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Comments on the Bureau of Land Management Proposed Rule, "Waste Prevention, Production Subject to Royalties, and Resource Conservation"

Taxpayers for Common Sense (TCS) appreciates the opportunity to provide comments to the Bureau of Land Management (BLM) on the proposed rule, "Waste Prevention, Production Subject to Royalties, and Resource Conservation." TCS is an independent, nonpartisan budget watchdog that has been working on behalf of the nation's taxpayers since 1995. Over our nearly 30-year history, TCS has advocated for responsible natural resource management of federal lands and waters to ensure taxpayers receive a fair return for the resources we own and do not shoulder the costs and liabilities of industry operations.

Introduction

In reports and federal comments, TCS has raised concerns with the serious problem of methane waste on federal lands and its implications for taxpayers. TCS has published research and educational materials on the issue of venting and flaring from BLM-managed leases in support of stricter standards for operators that would limit and prevent lost gas and more universally and consistently impose royalties on vented and flared gas. This work includes research and reporting that informed and supported key components of the Methane and Waste Prevention Rule published in November 2016 (81 FR 83008). It also included opposition to its rescission in 2018 (83 FR 7924). Most recently, TCS published a new report Gas Giveaways II: Methane Waste on Federal Lands is Business as Usual and commissioned a report with Environmental Defense Fund quantifying natural gas wasted on U.S. public and Tribal lands (both reports attached and included for the record).

With this rulemaking, the BLM has the opportunity to curtail the loss and waste of a valuable natural resource owned by federal taxpayers. However, the proposed rule must be strengthened to achieve this goal. The rule should seek to maximize the amount of the resource that is recovered and brought to market.

Overall, the BLM should prohibit the loss of natural gas in routine operations and lost gas should be limited to emergency situations to the maximum extent possible. We recognize that there may be circumstances where gas is lost because it is currently technically infeasible to capture it. However, we believe these situations will be limited. Gas capture technology continues to evolve and mature, broadening its applicability and reducing costs. Further, Congress created the Methane Emissions and Waste Reduction Incentive Program (42 USC 7436) and appropriated $800 million dollars through the end of FY2028 to provide financial and technical assistance to owners and operators of petroleum and natural gas systems facilities to reduce methane emissions, and another $700 million specifically for owners and operators of conventional wells to reduce methane at marginal conventional wells. The Department of Energy has also been funding methane mitigation research. Taxpayers have been partially shouldering the cost of operational and equipment improvement through various forms to incentivize increased capture.

The BLM should also consider the feasibility of enforcement actions where it determines there has been an "unreasonable and undue waste of gas." It is TCS's position that operators should pay a royalty on gas extracted from federal lands. But imposing a royalty on gas that is deemed avoidably lost alone is not a sufficient deterrent to wasteful practices. Where the BLM determines there is undue waste of gas, the BLM should take additional steps, including prohibiting routine venting and flaring, to ensure operators curtail their wasted gas.

I. Background

The BLM is responsible for managing more than 245 million acres of land and 700 million acres of subsurface mineral estate. The BLM holds considerable authority to issue news rules to responsibly manage oil and gas activities on federal and Tribal lands. The statutes which provide that authority, delegated to the BLM by the Secretary of the Interior, not only allow the BLM to issue regulations to prevent the waste of public natural resources, they require it. The Mineral Leasing Act of 1920 (MLA) stipulates that as a condition of leasing federal land for oil and gas development, a developer must "…use all reasonable precautions to prevent waste of oil or gas developed in the land."[1] And if waste occurs, the Federal Oil and Gas Royalty Management Act (FOGRMA) provides that the operator is liable for, "…royalty payments on oil or gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator of the lease, or due to the failure to comply with any rule or regulation, order or citation issued under this Act or any mineral leasing law."[2] And most recently, the Inflation Reduction Act (IRA, P.L. 117-69) expressly gave the BLM the authority to collect royalties on all gas extracted from Federal lands, subject to certain exceptions for gas lost during emergency situations, gas used for the benefit of lease operations, and gas that is "unavoidably lost."

