May 8, 2015

Mr. Armand Southall
Department of the Interior
Office of Natural Resources Revenue
Regulatory Specialist
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RE: Comments by Vulcan Inc. on the January 6, 2015 Proposed Rule, *Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform* (Docket No. ONRR-2012-0004)

Dear Mr. Southall,

Thank you for the opportunity to comment on the Notice of Proposed Rulemaking (Proposed Rule) published by the Department of the Interior's (DOI) Office of Natural Resources Revenue (ONRR), which would revise regulations governing valuation for royalty purposes of coal produced from Federal and Indian leases, and oil and gas produced from Federal onshore and offshore lands.[1] The following comments respond to issues on which ONRR specifically sought comment and offer broader alternatives to the policies proposed. These comments are focused on coal valuation issues, although many of the principles recommended here could and should be applied to the oil and gas sector.

This comment is being submitted on behalf of Vulcan Inc. Vulcan creates and advances a variety of world-class endeavors and high-impact initiatives that change and improve the way people live, learn, do business and experience the world. Founded in 1986 by investor and philanthropist Paul G. Allen, Vulcan oversees various business and charitable projects including real estate holdings, investments in dozens of companies, including the Seattle Seahawks NFL, Seattle Sounders FC Major League Soccer, and Portland Trail Blazers NBA franchises, First & Goal Inc., the Seattle Cinerama theatre, Experience Music Project, the Science Fiction Museum & Hall of Fame, the Allen Institute for Brain Science, the Allen Institute for Cell Science and The Paul G. Allen Family Foundation.

The January 6, 2015 Federal Register notice requests comments and suggestions on several aspects of oil, gas, and coal valuation reform. The proposal is a response to broad-based concerns about the integrity of the Federal coal leasing program articulated by the Government

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[1] "Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform," 80 Fed. Reg. 608 (Jan. 6, 2015) ("Proposed Rule").

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Accountability Office,[2] DOI's Office of the Inspector General,[3] and the Center for American Progress.[4] These reports have expressed concern about flaws in DOI's coal valuation procedures. Relying on lessees to determine the royalties they owe on a transaction-by-transaction basis, using data that is not publicly available, invites abuse. To eliminate this potential, using publicly available index pricing to establish royalties should become the norm.

In general, Vulcan believes that although the Proposed Rule would move the existing coal royalty valuation regulations toward a more fair, reasonable, and economically justifiable regulatory scheme, substantial changes to the royalty regulations are necessary to ensure the American taxpayer receives a fair return of revenue from coal extracted from Federal lands, as intended by Congress in the Federal Coal Leasing Amendments Act of 1976.

Introduction

The primary purposes of the Proposed Rule, according to ONRR, are to:

- Offer "greater simplicity, certainty, clarity, and consistency in product valuation";
- "Decrease industry's cost of compliance and ONRR's cost to ensure industry compliance"; and
- "Provide early certainty to industry and ONRR that companies have paid every dollar due."

Regrettably, however, ONRR has chosen in its Proposed Rule not to alter "the underlying principles of the current regulations."[5] The Proposed Rule would not change ONRR's current approach of valuing Federal coal "at or near the lease" nor ONRR's view that gross proceeds from arm's-length contracts are the best indication of market value."[6]

As explained further below, Vulcan believes it is a serious mistake for ONRR to stick to the status quo approach when valuing coal for royalty purposes. We file these comments in reliance on ONRR's statement that "detailed comments that elaborate on specific situations where further valuation changes [in addition to those proposed] should be considered would be

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[2] GAO, "Coal Leasing: BLM Could Enhance Appraisal Process, More Explicitly Consider Coal Exports, and Provide More Public Information" (Dec. 2013) ("GAO Report").
[3] Office of the Inspector General, DOI, "Coal Management Program, U.S. Department of the Interior" (June 2013).
[4] Center for American Progress, "Modernizing the Federal Coal Program (Dec. 9, 2014).
[5] Proposed Rule at 609.
[6] *Id.*

particularly useful to ONRR as it proceeds with this rulemaking as well as any future rules that may be considered."[7]

Simply put, Vulcan believes the Proposed Rule, which would continue to base royalties on first arm's-length sale prices, will fail to achieve the objectives of "simplicity, certainty, clarity, and consistency in product valuation." We recommend that the proposal be revised and promulgated as a final rule with the following features:

- **Valuation Point and Method**. For purposes of establishing the appropriate royalty, the value of coal should be based on an index established by ONRR of market prices for coal, rather than on a transaction-by-transaction evaluation by the lessee.
- **Transportation Costs**. An index or a published common carrier rate should be used to establish the cost of transportation or, in the alternative, the deduction for transportation should be limited to no more than 50% of the delivered price of the coal.
- **Washing Costs**. The deduction for coal preparation costs for purposes of calculating the royalty should be eliminated.

