

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO 87501

SPECIAL RULES AND PROCEDURES FOR
TIGHT FORMATION DESIGNATIONS UNDER SECTION
107 OF THE NATURAL GAS POLICY ACT OF 1978

Amended 2-1-81

A. General

Applications for tight formation designations under Section 107 of the NGPA and applicable FERC rules and regulations shall be accepted by the Division at its Santa Fe, New Mexico office after June 30, 1980. These special rules apply only to tight formation designations and do not apply to individual well filing requirements for price category determination.

B. Definitions

1. "Crude Oil" means a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separation facilities.
2. "Division" means the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico.
3. "FERC" means the Federal Energy Regulatory Commission.
4. "USGS" means the office of the United States Geological Survey in Albuquerque, New Mexico.
5. "Formation" means any geological formation or portion thereof described by geological as well as geographical parameters which is the subject of a tight formation designation application.
6. "Infill drilling" means any drilling in a substantially developed formation (or a portion thereof) subject to requirements respecting well-spacing or proration units which were amended by the Division or the Oil Conservation Commission after the formation (or portion thereof) was substantially

Order No. R-6388-A
Exhibit A

developed and which were adopted for the purpose of more effective and efficient drainage of the reservoirs in such formation. Such amendment may provide for the establishment of smaller drilling or production units or may permit the drilling of additional wells on the original units.

C. Procedure

1. To the extent that the Division's general rules of procedure for public hearings are not altered or amended by these special rules, such general rules of procedure shall be applicable and are incorporated herein by reference.
2. All applications for tight formation designation in the State of New Mexico, in which Federal, Indian, state, or fee lands, or any combination thereof, are involved, shall be filed with the Division.
3. All applications for tight formation designation shall be set for public hearing.
4. A complete set of exhibits which an applicant proposes to offer or introduce at a hearing, together with a statement of the meaning and purpose of each exhibit, shall be submitted to the Division (and to the USGS when federal or Indian lands are involved) when the application is filed or at least 15 days prior to a hearing. These exhibits shall cover all aspects of the required evidentiary data described in Section D below. Three additional complete sets of such exhibits and statements, enclosed in an unsealed postage-paid packet, shall also accompany the application or be presented at the hearing; this packet and its contents will be forwarded to the FERC by the Division after the hearing, together with the Division order recommending disposition of the application.
5. Where practicable, applications may be consolidated for hearing at the discretion of the Director of the Division.
6. Within 15 days after its issuance, any order promulgated by the Division pursuant to these special rules shall be submitted by the Division to the FERC in accordance with Section 271.705 of the FERC rules

and regulations applicable to NGPA for approval or disapproval of a tight formation designation.

D. Evidence

1. Evidence offered by an applicant at a hearing shall include:
 - a. a map and geographical and geological descriptions of the area and formation for which the designation is sought; and
 - b. geological and engineering data to support the application; and
 - c. a map or list which clearly locates or describes wells which are currently producing oil or gas, or both, from the formation within the geographical area of the formation, and
 - d. a report of the extent to which an applicant believes existing State and Federal regulations will assure that development of the formation will not adversely affect or impair any fresh water aquifers (during both hydraulic fracturing and waste disposal operations) that are being used or are expected to be used in the foreseeable future for domestic or agricultural water supplies; and
 - e. if the formation has been authorized to be developed by infill drilling prior to the date of recommendation, information and data demonstrating that the formation cannot be developed without the incentive price established in 18 CFR §271.703(a).
 - f. any other information which the Division may require.
2. Evidence shall be based on each of the following geological and engineering guidelines:
 - a. The estimated average in situ gas permeability, throughout the pay section, is expected to be 0.1 millidarcy or less.
 - (1) Permeability may be established and demonstrated by any customary or acceptable methods, techniques, or testing acceptable in the oil and gas industry.

- b. The stabilized production rate, either at atmospheric pressure or calculated against atmospheric pressure, of wells completed for production in the formation, without stimulation, is not expected to exceed the production rate determined in accordance with the following table:

| If the average depth to the top of the formation (in feet): | | The maximum allowable production rate (in Mcf/ day) may not exceed: |
|---|---------------------------------|---|
| <u>exceeds:</u> | <u>but does not exceed:</u> | |
| 0 | 1000 | 44 |
| 1000 | 1500 | 51 |
| 1500 | 2000 | 59 |
| 2000 | 2500 | 68 |
| 2500 | 3000 | 79 |
| 3000 | 3500 | 91 |
| 3500 | 4000 | 105 |
| 4000 | 4500 | 122 |
| 4500 | 5000 | 141 |
| 5000 | 5500 | 163 |
| 5500 | 6000 | 188 |
| 6000 | 6500 | 217 |
| 6500 | 7000 | 251 |
| 7000 | 7500 | 290 |
| 7500 | 8000 | 336 |
| 8000 | 8500 | 388 |
| 8500 | 9000 | 449 |
| 9000 | 9500 | 519 |
| 9500 | 10000 | 600 |
| 10000 | 10500 | 693 |
| 10500 | 11000 | 802 |
| 11000 | 11500 | 927 |
| 11500 | 12000 | 1071 |
| 12000 | 12500 | 1238 |
| 12500 | 13000 | 1432 |
| 13000 | 13500 | 1655 |
| 13500 | 14000 | 1913 |
| 14000 | 14500 | 2212 |
| 14500 | 15000 | 2557 |

- c. No well drilled into the recommended tight formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

- d. If an application meets the guidelines contained in subparagraphs 2 b and 2 c above, but does not meet the guidelines contained in subparagraph 2 a, an applicant may, in the alternative, show that the formation exhibits low permeability characteristics and that the incentive price is necessary to provide reasonable incentive for production of the natural gas from the formation due to extraordinary risks or costs associated with such production.
 - (1) An application based on the guidelines outlined in subparagraph 2 d above shall include data to support the contention that the guidelines contained in paragraph 2 b and 2 c above are met, and in addition thereto, shall contain:
 - (a) the types and extent of enhanced production techniques which are expected to be necessary, and
 - (b) the estimated expenditures necessary for employing those techniques, and
 - (c) an estimate of the degree of increase in production from use of such techniques together with engineering and geological data to support that estimate.
- e. If the formation or any portion thereof was authorized to be developed by infill drilling prior to the date of recommendation and the Division has information which in its judgment indicates that such formation or portion subject to infill drilling can be developed absent the incentive price established in 18 CFR §271.703(a), then the Division shall not include such formation or portion thereof in its recommendation.

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