm of obtaining such gas on the open market, as defined below, plus (b), the costs incurred by KUB in transporting such Unauthorized Gas via connecting pipelines to one or more of KUB's delivery points. The cost per dekatherm of obtaining such gas on the open market, (a) above, is defined as an index price based on the High Common price for "Transco zone 5 delivered" or "Tennessee 500 Leg", whichever is higher for the applicable Day as published in Gas Daily. If Gas Daily is no longer published, or one of the aforementioned indices is not published, or for any other reason as determined by KUB, KUB will select an industry recognized index at its sole discretion.

Other Charges:

Imbalance Charges (as herein defined), and any pipeline scheduling, balancing, transportation, or other similar charges incurred by KUB in connection with the transportation of gas on behalf of the Customer, as applicable.

Purchased Gas Adjustment

The Firm Gas Charge shall be subject to KUB's Purchased Gas Adjustment.

Standby Gas Service

In the event Transport Gas cannot be Delivered to KUB by a supplier of the Customer, KUB will attempt to make Standby Gas available to the Customer in volumes up to the Customer's Scheduled Daily Amount. To obtain Standby Gas service, Customer or Customer's supplier must provide KUB with prior written or oral notice that the supplier will be unable to Deliver volumes to KUB to meet Customer's Scheduled Daily Amount.

KUB shall have the right, in its sole discretion, to curtail in whole or in part Standby Gas service to the Customer.

Standby Gas under Rate Schedule G-11 shall be subject to the following charges, as applicable: (a) the Standby Gas Charge, as set forth in this rate schedule, for Deliveries of Standby Gas to KUB for the account of the Customer, and (b) the Transportation Charge, as set forth in this rate schedule, for deliveries of Standby Gas to the Customer by KUB.

Determination of Demand

Demand shall be the daily quantity of gas contracted for as Firm Gas by the Customer. Customer, with the consent of KUB, may from time to time change the amount of Firm Gas by providing written notice to KUB at least three (3) business days prior to the beginning of the monthly billing period for which the Customer desires the change to be effective; provided, however, that such changes shall not effect a reduction in the previously specified Firm Gas, unless the previously specified Firm Gas has been in effect for the entire twelve month period immediately preceding the date the requested change is to become effective.

Scheduling of Service

At least three (3) business days prior to the first calendar day of the month, Customer shall submit to KUB its schedule showing the proposed daily volumes of Transport Gas the Customer desires to deliver to KUB via connecting pipelines and have delivered to the Customer by KUB during the succeeding month ("Delivery Schedule"). Any proposed Delivery of gas in excess of the Transport Gas portion of the Contract Amount shall be specifically noted in the Delivery Schedule. At least one business day prior to the beginning of the applicable calendar month, KUB shall notify the Customer in writing of the volumes of Transport Gas for such Customer which have been approved for Delivery to KUB and delivery to the Customer by KUB on a daily basis during such month ("Scheduled Daily Amount"). The Customer must notify and obtain written approval of KUB for any changes in the Scheduled Daily Amount during a month at least twenty-four (24) hours prior to the proposed commencement of such change.

KUB shall have the right, in its sole discretion, to issue an Operational Flow Order (“OFO”) which shall require the Customer to adjust Deliveries to KUB or deliveries of non-Firm gas to the Customer by KUB in order to address one or more of the following situations: (1) to maintain system operations at pressures required to provide efficient and reliable service, (2) to have adequate gas supplies in the system to deliver on demand, (3) to maintain service to all firm gas customers and for all firm gas services, (4) to avoid penalties from connecting pipelines, or (5) any other situation which may threaten the operational integrity of KUB’s gas distribution system.

To the extent possible, KUB shall give at least one hour notice prior to issuing an OFO. Notice may be written or oral and shall be sufficient if given by KUB via telephone or in person to the person or person(s) designated from time to time by the Customer as authorized to receive such notices, or by facsimile to the facsimile number designated from time to time by the Customer, or if mailed or hand-delivered in writing to the Customer’s premises. The OFO shall include but not be limited to the following information: (1) time and date of issuance, (2) action Customer is required to take, (3) time at which Customer must be in compliance with the OFO, (4) anticipated duration of the OFO, and (5) any other terms and conditions that KUB may reasonably require to ensure the effectiveness of the OFO.