Adopting these recommendations will significantly increase the simplicity and transparency of the royalty process and increase public confidence, while avoiding opportunities for abuse associated with basing royalties on initial sales as determined by the lessee. So long as the initial responsibility for calculating the royalty is placed in the hands of the company with a financial interest in lower royalties, the process will be rightly suspected by the public. In this case, simple and transparent regulation would also be highly efficient, greatly reducing the extensive investment in time and energy by ONRR and coal companies in documenting actual sales terms, and transportation and coal preparation costs.

As described in more detail herein, Vulcan commissioned a study that modeled coal and energy market impacts of the changes proposed by ONRR, as adapted with Vulcan's recommendations. The analysis showed that a $2.50 cost increase, which is likely far above any price increase that would result from ONRR's rulemaking, applied to coal mined on Federal lands does lead to a small shift in coal production from regions with Federal lands to other coal supply regions, but would have little impact on the power sector in terms of generation, capacity, fuel consumption, as well as emissions.

Below we set forth the applicable law. Part II contains our comments to broadly reform the royalty structure. It includes comments supporting steps that would provide "greater

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[7] *Id.*

simplicity, certainty, clarity, and consistency" and greater certainty that "companies have paid every dollar due."

I. Applicable Law

The Mineral Leasing Act gives the Secretary of the Interior broad discretion to define the policy basis for setting the royalty rates. It directs the Secretary to set coal lease royalties at a minimum of 12.5% "of the value of the coal as defined by regulation." The statute also provides that the Secretary "may determine a lesser amount" for underground mining operations.[8] The statute thus requires the Secretary to charge royalties on an *ad valorem* basis, but does not expressly state or limit the grounds on which royalty rates may be based.

Part of ONRR's mission is to "ensure a fair return to the taxpayer from royalty and revenue collection and disbursement activities."[9] In 1989, ONRR's predecessor, the Minerals Management Service, promulgated the existing regulations, which, as the proposal describes, require lessees to classify the first sale of coal mined on Federal lands as either "arm's-length" or "non-arm's-length" and then determine the gross proceeds from such sale.[10] Under current regulations, in an arm's-length transaction, the value of the coal is defined as the gross proceeds accruing to the seller, less allowable deductions for transporting and washing the coal.[11] The seller lessee has the burden of demonstrating that the sale occurred at arm's-length.

Where Federal coal is sold to a subsidiary or affiliate and the transaction is thus not at arm's-length, ONRR currently uses a number of benchmarks to determine what the value of the coal would have been, if it were sold on the open market to an unaffiliated buyer (i.e. at arm's-length). The lessee seller can use virtually any information to justify its valuation of the coal.[12] The regulations do not require that the lessee share its justification with ONRR. The lessee is required only to keep the data on file and make it available for review and audit by ONRR, if requested.[13]

If, upon audit, ONRR determines that the seller lessee has miscalculated or misrepresented the value of the coal sold in a non-arm's-length transaction, the lessee is required to pay the difference, plus interest.[14] There are no other penalties for undervaluing coal sold in a

[8] 30 U.S.C. § 207(a).
[9] *Id*.
[10] 54 Fed. Reg. 1492 (Jan. 13, 1989).
[11] Allowances are determined by 30 C.F.R. §§ 1206.258 through 1206.262.
[12] 30 C.F.R. § 1206.257(c)(2)(i) states that the lessee may consider "[p]rice, time of execution, duration, market or market served, terms, quality of coal, quantity, and such other factors as may be appropriate to reflect the value of the coal."
[13] 30 C.F.R. § 1206.257(d)(1).
[14] 30 C.F.R. § 1206.257(e).

non-arm's-length transaction under ONRR's current regulations. With no penalties for understating the value of coal sold, the current system invites abuse through below-market sales to "affiliates" of coal companies, charges for coal preparation, and the addition of various capacity charges, take-or-pay contracts, and other charges deducted from the gross proceeds.[15]

Regardless of whether the first sale of Federal coal is at arm's-length or non-arm's-length, lessee sellers may deduct from the value of the coal applicable costs for washing and transporting the coal. Allowances for washing and transportation may not reduce the royalty value of the coal to zero.

