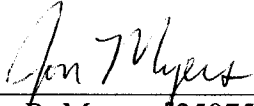




Respectfully submitted,



Jonathan R. Myers, #25975  
Litigation Counsel, Kansas Corporation Commission  
266 N. Main, Suite 220  
Wichita, Kansas 67202-1513  
Phone: 316-337-6200; Fax: 316-337-6211

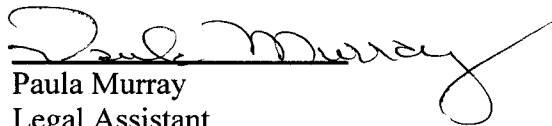
**CERTIFICATE OF SERVICE**

I certify that on 12/27/16, I caused a complete and accurate copy of this Motion to be served via United States mail, with the postage prepaid and properly addressed to the following:

N/A

And by email to the following:

Dustin Kirk/Michael Duenes  
KCC Topeka Office



Paula Murray  
Legal Assistant  
Kansas Corporation Commission

THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS

Before Commissioners:     Jim Robinson, Chairman  
                             F.S. Jack Alexander  
                             Rachel C. Lipman

In the matter of the application of )	DOCKET NO. 177,932-C
DUNCAN ENERGY COMPANY and FARLEIGH )	(C-26,223)
OIL PROPERTIES for an exception to )	
certain regulations of this )	CONSERVATION DIVISION
Commission otherwise applicable to )	
gas wells producing coalbed methane )	
gas in Jackson, Pottawatomie, )	
Nemaha, Shawnee, Jefferson, Brown )	
and Osage Counties, Kansas. )	

ORDER

NOW, the above-captioned matter comes on for consideration and determination before the State Corporation Commission of the State of Kansas.

On the 2nd day of October, 1991, Duncan Energy Company and Farleigh Oil Properties (hereinafter "Applicants") filed their application with the Commission seeking exceptions from certain regulations of the Commission covering a seven county area, as noted in the caption of this order.

Display notice was published in the Wichita Eagle and in the various official county newspapers for each of the seven affected counties on a weekly basis for three consecutive weeks with the notices advising the public of the upcoming hearing scheduled for October 30, 1991, at 1:30 p.m. in the afternoon, in accordance with an Interim Order dated October 18, 1991.

The matter was heard at the Commission's offices in Topeka, Kansas, pursuant to said notice, by Chairman Jim Robinson. Timothy E. McKee, Wichita, Kansas, appeared on behalf of Applicants, Duncan Energy Company and Farleigh Oil Properties. William J. Wix, Assistant General Counsel, appeared on behalf of the Commission staff and the public generally. Bruce E. Johnson, Landman, Steven A. Tedesco, Coal Geologist, and Paul E. Nielsen, Physicist, testified as experts on behalf of Applicant. In addition, at the request of staff counsel, letters of support from Mitchell Energy Corporation and Exeter Oil and Gas, Ltd. of London, U.K., were incorporated into the record.

The Commission, after taking the matter under advisement and after giving consideration to the record and files, makes the following findings and conclusions:

1. An application was filed on October 2, 1991, by Duncan Energy Company and Farleigh Oil Properties asking the Commission for permanent exemptions to the Commission's state-wide regulations involving downhole commingling of hydrocarbons from more than one common source of supply (K.A.R. 82-3-123), annual testing of commercial gas wells for determination of their respective open flow potentials (K.A.R. 82-3-303 and K.A.R. 82-3-304), restriction of commercial sales of natural gas from any gas well in Kansas to a volume equal to 25% of that gas well's open flow potential (K.A.R. 82-3-312) for coalbed methane gas wells to be drilled to and completed in the Cherokee and Marmaton coals within the seven county area described in the application. In addition, the application sought temporary exemptions to the Commission's state-wide regulation prohibiting unauthorized flaring and/or venting of natural gas except when it is produced in conjunction with crude oil (K.A.R. 82-3-208). Finally, the application seeks a minimum of forty (40) productive acres attributed to a well to be mandatory prior to the drilling of any coalbed methane gas well in the area that will be subject to this order.

2. The application in this docket was filed pursuant to the Kansas Statutes and the rules and regulations of the State Corporation Commission, thus fulfilling all statutory and regulatory requirements.

3. Notice was proper in every respect and was published as prescribed by the Commission's rules and regulations. There were no protests filed.

4. The utilization of the methane gas to be produced from these coalbed gas wells is for a purpose permitted by the laws of the state of Kansas and the rules and regulations of the Commission and will not constitute waste.

