POLICY MEMO

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Subject: Response to the Department of Interior, Office of Inspector General Audit on Federal Coal Leasing Program

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Summary and Background

The United States Department of Interior, Office of Inspector General released an audit of the Department of Interior, Bureau of Land Management Coal Leasing Program[2] on June 11, 2013. This was the first publicly released audit of the BLM on the issue of fair market value (FMV) in the coal program by the Inspector General in at least thirteen years.

The audit asked and answered the following threshold questions regarding BLM's management of the program:

- Does DOI/BLM follow the rules that insure the public receives fair value for federally owned coal leased to private coal producers? No.
- Has the government lost money due to this failure to comply? Yes.
- Has DOI/BLM recognized the problem and instituted a program of corrective action? No.

This memo summarizes key findings and implications of the FMV coal leasing component of the audit.[3] The OIG's audit, while responsive to certain critical issues inadequately addresses the nature of the problem and solutions for it.

The conclusions from this memo are as follows:

1. OIG acknowledges the failure of the agency to comply with fair market value standards. It identifies $60 million in revenue loss. However, the OIG uses a method to identify the $60 million that is flawed. Furthermore, OIG identifies at least three weaknesses in the BLM program: no independent verification of engineering and geological data, no revenue estimates for projected export sales and a failure to use comparable sales data when setting bid prices. The effect of

[1] See Brief Biography, Appendix I.
[2] Office of Inspector General, US Department of the Interior, *Coal Management Program, US Department of Interior*, Report No: CR-EV-BLM-0001-2012, June 2013 ("the Report", "the audit" and "IG Report")
[3] This paper does not address the section of the OIG audit that relates to the Inspection and Enforcement program, nor does it comment on the royalty rate hardship discussion.

these methodological lapses is not quantified by the OIG, but suggests potential revenue loss far greater than the $60 million identified in the audit.

2. OIG finds that BLM is not complying with internal oversight checks that would identify weaknesses in its valuation methods. BLM resists these oversight attempts. OIG's specific response is ineffectual.

3. Although cognizant of the difficulty in securing BLM's cooperation to correct program deficiencies, the OIG effectively fails to assert the fundamental point that the Secretary of the Department of Interior, not BLM, decides on fair market value policy. The findings of this audit strongly imply this program is out of control. OIG finds that BLM does not include export revenues in its estimates of fair market value.

4. BLM's procedural and substantive response disputes the importance of export revenue and minimizes the need for change. The OIG's substantive and procedural response is weak. It does however suggest that BLM currently has insufficient staff capability to address the financial issues related to export sales.

The Inspector General's function is to identify fraud and help the agency understand where it has risks. The OIG audit identifies the potential for fraud in a few areas and identifies some risks. Overall, the report fails to address the historic and continuing hostility of BLM to oversight, the inability of past reforms to correct the problem and the need for a realistic perspective on revenue losses.

This memo builds on a study prepared by the Institute for Energy Economics and Financial Analysis, *The Great Giveaway: An analysis of the costly failure of federal coal leasing in the Powder River Basin,* June 2012. Many of the historical, procedural and substantive issues referred to in this memo are covered in far more detail in that report, which is available at www.ieefa.org.

Issue # 1: Failure to obtain fair market value; revenue loss at $60 million

OIG found weaknesses in the coal lease program that put the Government at risk of not receiving fair market value for the leases. The audit estimates a "potential $60 million in lost revenue" from the defects it could identify, but has significantly understated this potential.

The audit begins with an acknowledgement of the importance of revenue collection to the coal lease process.[4] Regarding the question of whether the federal government receives a fair return for coal on public lands, the OIG states: "We found weaknesses in the current coal sale process that could put the Government at risk of not receiving the full, fair market value for the leases."[5] The audit states further, "…even a 1-cent-per-ton undervaluation in the fair market value calculation for a sale can result in millions of dollars in lost revenues, correcting the identified weaknesses could produce significant return to the Government."[6]

The substantive section of the audit identifies revenue losses from the lack of adherence to FMV policy and procedure.