The potential for abuse in such a system is obvious, and has been noted by numerous observers. For example, the Center for American Progress (CAP) recently reported that, "the major coal companies operating in the [Powder River Basin] have built an extensive network of subsidiaries and affiliates through which they sell and distribute their coal, which appears to help maximize their subsidies."[16] In 2004, "captive transactions"—i.e., sales from a parent company to an affiliate—constituted just 4% of sales in Wyoming. CAP found that, by 2012, 42% of all coal produced in Wyoming was sold through a captive transaction.

In 2011, ONRR issued an advanced notice of proposed rulemaking (ANPR) seeking comment on many of the changes it now proposes to make to the existing regulations.[17] In the ANPR, ONRR stated its intention to revise the royalty valuation regulations because they "have not kept pace with significant changes that have occurred in the domestic coal market during the last 20-plus years."[18] Specifically, ONRR stated its goal to "provide clear regulations that are easy to understand and that are consistent with fulfilling [] the Secretary's responsibility to ensure fair value for the public's resources."[19]

II. Vulcan's Comments on ONRR Proposal

1. <u>Economic principles guiding the royalty base and calculations</u>

The Federal Land Policy Management Act of 1976 requires the Department of the Interior to ensure sound land use practices. FLPMA requires balanced "management of public lands and resources…that will best meet the present and future needs of the American people," and that does not result in "permanent impairment of the productivity of the land and the quality

[15] *See, e.g.*, Peterson, "Devaluing Coal: Reasons for Restructuring How Federal Coal is Valued," 13 Geo. J.L. & Pub. Pol'y 165, 171 (2015).
[16] Matt Lee-Ashley and Nidhi Thakar, Center for American Progress, *Cutting Subsidies and Closing Loopholes in the U.S. Department of the Interior's Coal Program* 2-3 (Jan. 6, 2015).
[17] "Federal and Indian Coal Valuation," 76 Fed. Reg. 30,881 (May 27, 2011).
[18] *Id*.
[19] *Id*. at 30,883.

of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."[20]

In the United States, private parties under contract to the government develop public resources. Generically, the form of these contractual arrangements must confront three issues: (i) private costs that the government cannot monitor efficiently or at all ("asymmetric information"); (ii) the government's interest in providing incentives to private developers to operate efficiently, so as to maximize the value of the resource; and (iii) how the government might share the economic risk of developing the resource in light of possible future fluctuations in the price of the resource. When there are many potentially interested private parties, standard practice is for the government to conduct an auction for the rights for resource extraction. If the amount of the resource is known, the winning bidder would then be the low-cost bidder, and excess economic profits ("rents") from developing the resource would accrue to the government in the form of high bids for development rights.[21]

In the case of coal royalties, the auction framework, in particular a royalty auction, is currently not being utilized, ostensibly because there are only a small number of competitive bidders (discussed further below). Nevertheless, the general considerations drawn from economic theory have three implications for evaluating revisions to ONRR's royalty valuation procedures:

- The base on which the royalty is assessed should be transparent, should minimize the possibility of gaming, and should minimize the administrative and accounting burden on both ONRR and the developer. As discussed below, because of the difficulty in verifying arm's-length transactions, these considerations argue in favor of using an index of valuation, rather than a transaction-by-transaction price.

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[20] 43 U.S.C. § 1702(c).

[21] The issue of royalty rate determination is part of the theory of contracting and regulation with asymmetric information. A seminal textbook treatment of this material is J.-J. Laffont and J. Tirole, *A Theory of Incentives in Procurement and Regulation*, MIT Press, 1994, which makes the connection between auctions and regulation in a setting of asymmetric information and moral hazard. For a recent review of the theoretical literature on royalty auctions, see A. Skrzypacz, "Auctions with Contingent Payments," *International Journal of Industrial Organization* 31, 2013, 666-675. Recent evidence on the relation between auction structure and government revenues is summarized in Haile, Hendricks, and Porter, "Recent US Offshore Oil and Gas Lease Bidding: A Progress Report," *International Journal of Industrial Organization* 28, 2010, 390-396.

- The royalty rates should be gross of any unobservable costs to incentivize efficiency in private production. These costs include not just coal extraction but other necessary operations for making the coal marketable including coal preparation and marketing. In addition, because coal preparation and marketing are costs that are difficult for ONRR to monitor, and are necessary components of selling the coal, the goal of transparency and providing incentives to minimize costs both lead to the conclusion that coal preparation costs should not be deducted from the value of the coal used to assess the royalties.