This proposed rule would replace the BLM's current rules governing venting and flaring, issued by Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases: Royalty or Compensation for Oil and Gas Lost (NTL-4A). NTL-4A was issued more than 40 years ago and has proven to be outdated and insufficient to address the large volume of flaring associated with the rapid development of hydraulic fracturing and horizontal drilling that has occurred in the recent decade. Moreover, technological and operational advancements that can reduce losses of gas from oil storage tanks, pneumatic controllers, and equipment leaks have developed considerably since NTL-4A was first issued.

NTL-4A has long failed to prevent the undue waste of natural gas on federal and Tribal lands and has cost taxpayers billions of dollars in forgone revenues. Issues with the NTL-4A regulations are well documented. Evidence of unauthorized venting and flaring appeared in the public record in 1990, more than three decades ago.[3] The problem has only gotten worse. In a 2004 report, the Government Accountability Office (GAO) noted that the BLM's oversight and accounting of venting and flaring was still inadequate, writing: "…although flaring and venting are generally not authorized, no oversight mechanism currently exists for routinely monitoring the amount of flaring and venting that actually takes place."[4] As a result, the BLM and other agencies responsible for overseeing oil and gas

[1] 30 U.S.C. 225
[2] 30 U.S.C. 1756
[3] See Table III.3 in GAO, RCED-90-99: "Mineral Revenues: Shortcomings in Onshore Federal Oil and Gas Production Verification." June 26, 1990
[4] GAO, GAO-04-809: "Natural Gas Flaring and Venting: Opportunities to Improve Data and Reduce Emissions." July 14, 2004, p. 22

development on federal lands and waters cannot always be assured that companies are appropriately restricting their flaring and venting.

Between 2004-2010, more studies concluded that the systems for verifying the volume and energy content of federal natural gas production reported by operators were insufficient.[5] In 2010, the GAO estimated that 126 billion cubic feet (bcf) of natural gas was vented or flared from onshore federal leases in 2008.[6] The agency also concluded that at least some of the losses were preventable, asserting that "… about 40 percent of natural gas estimated to be vented and flared on federal onshore leases could be economically captured with currently available control technologies." The GAO also stated that the Department of the Interior's (DOI) oversight of the oil and gas program had significant limitations—specifically, that its regulations did not address significant sources of lost gas.

In 2016, the GAO reported considerable ambiguity regarding what properly constitutes royalty-free venting and flaring and consequently, "substantial variation in how the BLM has interpreted and applied the standard" for approval of flaring. The GAO also determined that the NTL-4A's ambiguity has been compounded by the BLM's inconsistent adherence to the protocol established to enforce it. Their audit estimated that 90 percent of the 1,281 venting and flaring requests received by BLM field offices in fiscal year 2014 did not contain the appropriate documentation, yet the BLM approved 70 percent of those requests anyway. Due to insufficient guidance regarding recordkeeping for lost gas, the GAO also concluded that the DOI "may not have a clear accounting of natural gas emissions, which could limit [its] ability to ensure that lessees pay royalties in the proper amounts and minimize waste of natural gas."[7]

The 2022 BLM proposed rule:

- establishes the requirement that "operators must use all reasonable precautions to prevent the waste of oil or gas developed from the lease." This applies to both newly proposed operations and existing operations.
    - The BLM may specify reasonable measures to prevent waste as conditions of approval of an Application for Permit to Drill (APD) and, after an APD is approved, the BLM may order an operator to implement, within a reasonable time, additional reasonable measures to prevent waste at ongoing exploration and production operations.
    - Reasonable measures to prevent waste may reflect factors including, but not limited to, relevant advances in technology and changes in industry practice.
- recognizes, and clarifies, that oil or gas can be "unavoidably lost"—and thus not royalty bearing—in connection with certain oil and gas operations, including during well completions, production testing, and emergencies.
    - It would place a 48-hour limit on the royalty-free emergency flaring and specify circumstances that would not constitute an emergency.
- establishes a monthly volume limit on royalty-free flaring due to pipeline capacity constraints, midstream processing failures, or other similar events that may prevent produced gas from being transported to market.