Any volumes of gas delivered to the Customer by KUB in excess of the volumes provided for under the OFO shall be subject to the entire Unauthorized Gas Charge. If the volumes of gas delivered to the Customer by KUB are less than the volumes required to be delivered to the Customer under the OFO, the volumes not delivered to the Customer shall be subject only to the penalty portion of the Unauthorized Gas Charge.

Unauthorized Gas Charge

No Customer shall take Unauthorized Gas. A Customer must immediately notify KUB if it has taken, or anticipates taking, Unauthorized Gas. In the event a Customer takes Unauthorized Gas, the Customer shall be charged for all Unauthorized Gas delivered by KUB to the Customer the Unauthorized Gas Charge. In addition, KUB may suspend or terminate service and/or pursue any other remedy available to it under applicable law. The existence of an Unauthorized Gas Charge shall not be construed to give any Customer the right to take Unauthorized Gas. The penalty portion of the Unauthorized Gas Charge may be waived or reduced by KUB on a non-discriminatory basis.

Balancing of Deliveries

As nearly as practical, Deliveries and Redeliveries shall be at uniform rates of flow. Due to Customer operating conditions, the quantities of gas Delivered to KUB and Redelivered to Customer during any particular period may not balance. It shall be the responsibility of the Customer to adjust Deliveries and Redeliveries of gas to maintain a daily balance of Deliveries and Redeliveries.

KUB will endeavor to monitor Deliveries and Redeliveries and, to the extent practical, inform the Customer of Imbalances which have occurred. KUB's failure to notify the Customer of an Imbalance shall not affect Customer's obligations under Rate Schedule G-11. All efforts to correct Imbalances by a Customer shall be coordinated with KUB.

KUB shall have the right to take any and all action necessary to limit Imbalances from connecting pipelines or which affect the integrity of KUB's system.

Resolution of Imbalances

The Customer's Imbalance for the month shall be the net total of daily Imbalances for the month. KUB shall divide the monthly Imbalance by the sum of the Deliveries to KUB for the Customer for each Day of the month to determine the percentage (%) monthly Imbalance. KUB shall resolve the monthly Imbalance according to the following schedules ("Imbalance Charges"):

Schedule A. Redeliveries exceed Deliveries - Customer shall pay KUB for excess volumes at the applicable percentage of the Index Price (as defined in this Schedule A) for those volumes within the corresponding % monthly imbalance range.

<u>% Monthly Imbalance</u>	<u>Price</u>
0 - 5%	100% of Index Price
> 5 - 10%	115% of Index Price
>10 - 15%	130% of Index Price
>15 - 20%	140% of Index Price
>20%	150% of Index Price

The Index Price shall be the total of: (a) the average of daily prices for the applicable Gulf Coast Price Index for the applicable month, as published in Gas Daily, or if Gas Daily is no longer published, in a comparable reliable source for natural gas prices and (b) the costs incurred by KUB in transporting such excess volumes via connecting pipelines to one or more of KUB's delivery points.

Schedule B. Deliveries exceed Redeliveries - KUB shall pay the Customer for excess volumes at the applicable percentage of the Index Price (as defined in this Schedule B) for those volumes within the corresponding % monthly imbalance range.

<u>% Monthly Imbalance</u>	<u>Price</u>
0 - 5%	100% of Index Price
> 5 - 10%	85% of Index Price
>10 - 15%	70% of Index Price
>15 - 20%	60% of Index Price
>20%	50% of Index Price

The Index Price shall be the total of: (a) the average of daily prices for the applicable Gulf Coast Price Index for the applicable month, as published in Gas Daily or, if Gas Daily is no longer published, in a comparable reliable source for natural gas prices and (b) the costs which would have been incurred by KUB in transporting such excess volumes via connecting pipelines to one or more of KUB's delivery points.