- The gross royalty revenues should reflect what might have been obtained in a royalty bidding scenario, under the hypothetical case that there are many competitive bidders. One implication of this observation is that royalty revenues (but not necessarily royalty rates) will differ by location and in particular suggest that the relevant point of assessing royalties is at the physical point where the coal is ready for sale into the market (the mine mouth or coal preparation point). This logic suggests that transportation costs should in principle be deductible, i.e. not in the base for the royalties. However, basing royalty calculations on the mine mouth price and allowing the transportation deduction runs afoul of the previous two points, which open the possibility of gaming and difficulty of monitoring transportation costs. Consequently, and as discussed in more detail below, we recommend that transportation costs be deductible from the base, but, to prevent gaming, costs are determined by either (1) use of an index or (2) the lessee's reported costs, but in no event should the value of the coal (final delivered sale value) be reduced by more than 50%, as in assessing oil and gas royalties.

2. <u>Adopting a simpler policy than the one stated in the Proposed Rule will better achieve ONRR's goals for rulemaking</u>

The ONRR proposal for revising the royalty valuation process states that one of the agency's major objectives is to "offer greater simplicity, certainty, clarity, and consistency in product valuations for mineral lessees" and to "decrease industry's cost of compliance," (while providing "certainty" that "companies have paid every dollar due").[22] To this end, the proposal seeks to find ways to deal with the obvious problem of identifying a market value in non-arm's-length coal sales, and the distortion caused by this problem in royalty collections.

As noted above, however, the proposal would leave undisturbed the current practice of relying on lessees' self-described "arm's-length" transactions for valuing coal when a lessee asserts that an arm's-length transaction has occurred.

[22] Proposed Rule at 608.

More specifically, ONRR proposes to continue to value coal based on the "gross proceeds from the first arm's-length coal sales."[23] Placing the responsibility for determining the value of sales in the hands of the mining company creates an internal conflict of interest that no doubt contributes to the shortfall in revenues identified by those who have studied the process (as well as to the lack of public credibility of the process). In response to this proposal, coal companies can be expected to continue to expand loopholes to minimize the gross proceeds for purposes of calculating the royalty.[24] Such a system will not increase the transparency, efficiency, or public confidence, and it certainly will not increase the royalties collected by the Federal government.

ONRR's proposal is said to be based upon the "general consensus of comments received on the ANPR" that "actual proceeds are the best indicator of value, and that ONRR should not change to index prices."[25] But the "consensus of the comments" appears to be inconsistent with the consensus of observers of the industry who have studied the coal leasing process. Among them the consensus is that the use of "actual proceeds" in the ONRR methodology results in royalty payments below the statutory 12.5% minimum mandated by Congress for surface-mined coal. A January, 2015 analysis of the royalty process, for example, found that "the effective royalty rate[26] over this period was 4.9 percent, and royalty collections averaged about $1.70 per ton."[27] The Headwaters Report found that, had royalties been based on the actual market price of coal, without deductions for transportation, "[t]otal royalty collections would have been about $5.5 billion higher than actual royalties."[28]

Recent government audits that have considered coal lease sale and bonus payment processes extensively have come to similar conclusions regarding the undervaluation of publicly-owned coal resulting from the current methodologies and circumstances. In separate reports, the GAO and the Inspector General of the Department of the Interior arrived at the conclusion that currently coal mined from Federal lands is significantly undervalued in the leasing process. Specifically, the reports observe that nearly every lease sale since 1990 had only a single bidder, that the market valuation process was not transparent, and that overall it is difficult to determine if the BLM and ONRR are receiving full consideration for the public's coal.

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[23] *Id.*
[24] Previous examples include *Black Butte Coal Co. United States*, 38 F. Supp. 2d 963 (D. Wyo. 1999).
[25] *Id.*
[26] "Effective royalty rate" is calculated by dividing total royalties paid to the government by the number of tons of coal sold from Federal leases.
[27] Headwaters Economics, "An Assessment of U.S. Federal Coal Royalties Current Royalty Structure, Effective Royalty Rates, and Reform Options" (January, 2015) at 1 ("Headwaters Report").
[28] *Id*.