[5] GAO-2004, DOI-OIG, RPC-2007

[6] GAO, GAO-11-34: "Opportunities Exist to Capture Vented and Flared Natural Gas, Which Would Increase Royalty Payments and Reduce Greenhouse Gases." Oct. 29, 2010

[7] GAO, GAO-15-290, Report to Congressional Committees, "HIGH-RISK SERIES, An Update," February 2015.

    - In particular, where oil-well gas must be flared due to pipeline capacity constraints, midstream processing failures, or other similar events that prevent produced gas from being transported through the connected pipeline, the operator may report only up to 1,050 Mcf per month, per lease, unit, or agreement as "unavoidably lost" gas.
    - The BLM explained that, after examining flaring data reported for years 2015-2019, it determined that a limit of 1,050 Mcf per month would impact the 20 percent of flaring operations responsible for 95 percent of the reported flaring volumes.
- includes a number of specific affirmative obligations that operators must take to avoid wasting oil or gas. In particular:
    - It would prohibit the use of natural-gas-activated pneumatic controllers or pneumatic diaphragm pumps with a bleed rate that exceeds 6 standard cubic feet (scf)/hour.
    - Where technically and economically feasible, it would require oil storage tanks on Federal or Indian leases to be equipped with a vapor recovery system or other mechanism that avoids the loss of natural gas from the tank.
    - The Proposed Rule would require operators on Federal or Indian leases to maintain a leak detection and repair (LDAR) program designed to prevent the unreasonable and undue waste of Federal or Indian gas. An operator's LDAR program must provide for regular inspections of all oil and gas production, processing, treatment, storage, and measurement equipment on the lease site.
- requires operators to submit a waste minimization plan with all APDs for oil wells. This plan would provide the BLM with information on anticipated associated gas production, the operator's capacity to capture that gas production for sale or use, and other steps the operator commits to take to reduce or eliminate gas losses.

    If the plan does not demonstrate reasonable steps to avoid wasting gas, the BLM may delay action on the APD until the operator adequately addresses the plan's deficiencies to the BLM's satisfaction.

II. BLM Should Consider a Stricter Definition of "Unreasonable and Undue Waste"

The proposed BLM rule, § 3179.3, defines "unreasonable and undue waste of gas" as "a frequent or ongoing loss of gas that could be avoided without causing an ultimately greater loss of equivalent total energy than would occur if the loss of gas were to continue unabated." The proposed rule further explains that the long-term flaring of associated gas from an oil well would constitute "unreasonable and undue waste of gas" if the operator can avoid or reduce the flaring by curtailing production in the near term and still produce an equal or greater amount of total energy resources (considering both oil and gas production) from the well in the long term.

TCS finds this definition of "unreasonable and undue waste of gas" problematic as it is not clear that this definition would resolve issues encountered under the NTL-4A. The current NTL-4A authorizes the BLM to approve flaring where conservation of the gas was not "economically justified" because it would "lead to the premature abandonment of recoverable oil reserves and ultimately to a greater loss of equivalent energy than would be recovered if the venting or flaring were permitted to continue." But there is no federal statute that grants operators the discretion to habitually discard one publicly owned resource simply because marketing another is more profitable. Moreover, any operator can claim a well

would need to close prematurely, leading to a greater loss of equivalent total energy, if required to conduct even minimal abatement.

Because the definition of what is "unreasonable and undue waste" is central to this rulemaking, and the proposed language tracks the language used in the NTL-4A, TCS is concerned the proposed rule will not decrease the amount of gas wasted during drilling on federal lands. Operators could continue to game the system as they have for decades, and millions of dollars' worth of natural gas will continue to be unnecessarily wasted.

Furthermore, this definition of "unreasonable and undue waste of gas" in the proposed rule favors inefficient operators who cannot shoulder the cost of doing business and disincentivizes efficient ones that are actively seeking to reduce waste. It also fails to fulfill the mandate given to the BLM by the Federal Land Policy and Management (FLPMA) to "manage the public lands under principles of multiple use and sustained yield,"[8] in which multiple use is a "combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources . . . ."[9] and sustained yield means "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use."[10] Allowing associated gas, for example, to be flared indefinitely because capturing it would prevent the development of an equal amount of oil is not consistent with the principles of multiple use or sustained yield.