Priority of Service

Interruptible gas service is supplied to customers of KUB under Rate Schedules G-7 and G-11. Except as may be otherwise determined by KUB in its sole discretion, Periods of Interruption shall generally be imposed on interruptible customers of KUB in the following order:

(1) If the Period of Interruption is necessary due to an emergency or a capacity limitation on KUB's gas distribution system, then the interruption of service to all interruptible customers of KUB shall be handled on a pro rata or other equitable basis as determined by KUB.

(2) If the capacity limitation affects only a restricted geographic area of KUB's gas distribution system, then only interruptible customers of KUB within the restricted area will have their service interrupted. The interruption of such customers shall be handled on a pro rata or other equitable basis as determined by KUB.

(3) If the Period of Interruption is necessary due to a shortage of KUB's normal gas supply, whether caused by a capacity limitation of KUB's connecting pipeline(s) or by an actual shortage of gas, then:

(a) The first service interrupted shall be Rate Schedule G-7 customers (other than redeliveries of supplemental gas and transport gas) who have not heretofore been interrupted as provided above.

(b) The second service interrupted shall be redeliveries of supplemental gas to Rate Schedule G-7 customers and Deliveries of Standby Gas by KUB to Rate Schedule G-11 Customers. Even though KUB may have acquired supplemental gas for the account of a customer under Rate Schedule G-7 or Standby Gas for the account of a Customer under Rate Schedule G-11, these services may be interrupted to the extent necessary to provide service to KUB's Firm Gas customers.

Within each category, the interruption of such customers shall be handled on a pro rata or other equitable basis as determined by KUB.

Insofar as Transport Gas has been Delivered to KUB for any customer receiving service under Rate Schedule G-7 or Rate Schedule G-11, and insofar as the Period of Interruption is not due to an emergency or capacity limitation on KUB's gas distribution system, the delivery of Transport Gas by KUB to those customers will not be interrupted.

(4) If the Period of Interruption is necessary due to a lack of confirmation by any connecting pipeline of Deliveries for any Rate Schedule G-11 Customers or to any customers receiving transportation service under Rate Schedule G-7, then only service to the affected Rate Schedule G-11 Customers or to the affected customers receiving transportation service under Rate Schedule G-7, as applicable, will be interrupted.

Notices

To the extent possible, KUB shall give Customer at least a one hour Notice of Interruption before a Period of Interruption begins. A Notice of Interruption may be written or oral and shall be sufficient if given by KUB via telephone or in person to the person or persons designated from time to time by the Customer as authorized to receive such notices, or by facsimile transmission to the telephone number designated from time to time by the Customer, or if mailed or hand-delivered in writing to the Customer's premises. If a Period of Interruption involves only a reduction in the amount of gas that may be transported, the Notice of Interruption shall state the daily and/or hourly quantity of gas which Customer may transport. A Period of Interruption shall continue in effect until KUB notifies Customer that the Period of Interruption has terminated or until the time specified in the Notice of Interruption expires.

Minimum Bill

The minimum bill for each monthly billing period shall be the sum of the Customer Charge and the Demand Charge.

Contract for Service

Each Customer receiving service under Rate Schedule G-11 shall execute a contract with KUB for at least twelve (12) months to end on the November 1st specified in said contract or such other period as Customer and KUB agree upon.

RATE SCHEDULE G-12

COMMERCIAL AND INDUSTRIAL FIRM TRANSPORTATION GAS SERVICE

Definitions

“Contract Amount” means the maximum amount of Transport Gas a Customer may transport through KUB’s gas distribution system facilities on any Day as established by a Transportation Service Agreement between KUB and the Customer.

“Customer” means a person or entity contracting with or otherwise receiving service from KUB for firm transportation gas service under Rate Schedule G-12.

“Day” means a period of twenty-four (24) consecutive hours, beginning and ending at 10:00 A.M. prevailing Knoxville time or such other period as may be established by the applicable connecting pipeline(s) to KUB’s system.

“Delivery” means the delivery of Transport Gas or Standby Gas to KUB.

“Imbalance” means the difference between Deliveries to KUB for a Customer and Redeliveries by KUB to the Customer.

“Operational Flow Order” means any directive issued to a Customer by KUB which requires the Customer to adjust Deliveries to KUB or deliveries of gas to the Customer by KUB.

