

**Congress of the United States
House of Representatives
Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
April 27, 2016
1324 Longworth House Office Building, Washington, DC**

**Testimony by Lynn D. Helms, Director
North Dakota Industrial Commission
Department of Mineral Resources**

Chairman Lamborn, Ranking member Lowenthal, and members of the Subcommittee

Thank you for this opportunity to provide comments on the Bureau of Land Management proposed regulations that would be codified at 43 CFR subparts 3178 and 3179 to replace the existing provisions related to venting, flaring, and royalty-free use of gas contained in the 1979 Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases, Royalty or Compensation for Oil and Gas Lost (NTL-4A).

The State of North Dakota is ranked 2nd in the United States among all states in the production of oil and gas. North Dakota produces approximately 400 million barrels of oil per year and 465 billion cubic feet of natural gas per year.

Implementation of this rule will result in an anticipated loss in state revenue from royalties and taxes estimated to be \$24 million per year. The impacts from this loss are expected to extend throughout the entire 30 year development life of the Bakken. North Dakota's gross production tax and oil extraction tax revenues fund various programs through a series of 12 funds that each must reach a maximum before funds can be appropriated to the next fund in the series. Even a brief revenue delay can result in a high priority fund not reaching the maximum appropriation with lower priority funds then receiving no revenue for the biennium. This forces a reprioritization and fund transfers in future biennium that can take decades to correct. This occurred in 1987-2004 when low oil prices generated only enough revenue to partially fund appropriations to counties and to water resource projects, the top 2 out of 12 priorities for 17 years. **Under current revenue distribution structure the effect would be to eliminate revenue to other funds such as the strategic infrastructure investment fund, oil impact grant fund and property tax relief fund.**

The NDIC, Department of Mineral Resources, Oil and Gas Division has jurisdiction to administer North Dakota's comprehensive oil and gas regulations found at North Dakota Administrative Code (NDAC) Chapter 43-02-03. These regulations include regulation of the drilling, producing, and plugging of wells; the restoration of drilling and production sites; the perforating and chemical treatment of wells, including hydraulic fracturing; the spacing of wells; operations to increase ultimate recovery such as cycling of gas, the maintenance of pressure, and the introduction of gas, water, or other substances into producing formations; disposal of saltwater and oil field wastes through the ND UIC Program; and all other operations for the production of oil or gas.

Mineral ownership of North Dakota lands upon which oil and gas development has occurred consists of approximately 85% private lands, 9% federal lands, and 6% state lands. Many of the private lands in North Dakota upon which oil and gas development has occurred are split estate lands, with more than 30% of the potential development on private surface involving federal minerals and therefore subject to the proposed rule.

North Dakota has a unique history of land ownership that has resulted in a significant portion of the state consisting of split estate lands that could be adversely affected by the proposed rule. Unlike many western states that contain large blocks of unified federal surface and federal mineral ownership, the surface and mineral estates in North Dakota were at one time more than 97% private and state owned as a result of the railroad and homestead acts of the late 1800s. However, during the depression and drought years of the 1930s, numerous small tracts in North Dakota went through foreclosure. The federal government through the Federal Land Bank and the Bankhead Jones Act foreclosed on many farms taking ownership of both the mineral and surface estates. Many of the surface estates were later sold to private parties with some or all of the mineral estates retained by the federal government. This resulted in a very large number of small federally-owned mineral estate tracts scattered throughout western North Dakota. Those federal mineral estates impact more than 30% of the oil and gas spacing units that are typically recognized as a communitized area (CA) by the BLM. There are a few large blocks of federal mineral ownership, for which the federal government has trust responsibility and also manages the surface estate through the U.S. Forest Service or Bureau of Indian Affairs. These are on the Dakota Prairie Grasslands in southern McKenzie and northern Billings Counties, as well as on the Fort Berthold Indian Reservation. **See map, Exhibit 1. Even within those areas, federal mineral ownership is interspersed with a “checkerboard” of private and state mineral or surface ownership. Therefore, virtually all federal management of North Dakota’s oil and gas producing region consists of some form of split estate.**

North Dakota’s unique land ownership situation provides an excellent example of how the proposed rule could have far-reaching adverse impacts on state’s ability to administer their oil and gas regulatory programs. This is reflected in the preamble to the proposed rule which states:

*“Of the vented and flared gas reported to ONRR, 15.2 percent came from wells extracting only Federal minerals; 9.0 percent from Indian ownership, and **75.8 percent from mixed ownership** (some combination of Federal, Indian, fee (private) and State land). While all of the natural gas flared or vented from the Federal and Indian lands categories originates from the Federal and Indian mineral estates, only a portion of the natural gas flared or vented from the mixed ownership category originates from the Federal and Indian mineral estates.”*

Federalism: The preamble to the proposed rule states “The proposed rule would not have a substantial direct effect on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the levels of government. It would not apply to States or local governments or State or local government entities. Therefore, in accordance with Executive Order 13132, the BLM has determined that this proposed rule does not have sufficient Federalism implications to warrant preparation of a Federalism Assessment.”

However, this contradicts Section **3179.11** *Coordination with State regulatory authority which states, To the extent that any BLM action to enforce a prohibition, limitation, or order under this subpart adversely affects production of oil or gas that comes from non-Federal and non-Indian mineral interests, the BLM will coordinate, on a case-by-case basis, with the State regulatory authority having jurisdiction over the oil and gas production from the non-Federal and non-Indian interests.*”

In the proposed rule the BLM anticipates adverse effects on production of oil and gas from non-Federal and non-Indian mineral interests and recognizes potential implications on the state’s regulatory authority. Therefore, a federalism assessment must be done.

The adverse impacts of the proposed rule on North Dakota’s ability to administer its oil and gas regulatory program are explained below:

Prescriptive limits on flared volume are not appropriate for unconventional oil production:

As noted in the preamble to the proposed rule, the primary means by which the BLM proposes to reduce flaring is based on Wyoming and Utah approaches to flaring limits and proposes to limit the average rate at which gas may be flared to 1,800 Mcf/month, per producing well on a lease. BLM states *that operators have multiple avenues to reduce high levels of flaring. One is to speed up connection to pipelines, or another is to boost compression to access existing pipelines with capacity issues. BLM believes there are additional options available to avoid this waste, the economics of alternative on-site capture technologies improve as the quantities of gas increase, and that imposing a limit on the overall rate of flaring on a lease would provide operators an incentive to implement these technologies, where net costs are not prohibitive, to allow the wells to produce oil at the maximum rate. Alternatively, an operator could slow production sufficiently to stay below a flaring limit. Slowing the rate of flaring is likely to conserve gas overall because less gas is lost before capture infrastructure comes on line (or is upgraded, in the case of a field with insufficient capacity).*

Section 3179.10 of the proposed rule states specifically that, if production from a new well would force an existing producing well already connected to the pipeline to go offline, then notwithstanding the requirements in 3179.6 and 3179.7, the BLM could limit the volume of production from the new well for a period of time while gas pressures from the new well stabilize.

The proposed flare volume limits are based upon Wyoming and Utah limits that were developed in the 1980’s for associated gas produced from conventional oil reservoirs. They are not appropriate for control of flaring from unconventional oil resources. The attached typical Bakken well completion scenarios (Exhibit 2 and Exhibit 3) illustrate how the 1,800 Mcf/month per producing well, or 60 Mcf/day, equals approximately 6-9% of the produced gas volume could be flared at initial production, but due to the very rapid decline rate of such unconventional oil wells, by year four 67% to 100% of the produced gas from a typical Bakken well could be flared.

NDIC has implemented flaring reduction regulations which utilize declining allowable flare percentages of 20% (4/1/16 through 12/31/17), 15% (1/1/17 through 12/31/17), 12% (1/1/18 through 1/1/20) and 7-9% thereafter. Four years from now the typical well will be allowed to flare 67-100% of the gas produced under the proposed BLM rule, but only 7-9% under NDIC regulations.

Restricting wells to oil production rates equivalent to 1,800 Mcf/month will result in uneconomic initial production rates of 60 barrels of oil per day or less.

Restricting flaring on federal wells to 1,800 Mcf/month and prioritizing existing wells over new wells will force operators to give gas produced from federal wells priority over gas produced from state and private wells, potentially increasing flared volumes from the state and private wells and directly conflicting with state rules designed to increase gas capture from all wells.

The NDIC strongly recommends that the average rate limits be changed to limit the average percentage of gas captured in order to better manage gas capture from unconventional oil resources and minimize conflicts with North Dakota's flaring reduction regulations.