TCS encourages the BLM to consider a modified version of the alternative definition proposed in the rule. The current alternative definition states "unreasonable and undue waste of gas" means "a frequent or ongoing loss of substantial quantities of gas that could reasonably be avoided if the operator were to take prudent steps to plan for and manage anticipated production of both oil and associated gas from its operation, including, where appropriate, coordination with other nearby operations." This definition recognizes the burden on the operator to take necessary steps to mitigate their waste and takes into account both oil and gas production on public lands.

However, we find that requiring "loss of substantial quantities of gas" problematic as any amount of lost gas that could reasonably be avoided if the operator were to take prudent steps should constitute "unreasonable and undue waste". Additionally, "substantial quantities of gas" is subjective and is prone to the same problems of uneven interpretation and enforcement as NTL-4A. We recommend removing "substantial quantities" from the definition of "unreasonable and undue waste of gas".

Furthermore, TCS urges the BLM to adopt a definition that establishes that, all venting and flaring, except for limited situations like emergencies, constitutes "unreasonable and undue waste". The BLM should pursue a rule that clearly prohibits routine venting and flaring.

TCS agrees with the BLM that the concept of "unreasonable and undue waste" would inform the BLM decision-making with respect to other, more complicated waste prevention measures, such as delaying or denying a permit to drill or ordering a well to be shut-in due to excessive flaring, as mandated by the MLA. The BLM should also consider the amount of "unreasonable and undue waste" during land use

[8] 43 U.S. Code § 1732
[9] 43 U.S. Code § 1702
[10] Ibid.

planning and leasing stages. The definition of “avoidable/unavoidable loss”, on the other hand, primarily serves as a means of determining when royalties must be paid on lost gas, especially as the Inflation Reduction Act expressly codified the BLM’s authority to assess royalties on all extract methane except:

1) gas that is vented or flared for not longer than 48 hours in an emergency situation that poses a danger to human health, safety, or the environment;
2) gas used or consumed within a lease, unit, or communitized area for the benefit of the lease, unit, or communitized area; and
3) gas that is “unavoidably lost.”

Congress has left it to the BLM’s expertise and judgement to determine the qualifications for “emergency situation” and gas that is “unavoidably lost”. The proposed § 3179.105(a) would allow an operator to flare or, if flaring is not feasible due to the emergency situation, vent gas royalty-free for no longer than 48 hours during an emergency situation, in which “emergency situation” is defined as “a temporary, infrequent, and unavoidable situation in which the loss of gas is necessary to avoid a danger to human health, safety, or the environment.” Proposed § 3179.105(b) would clarify that the following circumstances do not constitute “emergencies” for the purposes of royalty assessment: (1) recurring equipment failures; (2) the operator’s failure to install appropriate equipment of a sufficient capacity to accommodate production conditions; (3) the failure to limit production when the production rate exceeds the capacity of the related equipment, pipeline, or gas plant, or exceeds sales contract volumes of oil or gas; (4) scheduled maintenance; and (5) operator negligence. The BLM’s definition of “emergency situation” is in accordance with the IRA and TCS agrees that emergencies should exclude equipment failures and lack of equipment capacity in general. However, as we will explain in Section III, TCS finds the BLM’s definition of "unavoidably lost” that allows flaring due to “pipeline capacity constraints, midstream processing failures, or other similar events that prevent produced gas from being transported through the connected pipeline” to be problematic and insufficient to address the egregious waste of natural gas that has been going on for decades.

