MINUTES OF THE <u>Senate</u> COMMITTI	EE ONEnergy and Natural Resources	
The meeting was called to order by	Senator Charlie L. Angell Chairperson	at
8:00 a.m. Mong on Wednesday, Feb	oruary 23 , 1983 in room 123-S	_ of the Capitol.
All members were present XXXXXX:		

Approved February 24,

1983

Committee staff present: Ramon Powers, Research Department

Don Hayward, Revisor's Office LaVonne Mumert, Secretary to the Committee

Conferees appearing before the committee: Pete Loux, Kansas Corporation Commission Patty Gorham, Kansas Corporation Commission Ron Cook, Petroleum Consultant Phil Dick, Kansas Corporation Commission

The minutes of the February 22, 1983 meeting were approved.

Pete Loux introduced Kansas Corporation Commission staff present.

Patty Gorham said she would give a broad overview as to the natural gas regulation by the Commission. The jurisdiction of the Commission over the production and conservation of natural gas is: (1) when the production from a common source of supply is in excess of the demand for that gas, (2) waste of that natural gas, and (3) when the orderly production and development of natural gas requires the Commission to exercise jurisdiction over that source of supply. The Commission regulations prohibit inequitable or unfair taking of natural gas and unreasonable discrimination between common sources of supply within and without the state. The statutes give the Commission jurisdiction to regulate the taking of natural gas but do not allow the Commission to regulate purchasers of this gas. The Commission can put a minimum price on the natural gas out of the Hugoton Field; but basically, the Commission has no control over the price of gas. There are two types of natural gas fields -- prorated fields, where all the wells are subject to the Commission's order for that particular field, and nonprorated fields, where the wells are allowed to produce up to 25% of their adjusted open flow. There are only 23 prorated fields in Kansas, but many, many more nonprorated fields. Wells in nonprorated fields go through a series of tests and the Commission determines an end number on the deliverability for each well. The Commission then determines what 25% of the open flow is for each well. That number is used in the formula to determine what that well's allowable will be. Ms. Gorham said the spacing of the wells may vary from field to field. For prorated fields, the Commission adopts a proration formula which takes into consideration the acreages, pressures in the fields, open flow of each well in the field and the permeability of the formation. Using these factors, a formula is derived which is used in assigning an allowable to each well. In the Hugoton Field, the wells are basically in the center of each section, but there are exceptions. It is possible to have more than one well on a 640 acre unit, but each well would only get their fair share. The Commission is obligated to set the market demand for natural gas for all of the prorated fields in the state. Hearings are held every six months. Purchasers submit their nominations for how much gas they are going to be willing to take from the field. The Commission sets the market demand for each prorated pool. That market demand is spread over the six-month period and spread to all the wells based on their ability to produce. There is no requirement that these producers produce that gas; these allowables are permissive. Nonprorated wells are generally tested only one time. Prorated wells are tested annually unless otherwise directed by the Commission. Wells in the Hugoton Field are tested every other year. Ms. Gorham said one of the largest areas of the Commission's responsibility, obviously, is the Hugoton Field, which is the largest or one of the largest fields in the world. The Hugoton Field has been under the jurisdiction of the Commission since 1944. In March of last year, the Commission instituted a general investigation to determine if there were any provisions in the basic order that needed to be modified due to existing circumstances in the marketplace and the Hugoton Field. The Commission held several hearings and issued three orders changing the existing provisions of the basic order for the Hugoton Field. The first order dealt with the method of computing the deliverability of standard pressure. The formula was not really indicating what the capability of the field was, so changes were made. The second order was a result of hearings on the minimum allowables that exist in the Hugoton Field. The minimum allowable wells are ones on which the availability has dropped below the deliverability of Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for

editing or corrections.