5. Testimony was properly pre-filed, together with exhibits, by the following witnesses on behalf of the applicants, Bruce E. Johnston, Steven A. Tedesco and Paul E. Neilsen.

6. Mr. Tedesco is a consulting geologist who specializes in the geology of coal. He holds a bachelors degree in geology from Northeastern University and a masters degree in geology from Southern Illinois University. It was Mr. Tedesco's testimony that the area covered by this application is generally underlaid by a portion of the Forest City Basin which extends into portions of Iowa, Nebraska, and Missouri, and consists of coals in the Cherokee Group as the coals of primary interest. This area is generally

located between two areas that have been historically active for oil and gas production, but the area itself does not enjoy a strong history of oil and gas exploration. It was Mr. Tedesco's testimony that within the area of the application, the total gross amount of coal present in the Cherokee Group varies between zero (0) to ninety (90) feet and averages approximately fifty (50) feet. Mr. Tedesco is familiar with the coalbed methane production in the Black Warrior Basin in Alabama and believes that there are strong analogies between these two coalbed methane gas sources. The logs for wells in both places are strikingly similar regarding the geologic environment for deposition, coal thickness and other geologic features.

7. It was Mr. Tedesco's testimony that although there are several coalbeds, or stringers, which may be separated by rock types, methane gas produced from the Marmaton and Cherokee Group coals in the area of the application are part of a common source of supply due to the fact that the same geologic processes created these coals. It was his opinion that these coalbeds and sources for the methane gas production should be considered a common source of supply from a geologic prospective and that it would not be economically feasible to require separate completions and production from each coal stringer or coalbed. Mr. Tedesco noted that the coalbeds are produced as a common source of supply and not segregated in the Black Warrior Basin and that this approach has been approved by the conservation authorities in Alabama, as well as Virginia. It was Mr. Tedesco's testimony that the granting of the application and the requested exceptions, as well as the requirements sought for acreage attribution and well location, would not in any way violate correlative rights and would serve to prevent waste.

8. Paul E. Nielsen testified on behalf of the Applicants. Mr. Nielsen is a graduate of the University of Redlands in Southern California, holding a bachelor of science degree in Physics. He has worked in the oil and gas industry for approximately ten years. Mr. Nielsen participated with the Gas Research Institute in a program supported by the Federal Energy Regulatory Commission for a study of coalbed methane drainage. He served as the principal investigator for the project.

9. It was Mr. Nielsen's testimony that the gas conservation rules of the Kansas Corporation Commission were developed for natural dry gas reservoirs and are not at all suited to the nature of coalbed methane reservoirs. He further stated that the application of these rules and regulations would inhibit the testing and development of coalbed methane gas. Mr. Nielsen testified regarding the method whereby methane gas is released from the coal body by the reduction of pressure from the coals principally through their removal of water. He further testified

that when the reservoir pressure is lowered below the critical pressure, methane gas is released from the coal body and migrates towards the well-bore. Mr. Nielsen went on to testify that one of the essential elements of coalbed methane gas recovery is that the reservoir must have the pressure continually reduced. As a result, regulations such as K.A.R. 82-3-312 which limit a gas well's production to 25% of the open flow, and K.A.R. 82-3-304 and K.A.R. 82-3-312, which require the shutting-in of the wells for certain tests, will inhibit, if not prevent, coalbed methane wells from being produced. For these reasons, the exemptions are sought from these regulations.

10. Mr. Nielsen also testified regarding the effects of "positive interference" by offset wells and that proper spacing of coalbed methane wells will result in a reduction of the reservoir pressure by dewatering in a more efficient manner and result in greater production. However, Mr. Nielsen also testified that the optimum spacing, in his opinion, should not be less than one well per forty (40) acres. Well spacing on a closer pattern, as revealed on Exhibit 8, would result in waste of economic resources.

11. Mr. Nielsen further testified that the coal seams, forming the supply for coalbed methane gas in the area of the application, should be regarded as a common source of supply. However, if not so regarded, an exception from the commingling regulation of K.A.R. 82-3-123 should be granted from a commercial standpoint as multiple seam completion in a single well-bore is absolutely essential and is the practice that has been followed in the Black Warrior Basin. Nielsen testified that the economics of completion in a multiple number of seams for a single well would allow the commercial development in this area.

12. Mr. Nielsen testified that the granting of the requested exceptions, including an order containing a provision regarding acreage attribution as sought by the application, would serve to protect correlative rights and prevent waste.

