US Coal in the 21st Century: Markets, Bankruptcy, Finance and Law

September 8, 2016
Sponsored by the Sabin Center for Climate Change Law at Columbia Law School
Co-Sponsored by the Center on Global Energy Policy at SIPA

Event Summary

In January 2016 the U.S. Department of the Interior announced that for the first time in more than 30 years it will conduct a comprehensive review of the federal coal leasing program. The purposes of the review are to ensure the government receives a fair return on coal leases and that it properly accounts for the environmental externalities of coal mining, including its climate impacts. On September 8, 2016 the Sabin Center for Climate Change Law, together with the Center on Global Energy Policy, organized a workshop at Columbia University that brought together leading experts from academia, government, law and finance to discuss recent developments in coal markets, key factors influencing future directions in those markets, the nature and status of coal bankruptcy proceedings and re-organization in the sector, and the problem of legacy liabilities. This document includes a panel-by-panel summary of the day's events. The visual presentations that were offered during the panels are appended hereto, in either PDF or PPT file formats. In addition, we have included an "Open Letter to the US Coal Industry" from Dr. S. Julio Friedmann of Lawrence Livermore National Laboratory. Dr. Friedmann was scheduled to appear on the first panel but was unable to attend. The appended letter reflects the essence of what he would have discussed.

In addition, a full video recording of the event is online, at http://web.law.columbia.edu/us-coal-21st-century-markets-bankruptcy-finance-and-law-0.

Panel 1: Recent Developments in Coal Markets: Natural Gas, Renewables, Regulation and Global Supply & Demand

Colleen Regan, Bloomberg New Energy Finance
David Schlissel, The Institute for Energy Economics and Financial Analysis (IEEFA)
Clark Williams Derry, Sightline Institute

Moderator: Michael Burger, Sabin Center for Climate Change Law

Summary description:
According to the three panelists, U.S. coal markets face several significant challenges, primarily from renewable energy and natural gas, which are unlikely to abate to a degree sufficient to cause an upturn in their medium- or long-term prospects.

Colleen Regan noted the recent crescendo in coal-fired power plant closures—14.5GW in 2015—and anticipated that additional closures would follow in the coming years. She said that four key non-regulatory factors account for this: oil and gas prices have fallen to historic lows; renewables are putting downward pressure on electricity prices; steady improvements to energy efficiency are keeping rates of electricity demand flat; and increasing usage of demand side management tools are shaving peaks off of high-demand days and with them higher electricity prices. In addition to these factors, Regan also observed that U.S. coal plants are generally quite old, meaning that they are not good candidates for the addition of emissions control equipment. David Schissel echoed several of Regan's points, illustrating some of them with the example of seven plants in Texas whose financial profiles have been undermined by natural gas and renewables, as well as by compliance requirements related to the newly issued Haze Rule. Schissel also pointed out that an enormous volume of natural gas capacity—16GW in PJM alone—will shortly come online, that wind capacity factors are rising nationwide, and that coal is in many instances no longer providing base load power, but only load-following or peaking service.

Clark Williams-Derry supplemented Regan and Schissel's description of domestic electricity sector dynamics with several points about international markets for coal, and metallurgical coal in particular. He described the recent history of the Pacific rim market as featuring two bubbles: the general commodities bubble that ended with the 2009 crash, and a bubble specific to Chinese metallurgical coal demand that burst in 2012. Williams-Derry described how U.S. coal companies engaged in a bidding war for assets and firms in Australia and elsewhere in the run up to the burst of the second bubble, in the hopes of offsetting loses in the U.S. with sales abroad. That resulted in those companies paying top dollar at the height of the 2011 coal price peak and then facing a sharp downturn in coal prices *and* demand as China reduced its demand for coal and as multiple competing sources of coal came online in Australia, Indonesia, Russia, within China, and elsewhere. The acquisition of these overpriced assets, coupled with a generally unforgiving U.S. market for coal, pushed several firms into bankruptcy.