> We analyzed all 45 lease modifications since 2000 and found that BLM typically approved a substantially lower price – averaging more than 80 percent lower – than the price used in the regular lease sales during the same period. The cumulative price difference indicated a potential $60 million in lost revenues (see Appendix 2). While the reduced quality and accessibility of these coal seams could justify a lower price, the overall lack of documentation made it difficult to validate BLM's decision-making process.[7]

The OIG's methodology compares the price of the lease accepted by BLM to a contemporaneous regular lease sales price.[8] The difference between the two is the revenue loss to federal and state government. The $60 million is qualified by the OIG since there is no documentation that the value of the coal in the lease modification sales is degraded, either typically or in specific cases (See discussion below on Exports).

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[4] IG Report, p. 1.
[5] IG Report, p. 1.
[6] IG Report, p. 1.
[7] IG Report, p. 13.
[8] It might be useful to make a Freedom of Information Act request of the Office of Inspector General for: 1) the list of 45 lease modifications; 2) the values it used in determining the lease value of the modified lease; 3) the "regular sales" per ton or other valuation measure it used to form the basis for its comparison; 4) how it determined the 80% measure; 5) the itemized list of the 45 lease modifications and projected losses and 6) the method for aggregation of these values to derive $60 million.

In various other places, the OIG report identifies, but does not attempt to quantify, very clear methodological lapses in BLM's valuation process. These lapses heighten the risk that the government will receive less than fair market value for the coal, as follows:

- Engineering data on coal geology is supplied by the companies who are making application for the leases and lease modifications. This information, about the conditions of the seams, is not independently verified by anyone except the companies.[9] Companies know that BLM accepts the idea that more difficult mining conditions drive down the price the government will demand for the coal.[10] Is there a risk that the companies may overstate the geological conditions and engineering complexity of the mine since they know more difficult conditions drives down BLM's fair market valuations on specific coal tracts? Is this possibility enhanced when the applicant knows there will be no independent check on the information being provided?

- Potential income to coal producers from foreign sales is not assumed in the revenue projections for FMV appraisals. The BLM seems to believe that the only planned use for this coal is domestic consumption by utilities. The failure to include export revenue projections is a condition the OIG believes should be corrected (see below: Issue #4). Is the price of coal (excluding an estimate of export revenues) currently being used by BLM a reasonably accurate measure for planning a twenty to thirty year commercial lease? What is covered in a standard market research document used by BLM to determine coal prices and revenue projections for a mine transaction? How much revenue is lost from failing to include these revenue projections in BLM's standard appraisal models? Is the scope of the market (domestic only) used in the process fundamentally wrong?

- The OIG has stated that the method used for setting the regular sales price is flawed in other ways. The OIG takes exception to the failure of BLM to adhere to its own policy of using comparable sales to help set the FMV of leases and modifications. "BLM developed its comparable sales analyses using a lower bid amount instead of the higher, actual sale price."[11] The OIG's concern here is over the value set for a "regular lease sale." It finds that the regular sale price is distorted downward by the BLM practice of effectively ignoring comparable sales as a reference point for future secret bid prices. When the OIG identified $60 million in lost revenue it used the regular lease sales price as a benchmark to gauge revenue losses. How does the OIG use the same measure it has exposed as seriously flawed as a reliable benchmark to identify revenue losses? If the OIG finding of a flawed method for lease sales that lead to below fair market valuations is accurate, then current and future bid prices are distorted downward as well. What is the cumulative impact of these distortions since the last external review of this question by the Government Accountability Office, thirty years

[9] IG Report, p. 12.
[10] See discussion of Cloud Peak's successful bid for the West Antelope II North coal tract in IEEFA study, p. 48-49.
[11] IG Report, p. 7.

> ago? The Office of Valuation Services, the Department's authority on mineral valuation, is not consulted in the process. In the past the lack of external review has caused revenue losses and other questionable practices.[12]

All of these distortions, if quantified, would require a higher price for federal coal, not a lower one. The implications for revenue losses are clear. If corrected (and inclusive of a more competent rendering of coal market dynamics) the revenue loss to the federal government would far exceed $60 million.

