

October 7, 2013

MEMORANDUM

TO: John Conti
Assistant Administrator for Energy Analysis

Alan Beamon
Director, Office of Electricity, Coal, Nuclear, and Renewables Analysis

FROM: Coal and Uranium Analysis Team

SUBJECT: AEO2014 Coal Working Group Meeting II Summary

Attendees (31)

Name	Affiliation
Greg Adams (Moderator)	US DOE: EIA
Vlad Dorjets	
Bob Eynon	
Elias Johnson	(W)
Ayaka Jones	
Diane Kearney	
Jim Diefenderfer	
Mike Mellish	
Carrie Milton	
Sikander Khan	US DOE: FE/HQ
Ehsan Khan	US DOE: FE/HQ
Jose Benitez	US DOE: FE/NETL (W)
Christopher Nichols	US DOE: FE/NETL (W)
Charles Zelek	US DOE: FE/NETL (W)
Donald Remson	US DOE: FE/NETL (W)
Bill Meroney	US EPA (W)
Brian Fisher	US EPA (W)
Greg Moxness	US DOL: MSHA (W)
Steve Gigliotti	US DOL: MSHA (W)
Carl Lundgren	US DOL: MSHA
Leslie Coleman	National Mining Association (W)
Paul Georgia	National Mining Association (W)
Glenn Carlson	Union Pacific (W)
Carolyn Evans	Norfolk Southern Corporation (W)
Natalie Biggs	Wood Mackenzie (W)
Greg Marmon	Wood Mackenzie (W)
Jamie Heller	Hellerworx, Inc. (W)
James Staudt	Andover Technology Partners (W)
Boddu Venkatesh	ICF International (W)
Jack Ried	Seminole Electric Cooperative, Inc. (W)
Keith Harrison	Southern Company (W)

(W) = Participated via WebEx connection.

Meeting Summary

EIA staff reviewed results from the NEMS model as of the date of the working group meeting held on September 26, 2013 at DOE Headquarters. Staff offered several additional points of information during the presentation, including:

- Although Two Elk Generating Station appeared as planned in Slide 10, this plant would likely be removed in the final AEO run, and on Slide 13 the 2.4 GW mentioned currently includes the 275 MW Two Elk plant;
- Relative to the AEO2013, less petroleum capacity is expected to retire through 2040;
- More plants in the Georgia/Florida coal demand region are projected to retire in the AEO2014 compared to the AEO2013;
- The average minemouth price of coal in the preliminary AEO2014 is a little lower than in AEO2013 due largely to lower prices for coking coal.

Staff also provided clarifications in response to questions from those in attendance, including:

- Coal plants are allowed to cycle in the model.
- The CO₂ rule for existing coal plants is not included in the AEO. Only final regulations are included in the AEO Reference case, and the draft New Source Performance Standards recently published by EPA would not likely have much of an impact since the model builds very little coal in the Reference case;
- EIA does not publish international coal prices, primarily because the modeling of international coal markets is not as robust as the modeling of the U.S. domestic coal market. Annual cost updates for the international coal export supply curves represented in NEMS are based largely on changes in U.S. coal export and import prices (documentation available on the EIA website more fully explains the method used to model international trade in the AEO – refer to: [http://www.eia.gov/forecasts/aeo/nems/documentation/coal/pdf/m060\(2013\).pdf](http://www.eia.gov/forecasts/aeo/nems/documentation/coal/pdf/m060(2013).pdf));
- The productivity assumptions are exogenous to the model and do not include a demand feedback mechanism;
- The Interior coal price is higher in the preliminary AEO2014 compared to the AEO2013, but in combination with higher production levels;
- EIA did not specifically quantify the contributing factors leading to the decline in productivity seen for Central Appalachia in the last decade, due in part to the limited data available to EIA; staff noted declining seam thickness and tougher mining conditions in the region as contributing factors to the declining productivity, in addition to permitting and increased regulatory scrutiny, where the region is no longer amenable to longwall mining, and mountaintop removal operations in particular are subject to greater scrutiny; a productivity white paper by staff on the subject is anticipated sometime in the next year.

One commenter suggested that lower demand for lower sulfur coal as the result of increased scrubbed capacity contributed to the worsening outlook for Central Appalachian productivity, noting the increased use of Illinois basin coal. Staff noted that lower production in response to lower demand is one of several factors that could be contributing to lower productivity as mines are operated at lower capacity utilization or idled in response to the market forces.

One commenter asked if the increase in Western coal for exports was due to an assumption that new coal ports would be built. Another commenter specifically asked if there were any port constraints. EIA staff replied that no specific assumption regarding ports is included in the AEO assumptions but the projections also do not preclude it. The first commenter stated that the quantity projected would seem to imply that some capacity would need to be built, citing the expectation that these new ports could handle potentially 100 million tons, and noting a concern that limited amounts of Interior coal were projected to be exported. Staff stated that transportation costs for exports exist in the model and if prices are economic then coal will be exported. The second commenter mentioned that Kinder Morgan is planning to double export capacity most of which is out of the Gulf, and posed that it would be conceivable that some of this could be Powder River Basin coal.