“Redelivery” means the delivery of gas, excluding Unauthorized Gas, to a Customer by KUB.

“Scheduled Daily Amount” means the amount of Transport Gas approved by KUB from time to time to be Delivered by a Customer to KUB and delivered to the Customer by KUB on a daily basis.

“Standby Gas” means gas procured by KUB for the account of a Customer in the event of failure of the Customer’s supplier to Deliver Transport Gas to KUB.

“Transport Gas” means the gas purchased by a Customer from a supplier other than KUB that Customer has arranged to have Delivered to KUB for delivery to the Customer by KUB.

“Transportation Service Agreement” means the contract between KUB and Customer whereby KUB agrees to provide firm transportation gas service to the Customer.

“Unauthorized Gas” means (a) the quantity of gas taken by Customer exceeding the Contract Amount or (b) the difference (whether positive or negative) between the quantity of gas taken by Customer and the volumes provided for under an Operational Flow Order.

Availability

Service under Rate Schedule G-12 shall be available to any customer when the following conditions are met:

(a) Customer’s annual gas usage, on an actual or projected basis, shall not be less than 12,500 dekatherms (one dekatherm is equivalent to ten therms);

(b) KUB must determine that its existing distribution system facilities are adequate and available for the requested service; and

(c) Customer must execute a Transportation Service Agreement for firm transportation gas service.

(d) Customer’s use under this rate shall not work a hardship on any other customers of KUB, nor adversely affect any other class of KUB’s customers and further provided the Customer’s use under this rate shall not adversely affect KUB’s gas purchase plans and/or effective utilization of the daily demands under KUB’s gas purchase contracts with its suppliers, as solely determined by KUB .

In the event a Customer shall fail at any time to continue to meet condition (a) or (d), service under Rate Schedule G-12 shall no longer be available; but at KUB’s option, gas service may be provided to the Customer under other KUB rate schedules.

Character of Service

Pursuant to a Transportation Service Agreement and Rate Schedule G-12, KUB shall deliver to the Customer up to the Contract Amount of Transport Gas received from one or more connected interstate natural gas pipelines for Customer’s account.

Transport Gas, as provided for under Rate Schedule G-12, shall be subject to interruption as a result of emergency or other causes as provided for in KUB’s Rules and Regulations.

If the Transport Gas cannot be Delivered to KUB by a supplier of the Customer for any reason, Standby Gas service may be available in accordance with the terms and conditions under Rate Schedule G-12.

Gas purchased or transported under Rate Schedule G-12 shall be used only by the Customer at its facilities and shall be delivered at a single point of delivery located within the service area of KUB and shall not be resold by the Customer.

Net Rates

Customer Charge:	\$450.00
Demand Charge:	\$6.30 per dekatherm of demand.
Transportation Charge:	\$2.333 per dekatherm for the first 3,000 dekatherms of gas delivered to Customer; plus \$1.599 per dekatherm for each dekatherm from 3,000 to and including 20,000 dekatherms of gas delivered to Customer; plus \$.739 per dekatherm for each dekatherm from 20,000 to and including 50,000 dekatherms of gas delivered to Customer; plus \$.575 per dekatherm for the excess over 50,000 dekatherms of gas delivered to Customer.
Standby Gas Charge:	The charge for Standby Gas shall be the total of: (a) the cost per dekatherm to KUB for the applicable Day of acquiring Standby Gas in the open market, subject to the approval of the Customer to purchase Standby Gas at or above such price and (b) the costs incurred by KUB in transporting such Standby Gas via connecting pipelines to one or more of KUB's delivery points.
Unauthorized Gas Charge:	\$15.00 per dekatherm of Unauthorized Gas as a penalty, plus (a), the total cost per dekatherm of obtaining such gas on the open market, as defined below, plus (b), the costs incurred by KUB in transporting such Unauthorized Gas via connecting pipelines to one or more of KUB's delivery points. The cost per dekatherm of obtaining such gas on the open market, (a) above, is defined as an index price based on the High Common price for "Transco zone 5 delivered" or "Tennessee 500 Leg", whichever is higher for the applicable Day as published in <u>Gas Daily</u> . If <u>Gas Daily</u> is no longer published, or one of the aforementioned indices is not published, or for any other reason as determined by KUB, KUB will select an industry recognized index at its sole discretion.