All three panelists agreed that fluctuations in natural gas prices would lead to occasional departures from U.S. coal's secular downward trend, but that the growth of renewables and storage would continue to gnaw away at an accelerating rate at the basic underpinnings of coal's place in the electricity sector.

Panel 2: The Future Direction of Coal Markets: Dimensions of Supply, Demand and Prices

Howard Gruenspecht, U.S. Energy Information Administration (EIA)
Tony Yuen, Citibank
Ken Gillingham, Yale University
Ted O'Brien, Doyle Trading

Guest Commentator: Ali Zaidi, OMB

Moderator: Jason Bordoff, Columbia Center on Global Energy Policy

Summary description:
The panelists described different facets of the coal marketplace, but all—implicitly or explicitly—highlighted the relevance of policy to coal's future.

Howard Gruenspecht of the U.S. EIA noted that about 95% of coal consumed in the U.S. is burned to generate electricity, but that EIA's projections had included no new coal-fired plants since 2012 owing to several factors. That particular projection did not change in a modeled scenario in which the Clean Power Plan never entered into force. However, other EIA projections reflect significant negative effects of the CPP on coal production in the Powder River Basin, and lesser but still notable effects in the Illinois Basin and Appalachia. Gruenspecht also pointed out that EIA does not anticipate that prospective changes in international demand will offset the large secular declines expected in domestic markets.

Tony Yuen titled his presentation "a duel between policy and markets," and summarized the scenario facing coal in this way: the U.S. pie (i.e., the domestic electricity marketplace) is shrinking owing to renewables growth, efficiency gains, and demand side management, but international coal consumption is likely to continue at its current rate, and the coming rise in natural gas prices is likely to slow or stop coal's recent slide in the near term. In consequence, policy, by putting a thumb on the scales in one direction or another, will matter a great deal to coal's prospects.

Ken Gillingham discussed coal mined from federal lands and the royalties charged for that extraction. He noted that 42% of thermal coal sold in the U.S. is "federal coal" and that such coal had out-competed other sources on price for decades. Gillingham then explained several of the reasons that the Department of Interior is reviewing its coal leasing program and planning to issue a programmatic environmental impact statement to update that program: royalties charged for coal are 1/6th its market price and many times below the Social Cost of Carbon (in contrast to other fossil fuels, for which royalties are closer to what charging the SCC would yield); 90% of auctions have a single bidder because they are generally for continuations rather than new leases; and most bids for those leases are near the (confidential) minimum bid. Gillingham then noted that charging royalties equal to the SCC would effectively keep federal coal in the ground and suggested that charging 20% of the SCC—because royalties are split with states—could provide a revenue stream for programs that ease the pain of a transition away from coal.

Ted O'Brien described 2011-2015 as a disastrous window of years for U.S. coal, but also described relatively rosy prospects for coal in the near future. He said that prices have jumped in recent months—and even days—owing to several sources of novel international demand (notably including mandated limits on Chinese coal mine production) and hiccups in several Australian mines. He also said that coal-to-gas switches in the U.S. electricity sector would likely reverse in several instances as natural gas prices rise in the coming year.

The panelists generally agreed that a build-out of gas pipelines and export facilities would boost natural gas prices, at least regionally and under certain circumstances, by connecting the Marcellus and Utica shale plays to national and international markets, and that the coal industry would benefit from this price increase. However, they also generally agreed that U.S. coal would benefit relatively little over the long term from changes in Asian markets, because of the competition they would face from producers across the Pacific.

Ali Zaidi of OMB joined the panel to describe the Obama administration's commitment to smoothing the transition for coal industry workers, and to developing carbon capture and sequestration technologies, which DOE currently aims to make viable at a $40/ton carbon price within 10 years.

Panel 3: Bankruptcy, Ownership and Financing: Coal in the 21st Century

Prof. Ed Morrison, Columbia Law School
Peter Morgan, Sierra Club
Anna Zubets-Anderson, Moody's
Brian Resnick, Davis Polk & Wardwell

Moderator: Sharon Buccino, Natural Resources Defense Council (NRDC)

Summary description:
The four panelists discussed the general purpose and process of bankruptcy under Chapter 11, how recent bankruptcies have affected the coal industry and how coal companies' financial obligations with respect to reclamation and employee benefits are treated in bankruptcy proceedings.