Vulcan agrees with the commentators that taxpayers are being short-changed by the current system's flawed reliance on establishing the market value of Federal coal through transaction-by-transaction reviews of sales based on information that is unavailable to the public and often unseen by the agency. Key defects in the current valuation scheme include:

- **Lack of Transparency.** BLM treats valuation methods as proprietary information shielded from public view, so that only the lessee (and BLM if they audit the particular sale) know the cost deductions taken, prices used, and royalty rate assessed. BLM and ONRR deny Freedom of Information Act requests for such information. Such secrecy fosters distrust, and potentially improper influence on BLM by lessees.

- **Lack of Enforcement Resources.** Even if ONRR manages to reduce abuses such as claiming sales to affiliates as the measure of the first arm's-length sale, the process of auditing each sale requires an excessive commitment of resources by both the agency and the lessee.

- **Minimal Return to the Public.** ONRR's valuation methodology reflects an interpretation of the statute that minimizes the public's return on the exploitation of the public resource, contrary to Congress' directive.

3. <u>Use publicly available data to establish the value of coal rather than relying on the lessee-determined price paid in an arm's-length or non-arm's-length transactions</u>

We suggest two alternate approaches to address the problems associated with ONRR's reliance on a lessee-controlled transaction-by-transaction approach for valuing coal for royalty purposes. The first is to use an index of actual market prices for coal, determined by ONRR, as the basis for establishing the actual market value on which to calculate the royalty. In our view, this would be the more effective and efficient approach, as explained below. The second is to use the actual market price paid by the ultimate consumer of the coal, determined for each individual sale by reference to publicly available data.

a. Market price index

The complexity and opacity of the current process for determining the value of coal mined on Federal lands is a result of (1) assessing the value of the sale on a transaction-by-transaction basis for each lease; and (2) allowing the mining company to do its own evaluation of the value without being obliged to share it with the agency. The small number of audits emboldens companies to develop inventive new loopholes to lower the portion of sales revenue subject to royalties. So long as the agency administers a program that requires calculating the royalty for each contract, it will engender public distrust, and absorb a large number of person-hours on the staffs of both the agency and the coal company.

It would be simpler, more efficient and more transparent for the agency to use a publicly available index of prices to the ultimate consumer (delivered prices) to determine a baseline coal price (or prices) for calculating royalties. In order to eliminate the individualized treatment of each contract, ONRR would apply an index of the final delivered market price of coal in the relevant market to calculate the royalty. Use of a price index could entirely eliminate transaction-by-transaction calculation of the actual sale price of each contract.

The potential benefits of using an index of final delivered market prices, by comparison to the agency's proposal, are significant:

- By eliminating the detailed accounting negotiations with the coal companies, it would increase transparency and public confidence in the system;
- For the same reason, it would be more efficient to administer for both the agency and the coal companies;
- To the extent publicly available information is used to determine the index or indices, the process could become transparent to allow public participation;
- It would eliminate the potential for the use of subsidiaries and other controlled entities to reduce the basis on which the royalty is calculated; and
- Assuming that the royalty rate remained the same, an index approach would almost certainly increase the effective rate of the royalty significantly, which would begin to narrow the gap between the current effective royalty rates and the statutorily prescribed minimum rate of 12.5%. The Headwaters Report concludes that if royalty value had been assessed on the net market value of the coal (i.e. the price paid by the consumer less transportation costs), royalty collections would have been about $124 million per year higher over the period 2008-2013.[29]

We are not unmindful of the subsidiary issues involved in creating a coal price index (or using an existing index). Different types of coal have varying characteristics that affect price, such as heat content, sulfur content, ash, and mercury content. In some cases electric generating plants have been designed to use coal with certain characteristics, and they are incapable of switching to other coals without very substantial investment. ONRR or the index creator would have to determine whether to adopt a single national market index, or sub-indices based on relevant coal characteristics and mines.

[29] Headwaters Report at 18.