It is noteworthy that the OIG relied on two outside industry representatives for information when conducting this audit: The National Mining Association and Peabody Energy.[13] In commenting on the report, the National Mining Association called the $60 million loss a "rounding error" when compared with the overall dollars received by the program.[14]

Finally, the OIG's concern with revenue loss seems to be applied in an inconsistent manner. For example, the OIG reviews the bid reoffer process and expresses an 'efficiency' concern. The reoffer process occurs when BLM rejects a coal company's bid as too low. An applicant's bid sometimes does not meet BLM's secret valuation and so the Bureau rejects the bid. A process of rebidding often takes place. The OIG finds that the reoffer process is inefficient and suggests that BLM enter into direct negotiations with appropriate applicants to settle the price.

The OIG is, in effect, telling BLM to negotiate the value of the coal lease. This finding and conclusion comes after discussions of how BLM does not follow procedures on FMV, is losing revenue, has adopted policies with a higher likelihood of fraud, acts outside the will of the Secretary and refuses any independent oversight. Even BLM disagrees with this finding and recommendation.[15] Why would the OIG recommend that a flawed government agency be given greater autonomy in the area of its greatest flaw? Who made this recommendation to the OIG?

Issue # 2: BLM is not in compliance with Fair Market Value Process

BLM is giving away coal for below fair market value contrary to Department policy and refusing to adopt new procedures which might check the practice.

The report establishes that federal coal is leased by the Department of Interior, Bureau of Land Management (BLM) at below fair market value.[16]

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[12] See the discussion of lax oversight (p. 10-23) and revenue losses (p. 28-32) in IEEFA report referred to in the introduction.
[13] IG Report, p. 26.
[14] John Broder, *Undervalued Coal Leases Seen As Costing Taxpayers,* New York Times, June 11, 2013.
[15] IG Report, p. 33.
[16] Office of Inspector General, US Department of Interior, *Coal Management Program, US Department of the Interior,* Report No. CR-EV-BLM-0001-2012 (IG Report).

A central OIG finding in support of this statement is that BLM does not use the Office of Valuation Services (OVS) to prepare the Fair Market Value appraisals required under law. The OVS is the Department of Interior's "authority on valuation for all minerals extracted from public lands." [17] By order of the Secretary, OVS centralized its appraisal functions in 2010. According to the OIG, "The order intended to foster independence by taking responsibility for the valuation from the bureaus and placing it with OVS."[18] This was an internal control check designed to improve appraisal integrity.

Program Implications and Questions

The FMV process as currently carried out by DOI and BLM relies upon a shield of confidentiality to protect agency staff and coal producers. The use of confidentiality allows for agency employees to carry out the complex job of assigning value to coal and then managing the competitive bid process. The FMV appraisal is ultimately based on judgment. Coal producers are protected because of their claims to proprietary data with regard to coal analysis, mine plans, pricing and a range of other issues. The OIG points out that confidential engineering and geological data regarding coal quality and mining conditions used by BLM as the basis for its FMV determinations is provided by the applicants and not subject to independent verification by BLM or anyone else.[19]

The actual bid price established by BLM's internal fair market value process is also kept secret. Coal producers send in their bids on an agreed upon date. The bidder (usually there is only one) who offers the highest price for the coal that is also higher than the secret BLM bid price is awarded the lease. Since there is virtually no actual competition[20] between companies for the coal tracts, an independent assessment of the FMV secret price is the only real check on BLM's valuation of the minerals under lease.

The OIG report refers to the agency's Handbook,[21] which strives to balance the need for confidentiality with the need for oversight to determine if the process is handled in a transparent manner.[22] The Handbook **ASSUMES** that a robust process of post lease

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[17] IG Report, p. 7.
[18] IG Report, p.6.
[19] IG Report, p. 12.
[20] The coal lease program assumes that competition between companies for coal reserves is the optimal way that the public can be assured of receiving fair market value for coal that is an asset of the United States Treasury. The program design, historical practice and actual results of decades of program performance have all but eliminated competition from the coal lease program. See: IG Report, p.8.
[21] IG Report, p. 4.
[22] The Handbook is itself a reform to the FMV process adopted in the wake of the 1982 coal lease scandals. The OIG played an oversight role in reporting on the scandals. The OIG is responsible for independently and objectively identifying risks and vulnerabilities that directly impact the DOI's ability to accomplish its mission. During the coal leasing scandals of the 1980s, the Inspector General was also asked to investigate the DOI's decision to reduce coal price values by 50 percent for the purposes of the bid price. After a thorough review, the OIG discovered that agency personnel: 1) leaked portions of the fair market appraisal data to industry officials prior to the bid solicitation; 2) accepted gifts from those same industry officials; 3) were in a position to influence the outcome of the fair market appraisal and final bid selection; and 4) used their authority to reduce the minimum acceptable bid offered by the agency. Although the OIG forwarded its findings to the Justice Department, no action was taken as the Department remanded the matter back to the

