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RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 06-0309389

THE APPLICATION OF KJ ENERGY, LLC TO CONSIDER AMENDING THE FIELD RULES FOR THE BRACHFIELD, S.E. (COTTON VALLEY) FIELD, RUSK AND PANOLA COUNTIES, TEXAS

HEARD BY: Richard Eyster - Technical Examiner,
Clayton Hoover - Administrative Law Judge,

DATE OF HEARING: March 26, 2018

APPEARANCES:

REPRESENTING:

APPLICANT:

George C. Neale
Rick Johnston, P.E.

KJ Energy, LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

KJ Energy, LLC ("KJ") seeks to amend the existing field rules for the Brachfield, S.E. (Cotton Valley) Field (the "Field"). The Field was discovered in May 1981, had field rules adopted in November 2007, which were amended in November 2008, and again in October 2014. Specifically, KJ requests amendment of the existing "take point" rule, allowing operators to establish the first and last take points as close as 100' to property, lease, or subdivision lines, instead of the 330' currently allowed.

The current "take point" rule reads as follows:

a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point.

b. All take points in a horizontal drainhole well shall be a minimum of THREE HUNDRED THIRTY (330) feet from any property line, lease line, or subdivision line. A permit or

an amended permit is required for all take points closer to the property line, lease line, or subdivision line than the lease line spacing distance, including any perforation added in the vertical position or the curve of a horizontal drainhole well.

The proposed rule amendment reads as follows:

- a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point. (No change to current rule)
- b. No horizontal drainhole well for gas shall hereafter be drilled such that the first and last take point are nearer than ONE HUNDRED (100) feet to any property line, lease line, or subdivision line. (New insertion)
- c. For each horizontal drainhole well, the perpendicular distance from any take point on such horizontal drainhole to any point on any property line, lease line, or subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet. (Amendment to current rule)

All operators with wells in the Field were notified of the hearing. No operators appeared in protest of the application. The Examiners recommend that the amended Field Rules be adopted for the Brachfield, S.E. (Cotton Valley) Field, as requested by KJ.

DISCUSSION OF EVIDENCE

The Field was discovered in 1981 in the Paul Goldsmith - Lawler No. 1 Well, at a depth of 9,958 feet. Field Rules were adopted in November 2007 with a field interval of 8,630 feet - 10,510 feet as shown on the log for the Burks No. 1 Well (API No. 42-401-34011), B.A. Vansickle Survey, A-796, Rusk County, Texas. The Field is a non-associated gas field, is not an Unconventional Fracture Treated Field, and the most recent proration schedule carried approximately 240 wells. There are multiple operators in the Field, but KJ is the largest operator, with an estimated 142 wells. Field Rules currently provide for 330 feet lease line spacing, 0 feet between well spacing vertical to horizontal (330' horizontal to horizontal), 40 acre density with optional 20 acre units. Gas allocation is 25% based on per well, and 75% based on deliverability based on the most recent Form G-10 test filed with the Commission, but the allocation formula is currently suspended, and KJ requests continuation of the suspension. Cumulative production from the field through December 2017 is 190 billion cubic feet of gas ("BCFG"), and 1.63 million barrels of condensate/oil ("MMBO").

KJ plans to further develop the Field by drilling more horizontal wells and requests amendment to the existing take point rule by allowing the first and last take points to be no closer than 100' to any property, lease, or subdivision line. KJ opines that amending the rule will increase the total completable drainhole length of each horizontal well by an additional 460', as compared to the current rule, which requires that first and last take points must be no closer than 330' from property, lease, or subdivision lines. This amendment to the "take point" rule will facilitate production of additional resources.

KJ's expert consulting petroleum engineer, Mr. Rick Johnston, P.E., testified that the additional completable drainhole length of 460' would result in incremental recovery of reserves.

In addition, Mr. Johnston calculated an average recovery of 1,178 thousand cubic feet per foot of completable drainhole length from decline curves for four horizontal wells in the Field. Based on the 460' of additional completable drainhole length, the estimated incremental recovery would be approximately 542 million cubic feet of gas for each well drilled under the proposed "take point" rule.

The technical Examiner and the Administrative Law Judge (collectively "Examiners") consider the requested amendment for the Field to be appropriate and consistent with previous rules adopted for similar fields. KJ has demonstrated that the proposed amendment is necessary to continue development of the Field and will allow for the efficient and effective additional recovery of resources and prevention of waste.

FINDINGS OF FACT

1. Notice of hearing was given to all persons entitled to notice, and no persons appeared at the hearing in protest.
2. The Brachfield, S.E. (Cotton Valley) Field was discovered in 1981 in the Paul Goldsmith - Lawler No. 1 Well, at a depth of 9,958'.
3. Field Rules were adopted in November 2007 with a field interval of 8,630' - 10,510' as shown on the log for the Burks No. 1 Well (API No. 42-401-34011), B.A. Vansickle Survey, A-796, Rusk County, Texas.
 - a. There are multiple operators in the Field with multiple producing wells on the proration schedule.
 - b. Cumulative production from the field through December 2017 is 190 billion cubic feet of gas ("BCFG"), and 1.63 million barrels of condensate/oil ("MMBO").
4. Under the "take point" rule, item "a" is to read as follows: A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point.
5. Under the "take point" rule, item "b" is to read as follows: No horizontal drainhole well for oil or gas shall hereafter be drilled such that the first and last take point are nearer than ONE HUNDRED (100) feet to any property line, lease line, or subdivision line.
6. Under the "take point" rule, item "c" is to read as follows: For each horizontal drainhole well, the perpendicular distance from any take point on such horizontal drainhole to any point on any property line, lease line, or subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet.
7. KJ anticipates further development in the Field by drilling additional horizontal

wells.

CONCLUSIONS OF LAW

1. Proper notice was issued as required by all applicable statutes and regulatory codes.
2. All things have occurred or have been accomplished that are necessary to give the Commission jurisdiction in this matter.
3. The proposed field rules will prevent waste, protect correlative rights, and promote the orderly development of the Field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission adopt permanent field rules for the Brachfield S.E. (Cotton Valley) Field, as proposed by KJ Energy, LLC.

Respectfully submitted,



Richard Eyster, P.G.
Technical Examiner



Clayton J. Hoover
Administrative Law Judge