§ 3179.103 Initial production testing: This proposed section would clarify when gas may be flared, royalty-free or otherwise, during a well's initial production test. It provides that gas may be flared royalty-free during initial production testing for up to 30 days or 20 MMcf of flared gas, whichever occurs first. Volumes flared during well completion under proposed § 3179.102(a)(2) would count towards the 20 MMcf limit.

Many North Dakota Bakken wells are capable of producing more than 20MMcf in the 14 days of unrestricted production allowed under NDIC Order No. 24665.

The 20 MMcf limit in the proposed rule creates a direct conflict with North Dakota's ability to administer its oil and gas regulatory program. In some cases the proposed rule will allow flaring to continue twice as long as NDIC regulations; and in other cases, the proposed rules will require flaring to cease before the full flow back period allowed under NDIC regulations in the well reaches 20 MMcf of flared gas.

The NDIC strongly recommends that the limit be changed from a total volume to a total time period consistent with NDIC Order No. 24665.

§ 3162.3-1 Drilling applications and plans: When submitting an Application for Permit to Drill an oil well, the operator must also submit a plan to minimize waste of natural gas from that well.

The proposed rule duplicates North Dakota's requirement for gas capture plans in part, but the required information under the proposed rule is not entirely consistent with the North Dakota regulations. This requirement could create a direct conflict with North Dakota's ability to administer its oil and gas regulatory program. The proposed rule states that "failure to submit a complete and adequate waste minimization plan is grounds for denying or disapproving an Application for Permit to Drill." **Since North Dakota drilling permits and gas capture plans are only valid for one year, BLM denying or disapproving an Application for Permit to Drill on the basis of information the NDIC believes is unnecessary is likely to result in numerous North Dakota drilling permits expiring.**

§ 3178.2 Scope.

(a) This subpart applies to:

(1) All onshore Federal and Indian (other than Osage Tribe) oil and gas leases, units, and

CAs, except as otherwise provided in this subpart;

(2) Indian Mineral Development Act (IMDA) oil and gas agreements, unless specifically excluded in the agreement or unless the relevant provisions of this subpart are inconsistent with the agreement;

(3) Leases and other business agreements and contracts for the development of tribal energy resources under a Tribal Energy Resource Agreement entered into with the Secretary, unless specifically excluded in the lease, other business agreement, or Tribal Energy Resource Agreement;

(4) Committed State or private tracts in a federally approved unit or communitization agreement defined by or established under 43 CFR subpart 3105 or 43 CFR part 3180;

(5) All onshore wells, tanks, compressors, and other facilities located on a Federal or Indian lease or a federally approved unit or CA; and

(6) All gas lines located on a Federal or Indian lease or federally approved unit or CA that are owned or operated by the operator of the lease, unit, or communitization agreement.

(b) For purposes of this subpart, the term “lease” also includes IMDA agreements.

Because wells in North Dakota’s unconventional Bakken play require a 2 mile horizontal lateral to be economic, a large number of wells in North Dakota are commingled down hole, and many have central tank batteries in North Dakota which commingle private, state, and federal mineral interests. Under the proposed rule, many wells in established spacing units and CA will now require a BLM drilling permit and a waste management plan.

Private mineral interests, as well as the State of North Dakota, will be subjected to these new BLM permitting requirements and directly impacted by BLM permitting delays.

The NDIC strongly recommends that this section of the proposed rule be rewritten to exclude: State or private tracts in a federally approved unit or CA; all onshore wells, tanks, compressors, and other facilities located on a Federal or Indian lease or a federally approved unit or CA; and all gas lines located on a Federal or Indian lease or federally approved unit or CA that are owned or operated by the operator of the lease.

§ 3179.6 When flaring or venting is prohibited: *The operator must flare rather than vent any gas that is not captured with some exceptions.*

The proposed rule duplicates North Dakota’s prohibition of venting natural gas in part. The proposed rule allows venting in four explicit circumstances; NDIC rule and regulations do not allow explicit exceptions but allow the NDIC to grant an exception after notice and public hearing. **Any venting exception granted by the BLM will likely create a direct conflict with North Dakota’s ability to administer its oil and gas regulatory program.**

The NDIC recommends that this section of the proposed rule be withdrawn and BLM work within NDIC regulations to prevent venting as an active participant in any hearings scheduled for venting exceptions on federal wells.