Professor Ed Morrison began the panel with an overview of bankruptcy law and the procedural aspects of bankruptcy proceedings for coal companies. He noted that there has been a significant increase in bankruptcy in the past few years, with nearly 40 filings in 3 years by mid-2015. While 50% of the recent filings are liquidations under Chapter 7 of the Bankruptcy Code, the largest coal companies have filed for bankruptcy under Chapter 11. Under Chapter 11, the debtors can seek to adjust and reorganize debts in order to keep the business alive and pay creditors over time. There are several approaches to Chapter 11 bankruptcy. The first is a traditional bargaining procedure whereby the debtor proposes a plan of reorganization, the creditors vote on it, and if enough creditors support the plan, the debtor can override dissent by showing that the plan complies with certain rule. This process can take years to complete. There are also two faster approaches to bankruptcy which have become increasingly common: the debtor can sell itself to a buyer during bankruptcy, and the cash is distributed in order of priorities to creditors, or the debtor can pre-negotiate a plan with creditors before it enters bankruptcy. Several coal companies, such as Patriot Coal and Arch coal, have opted to sell all or part of the company during their bankruptcy proceedings.

Professor Morrison also highlighted several "wrinkles" in the bankruptcy proceedings for coal companies. First, he noted that the automatic stay which occurs during bankruptcy proceedings (which stops nearly all creditors from pursuing action against a debtor) does not stop the government from obtaining an injunction to enforce clean-up of a mine site. Second, he noted that it can be difficult to assign a value to future harms and clean-up costs during the claims valuation process, which means that these financial obligations may be undervalued during the process. Third, he noted that debtors can typically abandon burdensome properties, and that coal mine properties *might* fall into this category (however, the Supreme Court has held that you cannot abandon property if it poses an imminent risk of harm to the public). Fourth, he noted that collective bargaining agreements and pension and employee benefits can be terminated in bankruptcy proceedings under § 1113 of the Bankruptcy Code, if termination is necessary to complete reorganization (2nd Cir.) or liquidation (3rd Cir.).

Brian Resnick discussed how financial obligations related to reclamation are treated in bankruptcy proceedings. He noted that the ranking of these obligations are not specified in bankruptcy law, but generally speaking, reclamation does not have priority as compared with other debts (particularly debts to secured creditors and others with collateral). That said, most buyers will consider reclamation obligations when coming up with a purchase price for the company. Resnick also discussed the types of investors that are now buying coal companies or stakes in coal companies that have gone bankrupt. He noted there is a good deal of variation in terms of the types of companies (e.g., privately owned vs. publicly owned) and their reasons for investing in this sector.

Peter Morgan gave a brief overview of why and how the Sierra Club has gotten involved in the bankruptcy proceedings for coal companies such as Patriot, Peabody and Arch coal. The key reason for Sierra Club's intervention was to ensure that environmental considerations (such as the company's reclamation and water treatment obligations) would receive adequate attention in the proceedings. He also discussed how the problems with self-bonding became apparent in bankruptcy proceedings, citing the Alpha Natural bankruptcy as an example. Regulators had allowed Alpha to self-bond over $650 million of its reclamation obligations in West Virginia and Wyoming. The same regulators eventually agreed to a bankruptcy reorganization plan in which Alpha was allowed to split into two companies, one with its most valuable assets and other with remaining high liability assets and no clear plan as to how it will satisfy its reclamation obligations (some money was set aside for reclamation, but not enough to cover all of the costs). Morgan said that the regulators reached this agreement because they were "negotiating with a gun to their head" – that is, the threat of Alpha filing for Chapter 7 liquidation and all of the costs going to the public.