Other Charges: Imbalance Charges (as herein defined), and any pipeline scheduling, balancing, transportation, or other similar charges incurred by KUB in connection with the transportation of gas on behalf of the Customer, as applicable.

Standby Gas Service

In the event Transport Gas cannot be Delivered to KUB by a supplier of the Customer, KUB will attempt to make Standby Gas available to the Customer in volumes up to the Customer's Scheduled Daily Amount. To obtain Standby Gas service, Customer or Customer's supplier must provide KUB with prior written or oral notice that the supplier will be unable to Deliver volumes to KUB to meet Customer's Scheduled Daily Amount.

KUB shall have the right, in its sole discretion, to curtail in whole or in part Standby Gas service to the Customer. To the extent possible, KUB shall give the Customer at least one hour notice prior to curtailment of Standby Gas service. Notice of curtailment may be written or oral and shall be sufficient if given by KUB via telephone or in person to the person or persons designated from time to time by the Customer to receive such notices, or by facsimile transmission to the telephone number designated from time to time by the Customer, or if mailed or hand-delivered in writing to the Customer's premises.

Standby Gas under Rate Schedule G-12 shall be subject to the following charges, as applicable: (a) the Standby Gas Charge, as set forth in this rate schedule, for Deliveries of Standby Gas to KUB for the account of the Customer, and (b) the Transportation Charge, as set forth in this rate schedule, for deliveries of Standby Gas to the Customer by KUB.

Determination of Demand

Demand for any month shall be the Customer's Contract Amount. Customer, with the consent of KUB, may from time to time change the Contract Amount by providing written notice to KUB at least three (3) business days prior to the beginning of the monthly billing period for which the Customer desires the change to be effective; provided, however, that such changes shall not effect a reduction in the previously specified Contract Amount unless the previously specified Contract Amount has been in effect for the entire twelve month period immediately preceding the date the requested change is to become effective. Any change in the Contract Amount shall be effectuated by an amendment to the Transportation Service Agreement.

Scheduling of Service

At least three (3) business days prior to the first calendar day of the month, Customer shall submit to KUB its schedule showing the proposed daily volumes of Transport Gas the Customer desires to Deliver to KUB via connecting pipelines and have delivered to the Customer by KUB during the succeeding month ("Delivery Schedule"). Any proposed Delivery of gas in excess of the Contract Amount shall be specifically noted in the Delivery Schedule. At least one business day prior to the beginning of the applicable calendar month, KUB shall notify the Customer in writing of the volumes of Transport Gas for such Customer which have been approved for Delivery to KUB and delivery to the Customer by KUB on a daily basis during such month ("Scheduled Daily Amount"). The Customer must notify and obtain written approval of KUB for any changes in the Scheduled Daily Amount during a month at least twenty-four (24) hours prior to the proposed commencement of such change.

KUB shall have the right, in its sole discretion, to issue an Operational Flow Order ("OFO") which shall require the Customer to adjust Deliveries to KUB or deliveries of gas to the Customer by KUB in order to address one or more of the following situations: (1) to maintain system operations at pressures required to provide efficient and reliable service, (2) to have adequate gas supplies in the system to deliver on demand, (3) to maintain service to all firm gas customers and for all firm gas services, (4) to avoid penalties from connecting pipelines, or (5) any other situation which may threaten the operational integrity of KUB's gas distribution system.

To the extent possible, KUB shall give at least one hour notice prior to issuing an OFO. Notice may be written or oral and shall be sufficient if given by KUB via telephone or in person to the person or person(s) designated from time to time by the Customer as authorized to receive such notices, or by facsimile to the facsimile number designated from time to time by the Customer, or if mailed or hand-delivered in writing to the Customer's premises. The OFO shall include but not be limited to the following information: (1) time and date of issuance, (2) action Customer is required to take, (3) time at which Customer must be in compliance with the OFO, (4) anticipated duration of the OFO, and (5) any other terms and conditions that KUB may reasonably require to ensure the effectiveness of the OFO.