13. Mr. Nielsen also testified that both Applicants plan to drill test wells for purposes of evaluating the resource base and the economics of a field-wide development. The applicants anticipate production testing as part of their testing program, but because pipelines are not available in the vicinity and because of the high cost of construction of a pipeline, they believe they will need to vent or flare gas for a period not exceeding 180 production days as an essential part of their testing.

14. Mr. Bruce E. Johnston testified on behalf of the Applicants. Mr. Johnston holds a bachelor of science degree in Business Administration from the University of Colorado and is a Certified Professional Landman, having practiced that profession

for seventeen years. It was Mr. Johnston's testimony that the exceptions sought by this application were critical to a proper evaluation of the commercial potential for coalbed methane gas in the area of the application, which extends across a large portion of Northeastern Kansas and, in his opinion, provides a potential for a large natural resource for the state. In Mr. Johnston's opinion, the granting of the application would not in any way endanger correlative rights and would, in fact, prevent waste of economic and natural resources.

15. The Commission finds that the geology and engineering of coalbed methane production are not the same as those for natural dry gas reservoirs. As a result, the regulations for the subject of this application would serve to inhibit the development of coalbed methane gas wells, if they were applied to such wells.

16. The entrapped connate water indigenous to the various undeveloped coal seams of the Cherokee or Marmaton Group poses serious production problems that are unique to coalbed methane gas wells and necessitate producing this type of gas well at its maximum output level at all times. Because of the copious amounts of saltwater needing to be extracted, such wells are precluded from being tested for open flow potential.

17. Due to the absence of pipelines in close proximity to the seven county area to be drilled, neither applicant will be able to produce the methane gas from their first successful wells into a pipeline or other enclosed vessel. In view of their need to discover the production characteristics of each coal seam as quickly as possible and in order to determine the feasibility of further development of the resource, it will be necessary for the applicants to either vent or flare all produced gas for a fixed period of time after completion of the initial wells.

18. Both applicants assured the Commission that sufficient facilities would be available at the time of the commencement of drilling operations to adequately provide for the proper disposal of the copious amounts of saltwater expected to be encountered. Adequate provisions have been made for the disposal of the saltwater brine. Applicants will secure adequate disposal wells permitted and approved by the Kansas Corporation Commission prior to injecting into the same or applicants will drill their own disposal wells under staff's supervision. Upon motion, operators will seek authorization for disposal into other saltwater disposal wells as necessary.

19. Continuous venting of the methane gas produced from the wells at night may pose a safety hazard to members of the general public and to livestock.

20. Forty (40) acre well attribution will not impair correlative rights and will act to prevent waste by preventing the drilling of more wells than are actually necessary to dewater the coal seams and to recover the adsorbed methane gas.

21. Much of the technical information to be obtained from the drilling and operation of these northeast Kansas coalbed gas wells will be shared with the Commission including, but not limited to, measurements of permeability of the various coal seams by means of slug tests, but the same shall be kept confidential.

22. To be eligible for the necessary exceptions, the applicants suggest that eligibility of any gas well drilled within the described seven county area be contingent upon the operator of the well attaining a Section 107 NGPA determination from the State Corporation Commission, attesting to the fact that the well does, indeed, produce from a coal seam or from more than one coal seam which is a member or are members of the Cherokee or Marmaton Groups.

23. The granting of this application is necessary to promote orderly development of this resource within a limited time window defined by existing relevant Federal tax legislation.

IT IS, THEREFORE, BY THE COMMISSION ORDERED that the exceptions from state-wide Conservation Division regulations K.A.R. 82-3-123, K.A.R. 82-3-303, K.A.R. 82-3-304, and K.A.R. 82-3-312, be, and the same are hereby, granted for so long a period of time as each well subject to this order continues to produce occluded methane gas either in part or in total from the coal seams of the Cherokee or Marmaton Groups.

IT IS FURTHER ORDERED that beginning with the point in time that any of these wells are recompleted for gas or crude oil production solely from a "conventional" hydrocarbon reservoir, then the converted wells shall forfeit all claims to the aforementioned exceptions to rules.

IT IS FURTHER ORDERED that any and all venting associated with the operation of these coalbed methane gas wells be limited to the hours of daylight for a maximum cumulative period of 180 production days, as measured from whatever date on which the well commences producing measurable quantities of methane gas in excess of 25 Mcf per day.