external review will take place. The Handbook establishes the standards by which such external reviews, such as the IG audit, should take place. The Handbook also makes provision for outside review of the bid process via public information release that allows access to information after the leases are issued. These public information requests are routinely denied by BLM, as documented in the IEEFA report.

The OVS[23] check on BLM activities would be the only regularized external review of the FMV process. As noted in the IEEFA report mentioned above, the other potential internal control checks are non-existent: no competition, no publicly available Inspector General in at least thirteen years[24] or Government Accountability Office (GAO) audits in thirty years. The OIG finding is not a new revelation– it simply displays the same BLM patterns and practices that allowed agency officials to manipulate the FMV process in the past.

In the absence of action by the Secretary of the Interior (or Congress), it is very likely that the OIG findings and recommendation will have no impact on the operations of the program. Here is BLM's response to the IG's findings:

> The BLM agrees with the OIG's recommendations to work with OVS to explore potential appraisal improvements. The BLM has had some preliminary discussion with OVS as to how they might be able to assist the BLM in the pre-sale estimates completed by the BLM. The BLM disagrees with the OIG's conclusion that BLM has not been in compliance with Secretarial Order (SO) 3300 or Part 112, Chapter 33 of the Departmental Manual (DM). Under the SO, OVS may provide real estate (including mineral estate) valuation services to the bureaus if it is requested by the bureau. Therefore, the OIG's interpretation of the SO and the DM is not accurate. The OVS, however, may be able to offer their skillsets at the request of the BLM recognizing the limited resources currently available to the agency.
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> It is not clear to the BLM that the SO or the DM transferred responsibility for coal pre-lease-sale FMV determinations to the OVS. The main role of OVS is to appraise real estate for purposes of property purchase, sale or exchange, not for purposes of issuing a lease to be used as part of a commercial endeavor. At its inception, the staff of OVS included real estate appraisers that had formerly worked for a number of Interior agencies. However, engineers, geologists and other staff who are necessary to perform pre-lease-sale tract evaluation were not transferred at that time.[25]

DOI for potential ethics actions. The Inspector General's investigations of the leaks that occurred during the bid process were criticized by the Linowes Commission and were the subject of a highly critical United States General Accounting Office study. United States General Accounting Office, *Deficiencies in the Department of Interior OIG Investigation of the Powder River Basin Coal Lease Sale,* GAO/RCED, 84-167, June 11, 1987.

[23] The Handbook envisioned a robust external review environment. OVS is an important operational check. However, it is still part of the Department of Interior and would require a level of external and independent review of its own.

[24] The OIG Report (p. 26) notes that the OIG "examined prior reviews" as part of its methodology for the Report. It is not clear what this refers to as the OIG's website over the last decade provides no evidence of its involvement in oversight in the coal program and there has been no public reporting by the GAO during the same period. There is also no explicit recognition in the current OIG report what insights these prior reviews provided that made them relevant to this audit. The OIG report is quite limited in its reference to BLM's historical practice and completely silent on the history that has shaped the current program.

[25] IG Report, p. 33.

In summary:

- BLM rejects the intent of the Secretary's Order to transfer valuation services to the OVS;

- BLM states it will "explore the possibility" of "a role" in the process for OVS. There is nothing definitive here and it is a tacit assertion that it, BLM controls the process, and not the Secretary;

- BLM states the Secretary's Order never transferred the valuation process for coal leasing to OVS and uses as evidence the failure to transfer competent engineering and geological staff;

- BLM states that OVS values real estates, including mineral estate but not "for purposes of issuing a lease to be used as part of a commercial endeavor."