III. BLM Should Prohibit Routine Venting and Flaring

Although TCS applauds the BLM’s proposal to prohibit venting at § 3179.6, which requires operators to flare (rather than vent) gas that cannot be captured except under certain specified circumstances, the BLM should consider stricter prohibition of venting with the least number of exemptions possible. Under proposed § 3179.6, operators are allowed to vent when:

1) When flaring the gas is technically infeasible, such as when volumes are too small to flare;
2) Under emergency conditions, when the loss of gas is uncontrollable or venting is necessary for safety;
3) When the gas is vented through normal operation of a natural-gas-activated pneumatic controller or pump;
4) When the gas is vented from a storage vessel, provided that § 3179.203 does not require the capture or flaring of the gas;
5) When the gas is vented during downhole well maintenance or liquids unloading activities performed in compliance with § 3179.204;
6) When the gas is vented through a leak;

7) When venting is necessary to allow non-routine facility and pipeline maintenance, such as when an operator must, upon occasion, blow-down and depressurize equipment to perform maintenance or repairs; or
8) When a release of gas is necessary and flaring is prohibited by Federal, State, local, or Tribal law or regulation, or enforceable permit term.

The BLM should limit venting except during emergencies that poses a danger to human health, safety, or the environment for no longer than 48 hours and certain maintenance activities, which would be consistent with the IRA's allowance or royalty-free venting and flaring during emergencies. Any other broad exemptions for venting would be hard to enforce and could potentially be abused by operators.

Proposed §3179.4 would deem losses from specified operations and sources to be "unavoidably lost" when the operator has not been negligent, has not violated laws, regulations, lease terms or orders, and has taken prudent and reasonable steps to avoid waste. The proposed rule clarifies that oil or gas can be "unavoidably lost"—and thus not royalty bearing—in connection with certain oil and gas operations, including well drilling, well completions and related operations, initial production tests, subsequent well tests, emergencies, downhole well maintenance and liquids unloading, facility and pipeline maintenance, and flaring due to pipeline capacity constraints, midstream processing failures, or other similar events. Under proposed § 3179.8(a), when an oil-well gas must be flared due to pipeline capacity constraints, midstream processing failures, or other similar events that prevent produced gas from being transported through the connected pipeline, a maximum of 1,050 Mcf per month (per lease, unit, or communitized area) of such flared gas would be considered a royalty-free "unavoidable loss." The operator would owe royalties on flaring beyond that limit. This proposed monthly volume limit on royalty-free flaring due to pipeline capacity constraints replaces the case-by-case flaring approval process of NTL-4A.

Allowing flaring due to "pipeline capacity constraints, midstream processing failures, or other similar events that prevent produced gas from being transported through the connected pipeline" will fail to put a stop to the egregious waste of natural gas through routine flaring. The BLM must go beyond the current proposed rule and prohibit flaring, except as specified in the rule, and modify the definition of "unavoidably lost" to ensure that only short-term flaring with limited exceptions is allowed.

Although the proposed rule more specifically defines "avoidably/unavoidably lost gas," compared to the case-by-case flaring approval process of NTL-4A, which has led to wildly different rates of royalty collection, a royalty-only approach will not be sufficient to address the problem of flaring on federal lands.

Using the Oil and Gas Operations Report (ORGOR-B) data which is self-reported by oil and gas companies operating on federal lands, TCS found that 82% of gas lost by drilling operators during the past decade was flared. Most of this flaring occurred at oil wells. New Mexico and North Dakota accounted for 45% and 33% of all lost gas volume on federal lands from FY2012 to FY2021, respectively. However, New Mexico alone accounted for 77% of royalty revenues collected from avoidably lost gas by the Office of Natural Resources Revenue (ONRR) while North Dakota accounted for only 17.5% of royalty revenues from lost gas. This discrepancy between royalties collected in proportion to lost gas volume is largely due to inconsistent administration of what constitutes as "avoidably lost" gas under current rules by different BLM field offices. The BLM New Mexico Office likely had the stricter rules for determining when gas is "avoidably" or "unavoidably" lost.