Any volumes of gas delivered to the Customer by KUB in excess of the volumes provided for under the OFO shall be subject to the entire Unauthorized Gas Charge. If the volumes of gas delivered to the Customer by KUB are less than the volumes required to be delivered to the Customer under the OFO, the volumes not delivered to the Customer shall be subject only to the penalty portion of the Unauthorized Gas Charge.

Unauthorized Gas Charge

No Customer shall take Unauthorized Gas. A Customer must immediately notify KUB if it has taken, or anticipates taking, Unauthorized Gas. In the event a Customer takes Unauthorized Gas, the Customer shall be charged for all Unauthorized Gas

delivered by KUB to the Customer the Unauthorized Gas Charge. In addition, KUB may suspend or terminate service and/or pursue any other remedy available to it under applicable law. The existence of an Unauthorized Gas Charge shall not be construed to give any Customer the right to take Unauthorized Gas. The penalty portion of the Unauthorized Gas Charge may be waived or reduced by KUB on a non-discriminatory basis.

Balancing of Deliveries

As nearly as practical, Deliveries and Redeliveries shall be at uniform rates of flow. Due to Customer operating conditions, the quantities of gas Delivered to KUB and Redelivered to Customer during any particular period may not balance. It shall be the responsibility of the Customer to adjust Deliveries and Redeliveries of gas to maintain a daily balance of Deliveries and Redeliveries.

KUB will endeavor to monitor Deliveries and Redeliveries and, to the extent practical, inform the Customer of Imbalances which have occurred. KUB's failure to notify the Customer of an Imbalance shall not affect Customer's obligations under Rate Schedule G-12. All efforts to correct Imbalances by a Customer shall be coordinated with KUB.

KUB shall have the right to take any and all action necessary to limit Imbalances from connecting pipelines or which affect the integrity of KUB's system.

Resolution of Imbalances

The Customer's Imbalance for the month shall be the net total of daily Imbalances for the month. KUB shall divide the monthly Imbalance by the sum of the Deliveries to KUB for the Customer for each Day of the month to determine the percentage (%) monthly Imbalance. KUB shall resolve the monthly Imbalance according to the following schedules ("Imbalance Charges"):

Schedule A. Redeliveries exceed Deliveries - Customer shall pay KUB for excess volumes at the applicable percentage of the Index Price (as defined in this Schedule A) for those volumes within the corresponding % monthly imbalance range.

<u>% Monthly Imbalance</u>	<u>Price</u>
0 - 5%	100% of Index Price
> 5 - 10%	115% of Index Price
>10 - 15%	130% of Index Price
>15 - 20%	140% of Index Price
>20%	150% of Index Price

The Index Price shall be the total of: (a) the average of daily prices for the applicable Gulf Coast Price Index for the applicable month, as published in Gas Daily, or if Gas Daily is no longer published, in a comparable reliable source for natural gas prices and (b) the costs incurred by KUB in transporting such excess volumes via connecting pipelines to one or more of KUB's delivery points.

Schedule B. Deliveries exceed Redeliveries - KUB shall pay the Customer for excess volumes at the applicable percentage of the Index Price (as defined in this Schedule B) for those volumes within the corresponding % monthly imbalance range.

<u>% Monthly Imbalance</u>	<u>Price</u>
0 - 5%	100% of Index Price
> 5 - 10%	85% of Index Price
>10 - 15%	70% of Index Price
>15 - 20%	60% of Index Price
>20%	50% of Index Price

The Index Price shall be the total of: (a) the average of daily prices for the applicable Gulf Coast Price Index for the applicable month, as published in Gas Daily or, if Gas Daily is no longer published, in a comparable reliable source for natural gas prices and (b) the costs which would have been incurred by KUB in transporting such excess volumes via connecting pipelines to one or more of KUB's delivery points.

Minimum Bill

The minimum bill for each monthly billing period shall be the sum of the Customer Charge and the Demand Charge.

Contract for Service

Each Customer receiving service under Rate Schedule G-12 shall execute a contract with KUB to end on the November 1st specified in said contract.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.