The OIG summarizes the BLM's response to the first recommendation of its report:

"1. BLM should work with OVS when establishing FMV policies and methods and when identifying FMV for coal leases.

> **BLM's Response**: BLM concurred with the recommendation, stating that it will evaluate all existing coal program guidance and update them if necessary. BLM will also work with OVS to explore options for obtaining OVS' input into coal lease sales and potential revision to existing BLM guidance.
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> **Office of Inspector General's (OIG) Reply**: We consider this recommendation resolved, but not implemented. The recommendation will be referred to the Assistant Secretary for Policy, Management and Budget for tracking its implementation."[26]

In its reply above, the OIG has backed off its assertion about greater integration of BLM into the agency wide policy of appraisal centralization. They have accepted BLM's position that BLM, not the Secretary, determines the role of OVS in the process.[27]

Issue #3: The OIG fails to acknowledge that the Secretary of the Interior, not the BLM, decides on fair market value policy. In the absence of action from the Secretary of the Interior or the Congress, there is little potential for the findings of the OIG report to be meaningfully implemented.

The OIG, after citing several risks in BLM practices, including a lack of competition, identified revenue losses with the potential for more, and the need for independent external review on this highly secretive process, ultimately agrees to allow BLM to set the terms for the nature of independent review of its activities.

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[26] IG Report, p. 19.

[27] The OIG has been criticized in the past for weak responses to problems with the coal lease program. See: United States General Accounting Office, *Deficiencies in the Department of Interior OIG Investigation of the Powder River Basin Coal Lease Sale,* GAO/RCED, 84-167, June 11, 1987.

The Inspector General does not seem to expect much change from within the current structure of authority or decision making.

> Correcting deficiencies identified in this report will be a challenge because the BLM Washington Office does not have direct lines of authority for the coal program. Specifically, although the Washington Office manages the coal program, it does not directly control the program in the many State and field offices that oversee coal leases. Without strong, centralized management, State and field office personnel may interpret official standards, processes and procedures inconsistently.

According to the law, however, the Secretary of the Interior, not BLM, is responsible for the coal lease program:

> The Secretary of the Interior is authorized to divide Any lands subject to this Act which have been classified for coal leasing into leasing tracts of such size as he finds appropriate and in the public interest and which will permit the mining of all coal which can be economically extracted in such tract and thereafter he shall, in his discretion, upon the request of any qualified applicant or on his own motion from time to time, offer such lands for leasing and shall award leases thereon by competitive bidding: *Provided*, That notwithstanding the competitive bidding requirement of this section, the Secretary may, subject to such conditions which he deems appropriate, negotiate the sale at fair market value of coal the removal of which is necessary and incidental to the exercise of a right-of-way permit issued pursuant to title V of the Federal Land Policy and Management Act of 1976.

According to the law, the Secretary of the Interior, not BLM, makes the final determination of what is or is not appropriate with regard to fair market leasing.

> No bid shall be accepted which is less than the fair market value, as determined by the Secretary, of the coal subject to the lease. Prior to his determination of the fair market value of the coal subject to the lease, the Secretary shall give opportunity for and consideration to public comments on the fair market value. [28]

The apparent abdication of responsibility by the Secretary (and perhaps the OIG) has implications far greater than simply BLM working with OVS, inconsistent policy interpretation or even the risk of lost revenue (serious as it is).[29]

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[28] Mining Leasing Act and Supplementary Law, Coal, Section 2(a)1, November 12, 2012: http://www.house.gov/legcoun/Comps/mla.pdf (MLA). An extended excerpt of the MLA is attached as Appendix I.

[29] In a discussion of BLM's Review and Approval Determinations the OIG notes that the current BLM practice (in place for decades) of having one staff person compute the actual value of the coal after input from other professionals actually has a "higher risk of fraud" is illustrative of the organizational risk, IG Report, p. 11.

Issue # 4 BLM fails to include export revenues in its estimates of fair market value. The OIG states: "BLM does not fully account for export potential in developing the FMV's….BLM should reflect the export potential in its FMV calculations to ensure the Government receives proper value for lease sales."