LEAK DETECTION AND REPAIR (LDAR): The highly detailed leak detection and repair requirements in the proposed rule may be consistent with EPA 0000 initially, but will likely result in conflicting requirements when either agency makes changes or issues guidance. On March 11, 2016, EPA announced plans for rule making that will duplicate or conflict with the requirements of the proposed rule. In addition, the **BLM has no Clean Air Act authority and the proposed rule contains numerous references to EPA regulations at 40CFR part 60 subpart 0000. The very restrictive requirement to make repairs within 15 days of detecting a leak and then retesting within 15 days does not recognize the seasonal variability of work conditions in North Dakota and could result in exposing workers to very hazardous weather conditions.**

The NDIC strongly recommends that the leak detection and repair requirements be eliminated from the proposed rule.

§ 3179.8 Measuring and reporting volumes of gas vented and flared from wells: If the operator estimates that the volume of gas vented or flared from a flare stack or manifold equals or exceeds 50 Mcf per day; or if the BLM determines and informs the operator that the additional accuracy offered by measurement is necessary for effective implementation of this Subpart the operator must measure all volumes of gas vented or flared.

NDIC oil and gas measurement personnel have not been able to identify any existing meter systems that can accurately determine flare gas volumes over the extreme range of pressures and rates typically encountered on producing wells. Therefore, NDIC Order 24665 requires operators to accurately measure total gas production, or calculate total gas production from an accurate gas oil ratio, and calculate the gas capture percentage as follows: “The gas capture percentage shall be calculated by summing monthly gas sold plus monthly gas used on lease plus monthly as processed in a Commission approved beneficial manner, divided by the total monthly volume of associated gas produced by the operator.” NDIC Order No. 24665 and support documents can be viewed under Gas Capture at [https://www.dmr.nd.gov/oilgas/2014Permitting\(2\).asp](https://www.dmr.nd.gov/oilgas/2014Permitting(2).asp) .

The proposed rule conflicts with guidance issued by the NDIC for compliance with NDIC Gas Capture Order No. 24665. Therefore, this requirement is in direct conflict with North Dakota’s ability to administer its oil and gas regulatory program.

The NDIC strongly recommends that the measurement requirement be eliminated from the proposed rule.

§ 3179.401 State or tribal requests for variances from the requirements of this subpart. This proposed section would create a variance procedure, under which the BLM could grant a State or tribe’s request to have a State or tribal regulation apply in place of a provision or provisions of this subpart. The variance request would have to: (1) Identify the specific provisions of the BLM requirements for which the variance is requested; (2) Identify the specific State or tribal regulation that would substitute for the BLM requirements; (3) Explain why the variance is needed; and (4) Demonstrate how the State or tribal regulation would satisfy the purposes of the relevant BLM provisions. The BLM State Director would review a State or tribal variance request. To approve a request, the BLM State Director would have to determine that the State or tribal regulation meets or exceeds the requirements of the provision(s) for which the State or tribe sought the variance, and that the State or tribal regulation is consistent with the terms of

the affected Federal or Indian leases and applicable statutes. Paragraph (b) would specify that the decision on a variance request is not subject to administrative appeal under 43 CFR part 4. Paragraph (c) would clarify that a variance granted under this proposed section would not constitute a variance from provisions of regulations, laws, or orders other than proposed subpart 3179. Paragraph (d) would reserve the BLM's authority to rescind a variance or modify any condition of approval in a variance.

Discussion of the variance process with BLM personnel has revealed that even if a variance is approved, BLM will inspect and enforce the most strict requirements of the BLM, state, or tribal rule. This process could result in direct conflicts with North Dakota's ability to administer its oil and gas regulatory program.

The potential adverse impacts of the proposed rule on North Dakota's ability to administer its oil and gas regulatory program are many and the State of North Dakota intends to define its sovereign jurisdiction over oil and gas regulation in any manner necessary.