## CONTINUATION SHEET

MINUTES OF THE Senate COMMITTEE ON Energy and Natural Resources

room 123-S, Statehouse, at 8:00 a.m./WMMX on Wednesday, February 23 , 19.83

standard pressure, so they cannot be assigned a regular allowable. The order changed the standard for minimum allowable wells to those producing less than 65 m.c.f. Ron Cook told the Committee that it is possible for the pressure on these wells to increase. He said the normal line pressure runs about 400 to 500 pounds. There are gathering facilities in the fields, and the gas is then compressed into the line. The Commission has no direct control over the main line pressure. Commissioner Dick said, typically, a well will drain in a radial pattern. There was discussion about the idea of drilling second wells mentioned in yesterday's committee meeting by Mr. Byrd. The Commission said there has been no application made to drill additional wells. None of the producers, with the exception of Mesa Petroleum, are interested in additional supplies. Mesa signed a contract with Kansas Power and Light Company in which they agreed not to request for any infill drilling. The Commission said if an application were granted for infill drilling, this would have a ripple effect so that the whole Hugoton Field would be done this way. There was discussion that, theoretically, the whole Hugoton Field is a common source of supply. Ms. Gorham said that the third order dealt with the underage problem. For several years, the amount of underproduction has been increasing. The allowable for January was 52 b.c.f., and the production was not quite 13 b.c.f. The order is an attempt to try and induce the producers to take more of the gas from Hugoton to reduce some of the underproduction. A well can be underproduced six times its allowable before having that underage cancelled. The old order provided that underages could be reinstated at any time in the future if the operator would come in and say there was a market for gas regardless of how old those cancelled underages were. The new order provides that for any underage cancelled prior to 1975, the operator has until December 31, 1983 to come to the Commission and make a request that that underage be reinstated. For any underage cancelled between January 1, 1975 and December 31, 1982, the operator has to make a request to the Commission prior to December 31, 1985. Further, the well has to be underproduced. Chairman Angell asked what would happen if Kansas Power and Light Company went to producers who have underages and asked to purchase gas from those nonproducing wells. Commissioner Dick said such a sale would have to be arranged and negotiated at arms-length, would have to be approved by the Federal Energy Regulatory Commission and the price would Ms. Gorham's written testimony is attached hereto. have to be the system-wide price.

The meeting was adjourned at 9:03 a.m. by the Chairman. The next meeting of the Committee will be at 8:00 a.m. on February 24, 1983.

Senate Energy & Natural Resources Feb. 23, 1983

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## Overview of Corporation Commission Responsibility for the Regulation of Natural Gas Production

By Patricia A. Gorham, Assistant General Counsel
Testimony before the Senate Energy and Natural Resources
Committee.

February 23,1983

The jurisdiction of the State Corporation Commission of the State of Kansas over the production and conservation of natural gas is set forth in Chapter 55 Article 7 of the Kansas Statutes Annotated. The purpose of the Commission's authority is to prevent waste of natural gas and protect the correlative rights of all producers. Under the provisions of Article 7 the Commission may regulate the production of natural gas from any common source of supply whenever available production from that source of supply is in excess of market demands, whenever the market demand for natural gas can be fulfilled only by the production of natural gas under conditions constituting waste, or when the Commission finds that the orderly development and production of natural gas from any common source of supply requires the exercise of its jurisdiction. The Commission is required to regulate the taking of natural gas from any and all common sources of supply within the State of Kansas to prevent the inequitable or unfair taking of gas from a source of supply by any person, and to prevent unreasonable discrimination in favor of one source of supply as against another or in favor of any one producer as against another. In other words, the commission is given authority to prorate production from certain fields.

In carrying out this responsibility the Commission is given the authority to promulgate rules, regulations, and formulas, as well as to issue orders. In taking jurisdiction over certain fields the Commission issues what are termed basic proration orders to regulate the production and development from a field. The proration formulas established by the Commission take into consideration the acreage which is underlain by the common source of supply, pressures in the field, the open-flow of wells in the field, porosity, permeability and thickness of pay of the common source of supply. Once an order of the Commission is in effect for a common source of supply, all producers from the field are required to produce in accordance with the provisions of such order.

For those fields which the Commission does not issue order, the unprorated pools, the daily production of a well in such pool is limited to 25% of the open-flow of the well. This limitation is set by statute (K.S.A. 1982 supp. 55-703).

In the State of Kansas, there are only 23 prorated fields. While the number of unprorated fields far exceeds those that are prorated, the percent of production of total production of natural gas in Kansas from those prorated fields is in excess of 80%.

As a part of its exercise of jurisdiction over prorated fields, the Commission is required to determine the market demand for natural gas from these common sources of supply. do this, the Commission holds market demand hearings every six months. As a part of the hearing on market demand, the Commission receives nominations from the purchasers from the field. At the hearing, testimony is presented from purchasers and other interested parties. In setting the market demand, the Commission takes into consideration the reasonable current requirements for current consumption and use within and without the state as well as other factors, conditions and circumstances that affect the establishment of market demand. Market demands hearings are held by the Commission in September and March of each year. Based on the evidence presented at these hearings the Commission establishes the allowed production from the field for that period.