BLM's response is actually evasive, while appearing to be cooperative[30]:

> The BLM agrees with the importance of considering the possibility of future coal exports in developing presale estimates. However, little Federal coal is currently exported. According to the Energy Information Administration, no more than 1.6 percent of Powder River Basin coal is exported. However, and the general discussion of exports in the text of the report, as well as Figure 3, may create the misleading impression that the opposite is the case. The BLM's Handbook 3070-1 provides some direction as far as considering the potential for exports when making the pre-sale FMV determination, if such information is available. However, the BLM in coordination with OVS, will evaluate whether improvements can be made to the methods and procedures the BLM currently uses to establish the pre-sale FMV estimate so as to better account for coal export potential. The BLM intends to monitor changes in the export market in the future years that may result from changes in the North American market for natural gas.[31]

Program Implications and Questions

This response from the BLM calls for an analysis that is both substantive and procedural.

1. The BLM states that little coal is currently exported from the Powder River Basin. This, of course, minimizes the issue in the FMV appraisal process. This comment reflects a very narrow understanding of coal markets and exports. First, a company like Cloud Peak Energy, which exports approximately 4% of its coal, derives 18% of annual revenues from those sales. The impact on this company's share value is material. [32] In the section of the OIG audit, in Royalty Rate Reductions, the Inspector General makes the observation that: "BLM coal program officials, who are mostly trained in geology and mine engineering, generally do not have the expertise to evaluate a company's financial statements and other supporting documentation."[33] BLM's staff of engineers and geologists may understand the coal production side of the federal government's interest. It appears, however, that frontline BLM staff does not possess the skillsets necessary to represent the fiduciary interests of the US government in the coal lease process. Second, export success is integral to the investment story PRB companies are telling their investors.[34] A failure to achieve

[30] See, for example a short, concise discussion of evasive techniques faced by auditors: Scott Emett and David A. Wood, *Common Question – Evasive Tactics,* Journal of Accountancy, July 2010.
[31] IG Report, page 33.
[32] For a more detailed analysis of the material impact of the export revenue from PRB sales and its impact on coal producer balance sheets see: Tom Sanzillo, Finance Director, and Institute for Energy Economics and Financial Analysis, Observations on Cloud Peak Energy's Letters to DOI and Congress on Royalty Payments for Exported Coal, February 25, 2013.
[33] IG Report, p. 14.
[34] For example see: Henry Clay Webster, *Arch Coal shifts to export strategy in new document,* Platts Coal Outlook, May 28, 2012.

export goals will result in stranded assets for example, for Arch Coal[35] in its rail and port investments as well as its mining expansions in, among other places the Powder River Basin. Even small amounts of exported coal establish relations between US coal producers and coal consumers in other countries. Those relations are important even to the point of coal companies selling coal for a loss in the short term to help cement future deals. The financial value to the companies materially and symbolically is very high even if BLM engineers and geologists believe the coal export numbers are minimal.

2. The drive by PRB producers to export is founded as much on declining coal use in the United States due to cost of production issues as it is from natural gas displacement (mentioned in passing above).

   A robust global market also assists coal producers in covering the rising costs of production. Cost of production increases are a problem in every coal region.[36] The issue plays out differently in each region. In the PRB, coal producers face rising costs of production, at a time of flat or decreasing market prices for coal. This factor alone tightens mine profitability.

   All of the export scenarios floated by coal companies and consultants look at global coal prices between \$85.00 per ton and \$125.00 per ton[37] to make the PRB margins sufficiently robust to support expansion. Even with added transport costs for overseas shipping these prices more than cover the gradual but persistent rise in the cost of production.

   BLM's model assumes that as coal tracts become increasingly difficult to mine due to geological conditions the cost of extraction increases. These increased production costs place downward pressure on the value of coal under the current fair market appraisal methodology. Higher stripping ratios, greater overburden and more complex engineering and regulatory oversight, in theory make the coal less desirable to mine. The result is the federal government, as owner of the mineral reserve, receives a lower value for the coal.[38] This assumption could be valid if the market price of coal were to remain the same over time. But if the market shifts to a global market, for example, with a far different pricing structure that is higher than the