We believe a serviceable index would be available from existing information sources, either inside the government or private. At present, there are several entities that publish spot-price information about coal transactions in various regions. One public-domain resource for data on coal prices is the U.S. Energy Information Administration ("EIA"). EIA posts "Coal News and Markets" data,[30] which summarizes "spot coal prices by coal commodity regions (i.e., Central Appalachia (CAPP), Northern Appalachia (NAPP), Illinois Basin (ILB), Powder River Basin (PRB), and Uinta Basin (UIB)) in the United States."[31] EIA states that, "The report includes data on average weekly coal commodity spot prices, total monthly coal production, regional monthly coal production, electric power sector coal stocks, and average cost of metallurgical coal at coke plants and export docks."[32] As of May 4, 2015, for example, EIA's publicly available webpage displayed spot-price data for the five most recent weeks, and stated that, "The historical data for coal commodity spot market prices are proprietary and not available for public release."[33] The source of EIA's proprietary data is SNL Energy, which is a subscription service of SNL Financial that reports spot prices for the different reference coal regions.[34]

Other proprietary sources of spot prices (and futures contract prices) for coal are Platts[35] and CME Group (which operates NYMEX and other exchanges).[36] Both Platts and Argus Media asserted in comments on the 2011 ANPR that each publishes a number of indices, or price assessments, covering physical spot markets covering different coal characteristics and geographic areas. Platts, for example, publishes daily indices for Central Appalachian barge-delivered coal, Central Appalachian rail-delivered coal, and two low-sulfur Powder River Basin coal assessments. Platts publishes weekly assessments of more localized basins. In the alternative, the agency would also have the option to create an index to establish actual market value in a way that works for assessing royalties. These various indices might reflect more liquid markets over time if ONRR were to begin to rely upon such pricing tools as part of its calculation of royalty rates.

It is important to remember that despite the complexities of the coal market, buyers and sellers routinely reach agreement on the appropriate price for coal contracts today, taking into account all the relevant characteristics of coal supplies. These prices are often reported in the trade press, and several privately published services report at regular intervals on the price of coal, as illustrated above.

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[30] http://www.eia.gov/coal/news_markets/
[31] *Id.*
[32] *Id.*
[33] *Id.*
[34] http://www.snl.com/
[35] http://www.platts.com/commodity/coal
[36] http://www.cmegroup.com/trading/products

We also note that another large exporter of coal, Indonesia, uses a form of index to value coal for royalties purposes. The royalty rate for exported coal in Indonesia is based on the true market value of coal received at the export terminal, determined from the benchmark price or actual sales price – whichever is higher.[37]

b. Evaluation of actual market price paid by ultimate consumer

Publicly available information about the price of coal paid by utilities could provide an alternative to using a market index to value coal for royalty purposes. Electric utilities currently provide this information to Public Utility Commissions; independent and merchant electric generating companies provide it to Regional/Independent System Operators and in their annual reports. As such, reliable cost information paid by coal consumers is available on a regional basis and could be used as the basis for calculating royalties.

Using the net delivered price to the consumer would largely eliminate the opportunity for self-dealing that is a serious defect in the current regulations. The agency should increase the transparency of transactions by publishing the sale price and characteristics of the coal sold.

The use of a delivered price index and the use of publicly available information about the price and characteristics of the coal need not be mutually exclusive. For example, the publicly available delivered sales data could be used to improve the performance of the price index, or the price index could be used in cases in which there is no publicly available arm's-length delivered price data.

4. Increase transparency of transportation allowance while ensuring that transportation costs do not displace the public's share

ONRR has proposed modest changes to more clearly define that lessees may deduct only reasonable, actual costs to transport coal from the lease to a point remote from the lease or mine. The proposal requests ideas and comments on the "potential for creating standardized 'schedules' for transportation and processing allowances to reduce the need to rely on transaction-by-transaction operator reporting and agency review of actual cost."[38] This section responds to that request.

The current practice of allowing coal companies to deduct the full cost of transportation (unless it would eliminate the entire royalty) invites abuse. In order to reduce this potential,

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[37] PRICEWATERHOUSECOOPERS, CORPORATE INCOME TAXES, MINING ROYALTIES AND OTHER MINING TAXES (2012) at 3, 30, http://www.pwc.com/en_GX/gx/energy-utilities-mining/publications/pdf/pwc-gx-miining-taxes-and-royalties.pdf.
[38] Proposed Rule at 609.