Finally, Anna Zubets-Anderson provided the perspective of a credit rating company on the current status of coal mining companies. She noted that the credit ratings for coal companies have declined quite sharply in recent years, and that the outlook for the coal industry is negative. She said that companies that recently reorganized under Chapter 11 are better situated in many instances than the companies that have not filed for bankruptcy, but this does not change the long-term outlook for these companies. She concluded by saying that, even if gas prices go up, the credit ratings of coal companies will likely remain low due to the regulatory environment.

Panel 4: Coal's Legacy: Legal Liabilities

David Hillman, Shulte Roth & Zabel LLP
Mark Squillace, Colorado Law School
Andrew Stevenson, JUST Capital

Moderator: Jessica Wentz, Sabin Center for Climate Change Law

This panel discussed "legacy liabilities" for coal mining companies, which include liabilities related to the reclamation and clean-up costs for retired or abandoned mines, as well as liabilities related to the provision of employee and retiree benefits. There was some overlap with the previous panel, because the issue of bankruptcy is front and center when thinking about how and whether these companies can be held liable for environmental clean-up costs, health and disability benefits, and pensions.

Professor Mark Squillace started the panel with a presentation about reclamation liabilities under the Surface Mining Control & Reclamation Act (SMCRA). SMCRA requires companies to restore the area (including soils, hydrologic conditions, and all other resource values) to pre-mining conditions, which is a very costly endeavor. SMCRA also requires performance bonds to ensure the clean-up will take place, but it allows companies to self-bond. Regulatory criteria for self-bonding are relatively stringent, but still not enough to provide a real financial assurance that the companies will be able to reclaim the land. One key problem is that the the Office of Surface Mining, Reclamation & Enforcement (OSMRE) has allowed parent companies that aren't eligible for self-bonding to meet SCRMA requirements by creating a subsidiary company that is eligible for self-bonding. When the parent company goes bankrupt, the subsidiary does as well. Professor Squillace concluded by noting that there are some enforcement activities going on right now: compelled by complaints by WildEarth Guardians, OSMRE has issued notices to states re: violations of SMCRA, but the states have responded alleging that there is no violation, and OSMRE has not yet taken further action.

David Hillman spoke about labor-related liabilities, such as legacy healthcare costs for retirees. He described several types of such liabilities and whether they can be terminated in bankruptcy. First, there are benefits from collective bargaining agreements (CBAs), and these can be terminated in bankruptcy if deemed necessary for the reorganization or liquidation. Second, the Coal Act imposes two types of obligations on companies: to provide healthcare benefits to their own retirees and dependents, and to pay monthly premiums to health care funds that cover not only the operator's former employees but also employees of operations that have gone out of business. Bankruptcy courts have held that the debtors may terminate or modify the healthcare benefits, but they cannot terminate the premiums (because these are treated in bankruptcy as taxes with administrative expense priority status). Third, the Black Lung Act requires operators to pay certain health and disability benefits to current and former employees with black lung disease and to pay an exercise tax on coal sales. The Black Lung obligations cannot be terminated in bankruptcy: the person with black lung has an unsecured claim against the operator, and if the operator cannot pay, the employee can receive funds from the federal Black Lung Disability Trust Fund.

Andy Stevenson concluded the panel with a presentation about taxpayer liability to these costs when coal companies go bankrupt. He noted that the short-term taxpayer costs from coal bankruptcies are up to $3.7 billion from the big 3 coal companies alone (Alpha Natural, Peabody, and Arch Coal). This includes $1.7 in exposure from coal mine reclamation settlements. In terms of long-term taxpayer costs, he estimated that there could be up to $30 billion in total mine and worker retirement obligations.

During the discussion, the panelists agreed that OSMRE's decision to strengthen the self-bonding regulations might help address some of these problems – particularly if OSMRE required regulators to act more like private financial institutions when deciding whether companies should be eligible to self-bond. However, given the scale of current legacy liabilities, they also felt that other solutions would be necessary to protect taxpayers from the costs of coal bankruptcies. Andy Stevenson recommended the short-term solution of a Bailout Recovery Fee on coal production that would allow states to recoup their unpaid coal bills, and the longer-term solution of a coal-utility fee to help cover taxpayer exposure created by the coal industry.