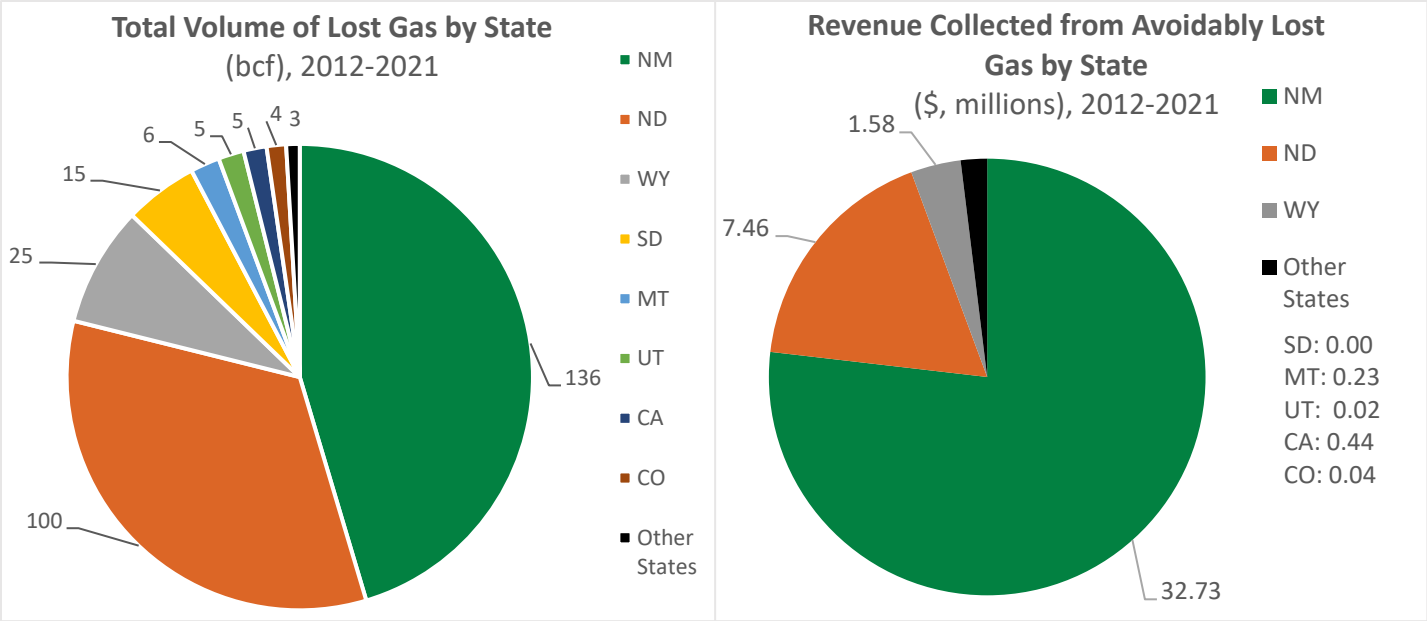

Figure 1, from Gas Giveaways II

However, to effectively curtail waste, the BLM must also take steps to require operators to capture any gas that escapes during oil production and prohibit the practice of routine flaring. Data have shown that charging a royalty on avoidably lost gas does not effectively reduce total flared gas, resulting in an egregious waste of taxpayer-owned resources. In *Gas Giveaways II: Methane Waste on Federal Lands is Business as Usual,* TCS particularly highlighted the need to stop the widespread waste of natural gas by banning non-emergency flaring in addition to establishing better guidelines for royalty assessment. The report found that, although New Mexico has assessed royalties more responsibly on avoidably lost gas over the past decade under the NTL-4A and collects more royalties in proportion to lost gas and flares less per barrel of oil produced compared to other states, lost gas in New Mexico still accounts for 45% of all lost gas on federal lands over the past decade – more than 136 billion cubic feet (bcf), which could power 1.5 million homes' for a year.[11] Even the BLM acknowledged that the agency must be prepared for the possibility of egregious cases where the volume of flaring is unacceptable even in the face of royalty payments because the incentive to flare is strongest where the price of gas (and, therefore, the royalty value of the gas) is lowest with respect to the price of oil.