Sincerely,

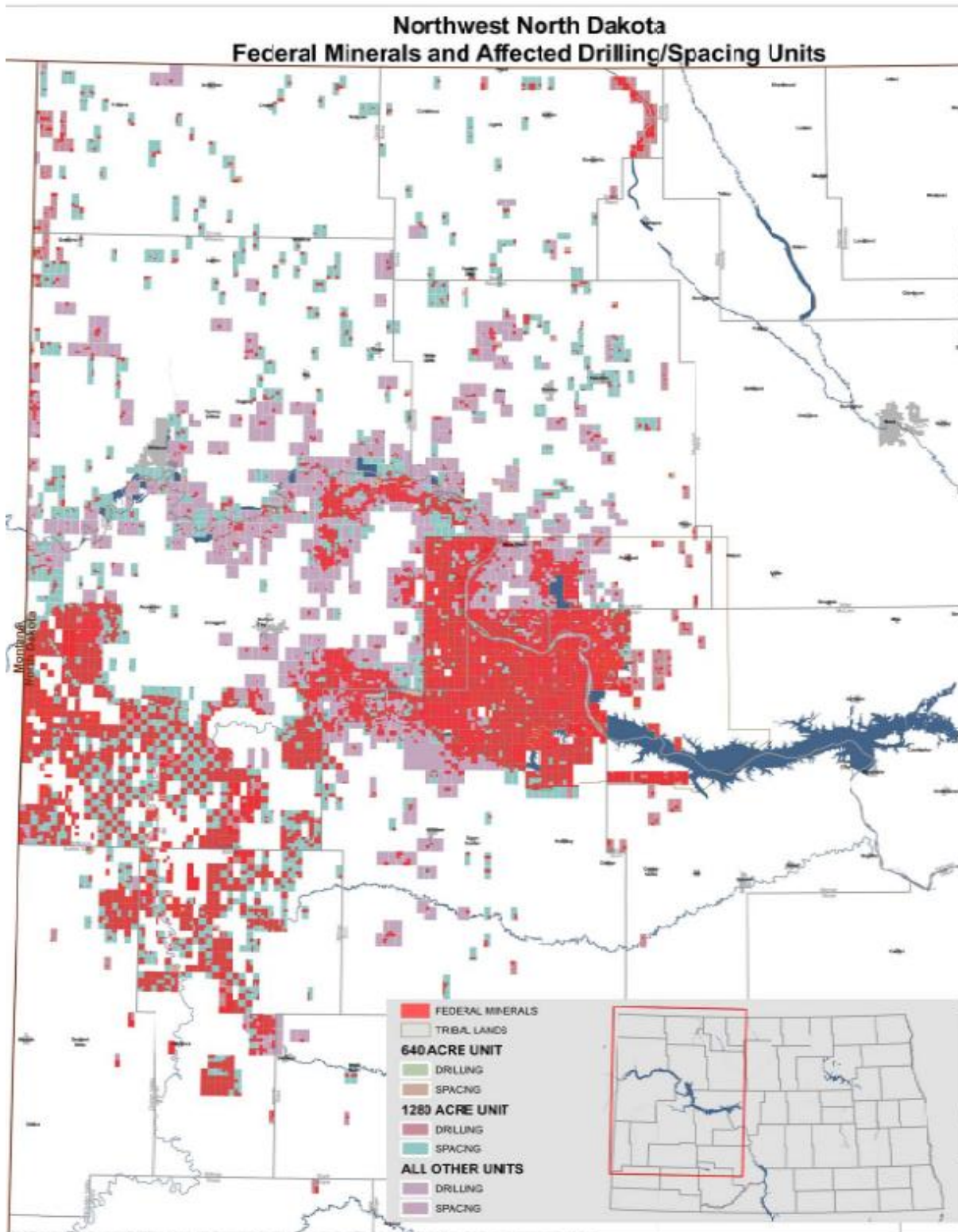
Lynn D. Helms, North Dakota Industrial Commission, Department of Mineral Resources