[35] For a more complete discussion of large US coal producer strategies for exports see discussion on Exports in IEFFA report (p.34-35). Since the report one smaller coal producer in the region has announced its foray into the export markets. See: Dan Lowrey, *Westmoreland Coal eyes M&A opportunities, export sales,* SNL, April 29, 2013.
[36] Darren Epps, *US coal producers scrambling in face of skyrocketing production costs,* SNL Coal, April 19, 2013.
[37] See for example: Peter Gartrell and John Miller, *Peabody projections show lucrative Chinese market for PRB Coal,* Platts Coal Trader, December 6, 2010; Peter Gartrell, *Arch CEO sees \$20 range for PRB coal to Asia,* Platts Coal Trader, January 31, 2011; Jim Thompson, Market Commentary, Coal and Energy, Volume 14, No. 156, August 14, 2012. Thompson's recap of a recent Wood and MacKenzie report provides highly useful information. The actual Woodmac report might be available to BLM; UBS Investment Research, US Coal, Some Coal Export and Port Capacity Math, May 21, 2012. Other investor information which is typically of a proprietary nature can be supplied upon request.
[38] IG Report, p. 32.

current market, it would be in the federal government's interest to charge more, not less, for the coal, notwithstanding the rising costs of production.[39]

Currently, in two coal regions without the protection of a federal owner,   Northern Appalachia (NAPP) and Central Appalachia (CAPP), thermal coal producers are priced out of the market for US domestic coal sales. This is due to the high costs of production, low natural gas and energy prices and the maturation of renewable markets. The coal that remains most marketable in the current US market is PRB coal. The continuation of federal practices that evade compliance with fair market value provisions ensures coal's competitive position particularly during this market period. If not for the consistent support of certain state regulatory agencies, public power and rural cooperatives and the current management practices of BLM, coal's share of the US market world be even lower than its current level in the mid to high 30% range. The policy decision to support coal at this stage of its economic evolution is based almost exclusively on political considerations. The historic ***business rationale*** for coal burning has unraveled.[40]

The BLM response implies that the Handbook provides s limited guidance with regard to the agency's inclusion of export revenue into its FMV calculations. This is not accurate. The guidance is actually quite broad. It instructs staff to consider "potential markets" and to derive values based on market research.[41] BLM creates a further perception of limitation by saying it can only make determinations "if such information is available." However, any reasonable diligence effort would produce an abundance of information on the market that would serve this purpose. There is even more information available through proprietary reports and consultants. (See discussion above on Exports)[42]

3. One final observation on exports and fair market value leasing will prove instructive. If DOI and BLM have concluded that the coal industry's export strategy is unreasonable and will not result in more coal sold outside the United States, then

[39] From a strictly economic perspective a monopoly owner could charge higher prices. As the quantity of economically recoverable coal decreases and coal producer demand intensifies, despite production cost increases, an owner should be able to raise prices. The failure of BLM to embrace the financial implications of the rising cost of production and its impact on coal reserves in the Powder River Basin is beyond the scope of this memo. For those interested in the topic see: United States Geological Society, *Assessment of Coal Geology, Resources and Reserves in the Gillette Coalfield, Powder River Basin, Wyoming,* Open-File Report: 2008-1202. http://pubs.usgs,gov/of/2008/1202. (USGS-Gillette)

[40] The political nature of the coal industry's pressure on its historic allies, the utility industry is a critical indication of the financial deterioration of coal burning. The New York Times covered the debate over the Big Sandy plant in Kentucky that showed this pressure on AEP, the nation's largest utility and a major consumer of coal. The utility company ultimately rejected a coal plant retrofit because the economics did not work despite attempts by the coal industry to press forward with a project to 'save coal'. The project failed because it was not financially feasible and would have resulted in an unacceptable rate increase for Kentuckians. See: Eric Lipton, *Even in Coal Country the Fight for an Industry,* New York Times, May 29, 2012.

[41] US Department of Interior, Economic Evaluations of Coal Properties, H-3030-1, April 17, 1990, p. II-7 and III-16.

[42] There are five sources cited above and numerous other analyses are available, most of it at no cost..

BLM's recent approvals of lease activity are being granted on what amounts to a speculative basis. A sober assessment made using a weak export scenario and changes in the current domestic market would support a smaller coal industry and fewer lease transactions.[43] This would require the Executive, DOI, BLM or the Congress to determine that not every request from a coal producer for a lease or lease modification is consistent with either the national interest or more narrowly the prudent management of federal coal reserves.