Vulcan recommends that transportation deductions be either (1) determined by a publicly available index of transportation costs, or (2) limited to no more than 50% of the value of the coal based on the final point of sale (either delivered price index or actual arm's-length delivered transaction price).

a. Use an index to determine the transportation allowance

As noted previously, Vulcan recommends that royalties be calculated based on an index of delivered market prices for coal established by ONRR. Delivered market prices of course include the cost of any transportation. The use of a delivered market price index has the substantial virtues of transparency, low monitoring burden for ONRR, very limited room for gaming and manipulation, and low industry compliance costs. At the same time the economic principles discussed above suggest that the base on which the royalty be assessed would be net of transportation costs, as it would in a hypothetical royalty auction. Thus the principles of transparency and simplicity on the one hand, and point-of-shipment pricing on the other, stand in conflict when it comes to the transportation deduction. A transportation index should be established and updated at a sufficient frequency to ensure prices are fair and current, and in a way that limits opportunities for gaming.

b. In the alternative, the transportation deduction should be capped at 50% of the delivered value

In the case that ONRR chooses to allow actual transportation costs to be deducted, the agency should place a 50% cap on such deductions to limit the opportunities for gaming and to provide consistency with the regulations governing the oil and gas industry. Adopting a transparent and standardized metric for determining allowable deductions for transportation costs is a step towards ensuring a fair return to the American taxpayer. However, ONRR has very limited auditing and monitoring resources, and history shows that industries are more nimble than the government in developing methods to circumvent regulations and mechanisms designed to protect the taxpayer. Thus, allowing deductions for transportation expenses, while at the same time closing other loopholes such as the coal preparation expense deduction (discussed below), raises the specter of the industry undercutting the value to the taxpayer by developing alternative ways to exploit the transportation deduction.

For this reason, Vulcan supports a transportation deduction consistent with the principle of net delivery pricing, but limited so that the transportation deduction cannot be used to reduce taxpayer receipts inordinately. Requiring royalties be paid on at least part of the cost of transportation would eliminate much of the incentive for companies to exaggerate transportation costs, since the company would be required to pay a royalty on any portion of the reported transportation costs.

Limiting the transportation deduction to 50% would be consistent with ONRR's restrictions on transportation allowances for Federal oil and gas.[39] A 50% limit would not unfairly burden the coal industry, but would provide prudent protection to the taxpayer. Capping transportation deductions at 50% would also remove the unfair advantage Federal coal receives in comparison with Federal oil and gas in the electricity market.[40]

The transportation costs of delivering coal from the Federal mine to a domestic power plant averages just less than half of the total delivered cost of the coal.[41] Headwaters Economics estimates that capping transportation allowances to 50% of the market price of the coal would capture additional market value of Federal coal and increase royalty payments by $0.85 per ton on average.[42]

5. Eliminate deductions for washing allowances

The Proposed Rule seeks comment on whether ONRR should limit deductions for washing expenses to 50%.[43] Vulcan believes that, like other expenses necessary for marketing the coal, no coal washing expenses should be deductible, either as a matter of economics or as a matter of law.

As a matter of general economics, coal washing expenses, like marketing expenses, are difficult and expensive for the government to monitor, and allowing deductions for expenses that can be gamed is inconsistent with the principle that royalties be computed on a transparent and easily monitored base.

As a matter of law, any coal washing expense deduction is inconsistent with the applicable law. The U.S. Court of Appeals for the D.C. Circuit has held that the Mineral Leasing Act requires lessees to place Federal resources in "marketable condition" at no cost to the government.[44] Coal washing is currently defined as "any treatment to remove impurities from coal."[45] DOI explicitly denies the costs of "placing lease products in a marketable condition" in its regulations on natural gas.[46] ONRR defines "marketable condition" as, "coal that is

[39] 30 C.F.R. § 1206.109.
[40] Headwaters Report at 21.
[41] Headwaters Report at 9.
[42] Headwaters Report at 3.
[43] Proposed Rule at 629.
[44] *Devon Energy Corp. v. Norton*, 2007 U.S. Dist. LEXIS 61709 (D.D.C. 2007) (citing to *California Co. v. Udall*, 296 F.2d 384, 387-88 (D.C. Cir. 1961) (upholding marketable condition requirement)).
[45] 30 C.F.R. § 1206.251.
[46] 30 C.F.R. § 1206.158.

sufficiently free from impurities and otherwise in a condition that it will be accepted by a purchaser under a sales contract typical for that area."[47] The costs of coal washing are costs incurred in making the coal marketable and, as such, the Federal government is prohibited from subsidizing them under the Mineral Leasing Act.

6. Default valuation

The Proposed Rule would give ONRR discretion to value Federal coal on a transaction-by-transaction basis if it determines that: (1) a contract for the sale of Federal coal does not reflect the total consideration; (2) there is misconduct between the parties to a contract; (3) a lessee has breached its duty to market; (4) a lessee sells coal at an unreasonably low price, which would be defined as "10 percent less than the lowest other reasonable measures of market price, including but not limited to prices reported to ONRR for like-quality coal,"[48]; or (5) if ONRR cannot determine whether the lessee properly valued the coal.