Flaring shall be permitted during both daylight and nighttime hours from any coalbed gas well that will be subject to this order for a maximum cumulative period of 180 production days, as measured from whatever date on which the well commences producing measurable quantities of methane gas in excess of 25 Mcf per day.



Each operator of a coalbed methane gas well that is subject to this order shall file a certified, attributed-acreage plat (Conservation Division Form CG-8) with the Conservation Division's Wichita office at the same time as the Intent-to-Drill form is filed, with said plat clearly showing the boundaries and extent of the forty (40) or more acres surrounding the proposed drillsite which are reasonably expected to be productive of coalbed methane gas.

In no event shall a proposed drilling location for a coalbed gas well that is targeted for a coal seam that is a member of the Cherokee or Marmaton Group be farther than 150 feet in any direction from the exact geometric center of the attributed acreage. Operators of coalbed methane gas wells in the seven county area that will be subject to this order shall endeavor whenever possible to construct the forty (40) acre or larger drilling unit so that said drilling unit is made up entirely of acreage within one governmental "quarter-quarter section" of land contained within a single, surveyed government section.

In any event, all acreage to be attributed to an individual well by the establishment of a drilling unit beforehand shall be contiguous and adjoining.

The Commission shall have the right to exclude any acreage from inclusion within any proposed drilling unit which, in the Commission's judgement, isn't reasonably expected to be productive of coalbed methane gas in commercial quantities.

Before commencing drilling operations on any well that is targeted for coals in the Cherokee or Marmaton Group and which will be subject to this order, if successful, the operator of such well shall certify in writing to the Commission that all such saltwater disposal facilities as will be needed are either already in place at the time of spudding in or will be in place and be ready for use by the time that the proposed new well is completed.

This condition shall also apply to any operator wishing to wash down an old, plugged and abandoned hole for the purpose of converting said hole to a coalbed methane gas well in any of the Cherokee or Marmaton coals.

Each operator of a coalbed methane gas well that is subject to this order shall erect (as soon after the start of venting as possible) at the entrance to each individual lease on which coalbed methane gas is going to be vented to the atmosphere (subject to the conditions outlined above) a warning sign to alert incoming personnel and the public at large of the fact that large volumes of flammable gas are being vented to the atmosphere.

In addition, the operators of coalbed gas wells subject to this order from which methane gas is being vented or flared shall regularly forward to the Conservation Division office in Wichita on a monthly basis written reports of the volumes of gas having been vented or flared from an individual well during the previous calendar month, corrected to a standard temperature and pressure base of 60°F and 14.65 psia, respectively.

Individual wells from which coalbed methane gas is being or will be vented or flared shall be individually metered with such equipment as is approved for use by the staff of the Conservation Division and shall have such auxiliary recording equipment in use with the approved metering equipment as is necessary to create and maintain a permanent, written record of the volumes being metered per unit of time.

The operator shall retain the written records of metered volumes that were either vented or flared from his coalbed gas wells in storage for a minimum period of two years from the date that each record was created.

All operators of coalbed gas wells that are or will be subject to this order shall, within 45 days of the observance of the first measurable quantities of methane gas at the wellhead, initiate Section 107, High Cost Natural Gas, NGPA filings on behalf of their wells.

Failure to adhere to any part or provisions of this order may result in forfeiture of the requested exemptions to the Commission's state-wide rules and regulations which would otherwise apply, or in a fine of not less than \$500.00 being imposed, or in shutting-in of the violating operator's coalbed methane gas wells for any length of time deemed necessary by the Commission, or in any combination of these three penalties.

Any party affected by this Order may file with the Commission a petition for reconsideration pursuant to K.S.A. 77-529(a). Such petition shall be filed within fifteen (15) days after service of this order and must state the specific grounds upon which relief is requested. This petition for reconsideration shall be filed with the Executive Director of the Kansas Corporation Commission, 1500 S.W. Arrowhead Road, Topeka, Kansas 66604.


The Commission retains jurisdiction of the subject matter and the parties for the purpose of entering such further order or orders as from time to time it may deem proper.

BY THE COMMISSION IT IS SO ORDERED.

Robinson, Chmn.; Alexander, Com.; Lipman, Com.

Dated: NOV. 27 1991

I CERTIFY THE ORIGINAL  
COPY IS ON FILE WITH  
The State Corporation Commission

  
Executive Director

Date Mailed: NOV 27 1991

NOV 02 1991

  
EXECUTIVE DIRECTOR