The market implication of BLM's practices is that the federal government, as the owner and fiduciary of federal coal reserves, will not be able to take advantage of any upside from exports. The FMV process does not recognize the revenue potential from export sales. Lower revenues diminish the value of coal in the FMV appraisal process and decreases the secret appraisal price. Other organizational units within DOI also appear to exempt the foreign sales revenue of coal producers from inclusion in its revenue base for royalty payments to the federal and state governments.[44] This acts as further federal incentive to export and an effective US subsidy of economic development in other countries. These twin practices amount to a fiscal policy designed to lose federal revenue on the one hand and a coal production policy that fosters speculation on the other.

Conclusion

This policy drift requires the kind of fundamental reexamination that historically has supported moratoria on coal leasing activities.

The federal government declared two policy driven moratoria in the past -- first under President Theodore Roosevelt and then again in the 1970's --when it became clear that the Department was leasing out too much coal because private speculation, not national need, became the motivation for leasing. The government declared a third moratorium in the 1980's after a scandal revealed that coal was being leased for below fair market value.[45]

The current situation contains the same elements that led to the previous moratoria, and more. Leases are currently being granted for speculation in foreign markets, not US generation needs (if current trends continue, PRB production will be flat or will decline based on projected domestic use). There are now real questions about the future energy mix for the country, US energy independence and US economic relations with both

[43] The cutbacks in the coal industry in the PRB already evidence the need for longer term thinking into the necessity for more leases. See: Darren Epps, *Arch tells investors it will show patience with idled PRB production,* SNL Coal, June 10, 2013.

[44] This issue was originally exposed through a series of investigative articles. See, for example, Patrick Rucker, *Prices of coal exports Asia not reflected in royalty payments*, Thomson-Reuters, December 5, 2012. For more policy background see: Tom Sanzillo, Finance Director, and Institute for Energy Economics and Financial Analysis, Observations on Cloud Peak Energy's Letters to DOI and Congress on Royalty Payments for Exported Coal, February 25, 2013.

[45] One cannot call the current state of affairs a "scandal" as this requires a broader public acknowledgement. Perhaps the more apt term, given the decade's old recognition of abuse implied in this memo would be "travesty".

China and emerging market countries. In addition, the claims that the coal industry makes of economic benefits from exports must be weighed against other economic and social factors: coal's almost insignificant part of total US exports, the negative impacts of rising coal prices and community disruption caused by coal exports.

Appendix I: Brief Biography of Tom Sanzillo

Tom joined the Institute for Energy Economics and Financial Analysis (IEEFA) as Director of Finance in 2012.

For the past six years Tom has run his own company TR Rose Associates. The company has served several clients working to create alternatives to fossil fuel use in the United States. The work has consisted of research, reports, testimony and advice on construction costs of coal plants and alternatives, financial reviews (involving independent owned utilities, cooperatives, public authorities and hybrid organizational structures), credit analysis, coal market and price analyses, rate impact assessments, federal financing, federal coal leases, coal export markets and policy, load forecast reviews, energy contracts and a series of other topics related to electric generation. He has served as a financial advisor to the innovative Green Jobs/Green New York large scale residential energy efficiency retrofit program in New York State. Tom has served on the Advisory Board on the future management of the Long Island Power Authority in New York State. His clients also have included business, labor and community organizations covering a host of public and private finance and policy issues.

From 1990 to 2007, Tom served in senior management positions to the publicly elected Chief Financial Officers of New York City and New York State. From 2003 to 2007, he served as the First Deputy Comptroller for the State of New York. Tom was responsible for a $150 billion globally invested public pension fund; financial oversight of state and 1600 units of local government budgets and public debt offerings; planning and supervising the audit programs for all state agencies, public authorities (including power generation authorities) and local governments, and audit reviews and approval of state contracts. One estimate places the level of public assets under the State Comptroller's watch at over $700 billion. Due to an early resignation of the elected State Comptroller, Tom, as First Deputy Comptroller, served for a short period as the New York State Comptroller from 2006-07. His most recent publication on New York State government and finance is part of the 2012 Oxford Handbook of New York State Government and Finance.