Operators should not be allowed to flare due to pipeline takeaway capacity issues. Non-emergency flaring is an egregious waste of taxpayer-owned resources that also deprives consumers of valuable energy sources especially in a time of heightened need for energy security and energy independence. In order to protect the public interest in such cases, the BLM should update waste prevention requirements to prohibit operators of oil wells with associated gas from routinely venting or flaring that gas as a means of disposal. The extensive ongoing waste will only be avoided if produced gas is required to be used or preserved. Associated gas should be required to be sold for consumption, put to a useful

[11] EPA Greenhouse Gas Equivalency Calculator. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

purpose on-site, or reinjected, which either enhances oil production or retains the value of the gas for future extraction.

IV. BLM Must Take Action to Improve the Availability of Venting and Flaring Data

In our report Gas Giveaways II: Methane Waste on Federal Lands is Business as Usual, TCS analyzed operator-reported data and found that 300 billion cubic feet (bcf) of natural gas was vented, flared, or lost from leases on federal lands. Using average monthly Henry Hub natural gas spot prices, we found this gas had an estimated value of $949 million.[12] Applying a royalty rate of 12.5% on all lost gas over the last decade, taxpayers would have received $119 million. Instead, the ONRR reported collecting just $43 million in royalties on gas vented or flared over the decade, approximately one-third of the potential royalties. Taxpayers have lost at least $76 million in potential revenue over the past decade on wasted gas.

However, the magnitude of waste and forgone revenues is likely much bigger as estimates of lost gas from self-reported data likely underestimate total gas losses from federal lands. There is little or no incentive for operators to estimate the volume of lost gas accurately, and little oversight by the DOI to check if they have. Operators are not required to check for leaks or detect fugitive emissions, even as leaks and fugitive losses are common throughout the oil and gas production process. A recent EDF-TCS commissioned report by Synapse Energy Economics ("Synapse report")[13] found that, in 2019, leaks accounted for 75 bcf, or 46% of all lost gas on public lands.[14]. Abandoned or poorly sealed wells are also significant sources of lost gas, and the DOI does not collect data on these losses either. Satellite data on flaring confirms that actual volumes lost are much greater than the available data suggests. For example, in 2015, operators reported flaring 28.9 bcf of natural gas to the State of New Mexico.[15] But satellite data indicate operators actually flared 42.4 bcf of gas in New Mexico in 2015, 46% more than what was reported.[16]

There are also inconsistencies within governmental data on lost gas. For example, the GAO, using Environmental Protection Agency (EPA) data, estimated that the true amount of gas vented or flared on federal land in 2008 was 126 bcf.[17] Data collected by the ONRR, however, indicate just 15 bcf was lost in 2008, roughly 12% of what the GAO estimated. Similarly, the BLM estimates that in 2019, on BLM-administered leases, units, and communitized areas (CAs), operators lost 151 billion cubic feet (Bcf) of gas through flaring.[18] In contrast, Synapse report estimated that in 2019, 87.5 bcf of natural gas was flared from natural gas operations on federal and tribal lands, just 58% of the BLM's estimate. This

[12] All-natural gas was assumed to have a heat value of 1,037 Btu per cubic foot. Calculations used monthly average Henry Hub Natural Gas Spot Prices obtained from the Energy Information Administration

[13] Olivia Griot et. al., Onshore Natural Gas Operations on Federal and Tribal Lands in the United States: Analysis of Emissions and Lost Revenue (Jan. 20, 2023)

[14] Ibid. Synapse used a Synthesis model based on Alvarez et al. 2018[14] that uses well pad data from Enverus and production-dependent emission factors

[15] OGOR-B data largely agree with the data the State of New Mexico collects from operators. EMNRD, C-115 volumes, flaring only

[16] VIIRS Nightfire data, collected by the Earth Observation Group (EOG) at the Colorado School of Mines, reported by SkyTruth – https://skytruth.org/2022/01/monthly-methane-flaring-summary-data-now-available-in-alerts/

[17] GAO, GAO-11-34, "Opportunities Exist to Capture Vented and Flared Natural Gas, Which Would Increase Royalty Payments and Reduce Greenhouse Gases," Oct 29, 2010.

[18] BLM Proposed Rule, Regulatory Impact Analysis at 10-11 (Nov. 2022) (hereinafter "RIA").

suggests either significant underreporting by federal lessees or that the BLM has reason to believe some gas is not captured in properly reported volumes. The BLM should clarify the source of its estimate and release any related data.