The proration of natural gas involves the assignment of allowables to the wells in prorated fields. The purpose of such assignment is to allow a well the opportunity to produce its fair share of the natural gas allowed to be produced for the current market demand period. The allowables set are permissive. The Commission has no authority to require a producer to produce its allowable.

The initial step in the assignment process is the testing of the well to determine its capability to produce. The Commission has established rules for this purpose (82-3-303). Gas wells are tested upon completion and tested annually thereafter unless otherwise determined by the Commission. For wells in non-prorated fields, the test results provide the information to determine what 25% of open-flow is for that well, which in turn determines the well's allowed production. For wells in prorated fields, the test information is used in making the calculations of the proration formula. Any well that is subject to a special order shall be tested in accordance with that order.

The most significant area affected by the Commission's responsibility with regard to the proration of natural gas is the Kansas Hugoton Field, by far the largest gas field in the state and one of the largest fields in the world. The Commission first took jurisdiction over the Kansas Hugoton Field in March of 1944 when it issued the Basic Proration Order for the field. This order established rules and regulations relating to production, sale and conservation of natural gas in the field. The Commission has amended the Basic Proration Order from time to time as necessary due to changing conditions in the field and the market for natural gas.

The Basic Proration Order, like other such orders issued by the Commission, establishes the limits of the field, which currently covers nine counties in Western Kansas, provides for, among other things, the location of wells, the maximum number of acres that can be attributed to a well, exceptions to the well location requirements, the testing methods used to determine the allowables for wells in the field, and the production tolerances for permitted ranges of over and under production of the assigned allowables. As a part of the Basic Proration Order, the Commission adopted a formula that will enable each well to currently produce its allowable and ultimately produce approximately the amount of gas underlying the lease upon which it is located. The formula takes into consideration those factors which must be considered by the Commission in prorating a field such as acreage, pressures, open-flow, porosity and thickness of pay. The formula gives equal weight to acreage and deliverability in establishing a well's allowable. Although many of the other provisions of the Basic Order have been amended or at least challenged, it is generally agreed that this formula is the one best suited for use in the Hugoton Field.

In March of 1982, the Commission instituted a general investigation into the provisions of the basic proration order for the Kansas Hugoton Field to determine whether any changes should be made in the provisions of the Order. After extensive

hearings with testimony from numerous parties, the Commission issued three orders amending various provisions of the Basic Proration Order.

The first order, issued September 2, 1982, amended the method of computing the deliverability of standard pressure (DSP) which is a part of the order that is used to determine the allowable of a well. The formula itself was not changed.

The second order issued February 16, 1983, raised the allowable assigned to minimum allowable wells to 65 MCFD from 50 MCFD. This was done to allow marginal wells to produce additional gas.

The third order, and by far the most controversial, was also issued February 16, 1983. This order relates to the provisions of Paragraph "P" of the Basic Provation Order which addresses over and under production from the field.

It is common knowledge that there exists in the Hugoton Field huge amounts of underage, i.e. allowed production that has not been produced. Based on January 1983 figures the current underage in the field is 223.5 BCF. The amount of cancelled underage available for reinstatement totals 435 BCF. These figures added to the amount of reinstated underage to be produced 25.5 BCF and the current January allowable 52.5 BCF there was almost 684 BCF of gas available for production. This is in addition to the current allowables. Clearly there is a serious problem in the field.

The Commission, in instituting its investigation, set out to determine the cause or causes of this problem and to arrive at some solution to eliminate or at least lessen this problem. After many hours of testimony from various parties with differing points of view, the Commission arrived at what it feels is a method to encourage production from the Kansas Hugoton Field. This method is a change in policy regarding the reinstatement of cancelled underage.

The Commission has taken a strong stand on allowing the reinstatement of cancelled underage. Formerly, any underage cancelled because it was in excess of the production tolerances allowed by the Basic Order, either six or nine times the basic allowable, could be reinstated at any time in the future upon request of the producer. The new policy sets out specific time frames for both requesting reinstatement and producing any underage that is reinstated. If a company fails to meet the time requirements for reinstatement or production, the subject underage is cancelled permanently and the purchaser loses the right to produce that gas.

This change in policy was adopted in hopes that the tightening of policy will put the necessary pressure on the producers to produce more of their assigned allowables and thereby maintaining the necessary balance in the field which is the purpose of the Basic Order.