If the rule ultimately provides for transaction-by-transaction valuation, Vulcan would support ONRR's proposed default valuation method. It would be an important step toward increased compliance and a reduced enforcement burden for ONRR. However, we note that if ONRR were to adopt Vulcan's proposal to utilize a publicly available market index to value coal for royalty purposes, such default valuation would be unnecessary, except in very few circumstances. The market index valuation method would be easier to enforce and thus greatly increases compliance.

7. Information

ONRR and BLM have at times been hampered in their ability to evaluate alternative policy options by of lack of information about coal sale transactions. DOI should consider information collection options requiring mining companies and others to provide information that can improve ONRR's ability to oversee the leasing program and give greater assurance that lessees are paying the royalties intended by Congress and DOI. We recommend that, as a condition of all new leases, lease modifications, or extensions of leases, lessees be required to provide DOI the following information on a quarterly basis:

- Their calculation of the royalties owed;
- Information regarding the destination market for their output, including buyers in the chain of sale, and ultimate consumers; and
- Extent to which coal is being sold for export.

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[47] 30 C.F.R. § 1206.251.
[48] Proposed Rule at 664.

ONRR would be the logical agency to collect and evaluate this information. In order to increase transparency, we would also urge that ONRR publish the reported information on a quarterly or annual basis.

III. Economic Impact of the Proposed Rule

The potential impacts of the Proposed Rule specific to coal are highlighted in an analysis commissioned by Vulcan and conducted by ICF International to evaluate changes in Federal coal leasing policy. ICF's Integrated Planning Model (IPM®)[49] was used to model future scenarios including those where the cost of coal mined on Federal lands would increase by $2.50 per ton.[50]

The results of the simulations, summarized below, show that the impact on power markets is minimal, with little change in net production of coal in the U.S. (-0.6%). Coal markets would experience a shift of production (4.2%) from Western states, with a corresponding increase in production in Appalachia and the Illinois Basin. Total Federal royalty payments would increase by 7%.

The modeling results show the following minimal impacts on the coal market:

- Compared to the Base Case, the +$2.50 case leads to an average annual decrease of 18.7 million short tons, or 4.2%, in coal produced in CO, UT, MT, and WY from 2016 to 2050. Total U.S. coal production levels would only decrease by an annual average of 6.6 million short tons, or 0.6%, between cases, as some coal production shifts from Powder River Basin/UT/CO to other coal supply regions.

- Market prices for coal in CO, UT, MT and WY would be higher by an average of $1.40/ton in each year with the +$2.50 case. This reflects that not all coal mined in these states is on Federal land.

- Coal exports from Montana remain the same when a +$2.50 cost increase is imposed.

- With the +$2.50/ton case, Federal royalty payments are higher by an average of

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[49] IPM is a multi-region model that endogenously determines capacity expansion plans, unit dispatch and compliance decisions, as well as power and coal price forecasts, all of which are based on power market fundamentals. Power market assumptions for the analysis were based on a combination of public sources, including EPA's v5.13 Base and Clean Power Plan (CPP) cases, as well as the Energy Information Administration's (EIA) Annual Energy Outlook (AEO) 2014.

[50] The $2.50 per ton increase used in the modeling is an upper bound estimate derived from surveys conducted by Vulcan of external experts regarding the impact of future regulatory scenarios on the Federal coal mining costs.

7% in each year, because the higher coal prices offset the decrease in production.

ICF's model also showed minimal effects on the power market:

- As a result of the $2.50 increase, there is little impact on generation and capacity mix, largely because the total national coal production and consumption remains unchanged.

- Natural gas prices, natural gas consumption in the power sector, firm wholesale power prices, and CO_2 emissions are all relatively unchanged between cases.

In short, a $2.50 cost increase, which is likely far above any cost increase that would result from ONRR's rulemaking, applied to coal mined on Federal lands does lead to a small shift in coal production from regions with Federal lands to other coal supply regions, but would have little impact on the power sector in terms of generation, capacity, fuel consumption, as well as emissions.

IV. Conclusion

Vulcan appreciates this opportunity to share our comments on the Proposed Rule. Vulcan strongly supports ONRR's efforts. We would be pleased to further discuss our comments. Please do not hesitate to contact Spencer Reeder at Vulcan Inc., 206-342-2000.