On behalf of the North Dakota Industrial Commission

Jack Dalrymple, Chairman
Governor

Wayne Stenehjem
Attorney General

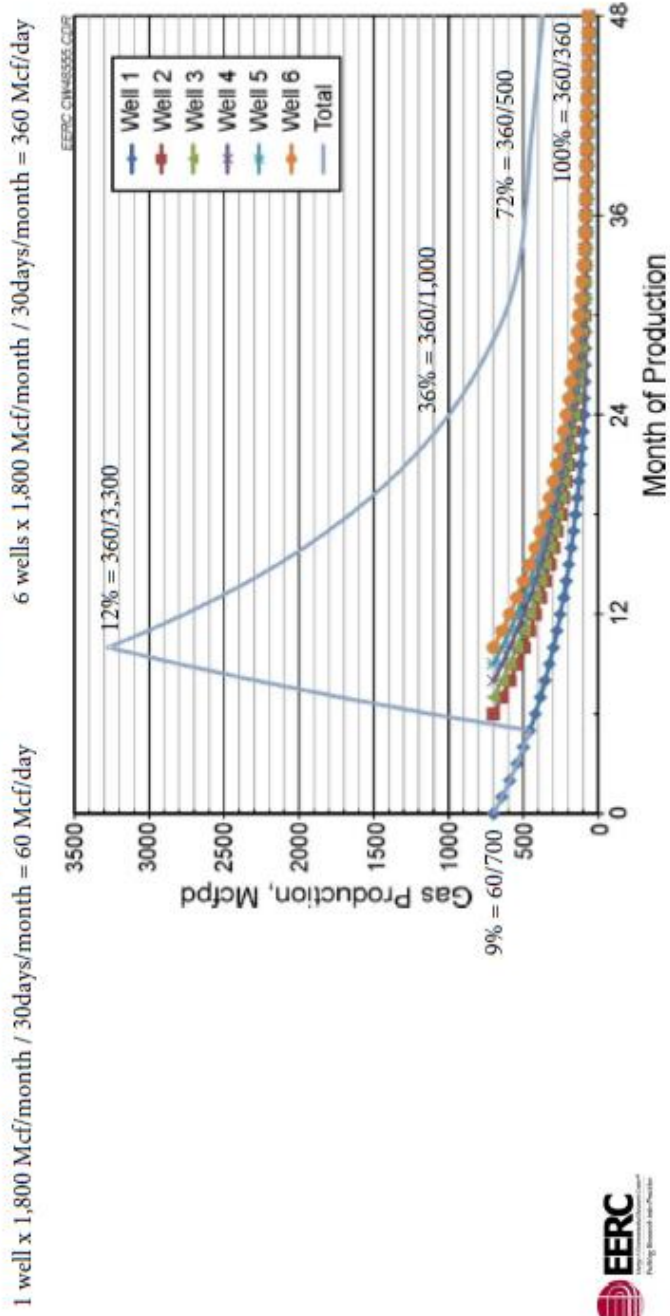
Doug Goehring
Agriculture Commissioner



Scenario 1 – Hypothetical Six-Well, 1-month Interval

- Initial well producing for 6 months, followed by five additional wells coming online at 1-month intervals.
- Hypothetical decline curve used.

Exhibit 2



Scenario 2 – Hypothetical Six-Well, 6-month Interval

- Six wells coming online at 6-month intervals.
- Hypothetical decline curve used.

1 well x 1,800 Mcf/month / 30days/month = 60 Mcf/day
 2 wells = 120 Mcf/day
 3 wells = 180 Mcf/day
 4 wells = 240 Mcf/day
 5 wells = 300 Mcf/day
 6 wells = 360 Mcf/day

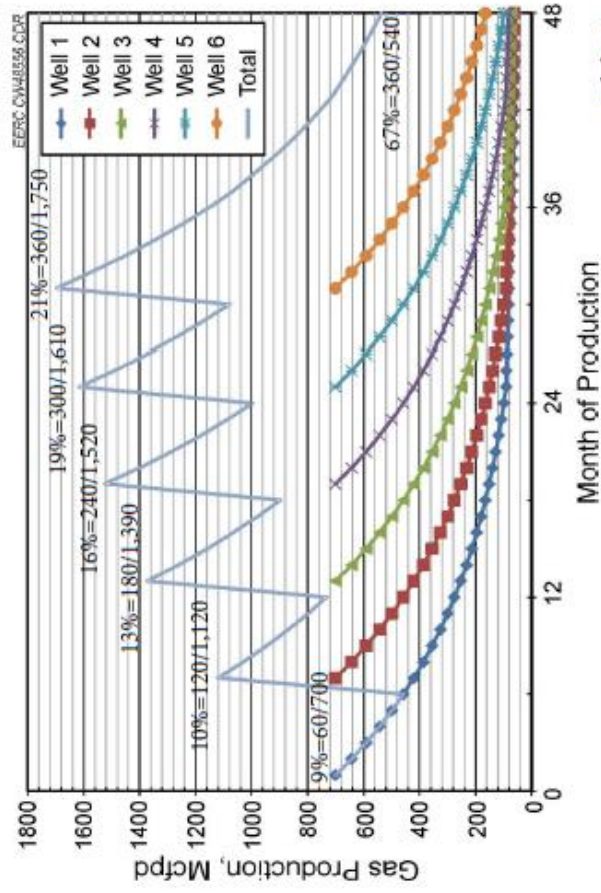


Exhibit 3