TCS applauds the BLM's effort to improve the reporting and accounting of natural gas emissions from onshore federal leases. Section 3179.9(b) of the proposed rule would introduce inspection and measurement requirements for all high-pressure flares flaring 1,050 Mcf per month or more. Furthermore, as applicable, the orifice plate for the meter must be pulled and inspected at least once a year and the meter must be verified at least once a year.

Accurate and available venting and flaring data is needed to reasonably ensure that natural gas waste is effectively being minimized. While the proposed rule provides measurement requirements for reporting flaring data, the BLM should also seek to improve the reporting of certain unreported or underreported emissions, as well as guidance on the reporting of combusted and uncommuted volumes used for beneficial use. Providing additional guidance on how to estimate natural gas emissions from federal oil and gas leases would be a first step to bridge the data discrepancies and inaccuracies mentioned above and would allow better tracking and monitoring of methane mitigation efforts.

Furthermore, the BLM should make onshore OGOR-B data publicly available, instead of being available only through Freedom of Information Act (FOIA) requests. The disposition of publicly owned oil and gas should be a matter of public record. For comparison, the Bureau of Safety and Environmental Enforcement updates the OGOR-B datasets available for download from offshore federal lessees monthly. TCS understands that ONRR staff are working to provide disposition data on the RevenueData.doi.gov portal, but that is no excuse for allowing the data vacuum to continue in the interim. There is no reason that the BLM cannot work with the ONRR to promptly disclose summary monthly venting and flaring data at a minimum. This data would not only increase accountability and improve transparency, but also create a far more robust factual basis for commenters to draw from during a rulemaking process and for the public and stakeholders to examine the progress of methane reduction efforts.

V. Waste Minimization Plans Should Be Required During Land Use Planning, Leasing, and Drilling Application Stages

The BLM requests comments on how it can improve its processes pertaining to the leasing stage of development to minimize the waste of natural gas during later stages of development. TCS recommends that the BLM require waste minimization plans when an operator nominates parcels of land for lease. Then this information from proposed waste minimizations plans can be taken into consideration when evaluating parcels from submitted Expressions of Interests (EOIs), similar to proposals to require waste minimization plans for APDs.

In November 2022, the BLM issued seven Instruction Memorandums (IM) to enable consistent implementation of the Inflation Reduction Act's changes to the agency's oil and gas programs, including IM 2023-007, Evaluating Competitive Oil and Gas Lease Sale Parcels for Future Lease Sales. IM 2023-007 instructs BLM offices to evaluate parcels from submitted EOIs for lease according to the following criteria:

- Proximity to existing oil and gas development, giving preference to lands upon which a prudent operator would seek to expand existing operations;
- The presence of important fish and wildlife habitats or connectivity areas, giving preference to lands that would not impair the proper functioning of such habitats or corridors;
- The presence of historic properties, sacred sites, or other high value cultural resources, giving preference to lands that do not contribute to the cultural significance of such resources;
- The presence of recreation and other important uses or resources, giving preference to lands that do not contribute to the value of such uses or resources; and
- Potential for development, giving preference to lands with high potential for development.

Proximity and availability of gas capture infrastructure should be considered when evaluating parcels from submitted EOIs. The BLM could collect additional information from proposed waste minimization plans regarding the location of adequate gas capture infrastructure to minimize natural gas waste during later stages of development. Additionally, the BLM could consider embedding waste prevention measures during the land use planning stage.

VI. Conclusion

Thank you for the opportunity to comment on the proposed rule to address lost natural gas from energy production on federal lands. The outdated rules that governed oil and gas development for over four decades have cost taxpayers billions of dollars in lost revenue, kept billions of dollars' worth of valuable natural gas from ever getting to market, and saddled taxpayers with additional climate liabilities. For these reasons and more, TCS recommends the BLM strengthen the proposed rule to move away from the NTL-4A and move toward a system that ensures a fair return and reduces the waste of the resources we all own.