

October 4, 2012

MEMORANDUM FOR: John Conti  
Assistant Administrator for Energy Analysis

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

FROM: Coal and Uranium Analysis Team

SUBJECT: AEO2013 Coal Working Group Meeting II Summary

Attendees:

\*Leslie Coleman (National Mining Association)  
Jim Diefienderfer (EIA)  
Bob Eynon (EIA)  
Eric Eschmann (EPA)  
Karen Freedman (EIA)  
\*Paul Georgia (National Mining Association)  
\*Eric Grol (NETL)  
Tyler Hodge (EIA)  
Elias Johnson (EIA)  
\*Serpil Kayin (EPA)  
Diane Kearney (EIA)  
Sikander Khan (DOE: Fossil Energy)  
Jordan Kislear (DOE: Fossil Energy)  
\*Bill Meroney (EPA)  
Carrie Milton (EIA)  
Sam Napolitano (EIA)  
Tien Nguyen (DOE: EE)  
\*Chris Nichols (NETL)  
Nick Paduano (EIA)  
\*Anthony Paul (Resources for the Future)  
\*Paul Pierce (USGS)  
\*Donald Remson (NETL)  
Marie Rinkoski-Spangler (EIA)  
\*Henry Rubert (CSXT)  
Dave Schoeberlein (US DOE: Office of Policy and International Affairs)

\*non-EIA/DOE attendees

Presenter: Mike Mellish  
Meeting date: 10/4/2012

*Topics covered included assumptions and preliminary projections for the Annual Energy 2013.*

Key topics of discussion:

1. One participant inquired how the natural gas resource outlook compared to last year. The coal team responded that they did not know the specifics of this year's assumptions versus last year's. One EIA colleague mentioned that EIA staff plans to review a new USGS gas resource report, and will consider whether its contents should or could be included in the assumptions for this year's outlook.
2. One participant asked why coal consumption is rising over the projection in light of the natural gas price and coal regulations. Staff explained that electricity demand is projected to rise over the projection, and natural gas prices also rise. Both factors contribute to a rising coal outlook.
3. One participant asked how the model determines which ports are used for exports. Staff indicated that the coal model does not model exports at that level of detail. Instead, the coal model has demand regions which are then aggregated into four larger export regions. For example, the U.S. East Coast and the U.S. West Coast represent two of these larger export regions. Using this regional aggregation, the coal model represents domestic rail rates for U.S. supply/demand region pairs and then ocean freight rates from the four larger U.S. export regions.
4. A meeting participant inquired how much coking coal is projected to be exported in 2040. Staff responded that preliminary projection indicated about 70 million tons of coking coal and 100 million tons of thermal coal.
5. One participant asked if Slide 13 entitled "Cumulative coal-fired capacity retirements by coal demand region, 2012-2035" included both planned and modeled coal-fired generating capacity retirements, to which staff responded yes.
6. One participant commented that with a different outlook for fuel prices, the projections might yield a different path for retirements. EIA staff indicated that this would be the case, and, in fact, was demonstrated in the alternative natural gas and coal price cases developed for the AEO2012.
7. One participant asked if we were including Phase 2 of CAIR. The tighter emission cap for Phase II of CAIR takes effect in 2015 and is represented in the current AEO2013 modeling runs. Staff responded that in the near-term CAIR is assumed to start in 2012. Other staff also mentioned that because pre-CAIR SO<sub>2</sub> allowances (2004-2009) could be used in a 1:1 ratio instead of a 2:1 ratio under Phase I of CAIR (2010-2014), an early compliance incentive was provided to electricity generators leading to a large build of banked SO<sub>2</sub> allowances. Staff stated that, in effect, CAIR began as far back as 2005, when CAIR was finalized. As a result, staff explained, the bank is quite large and it mutes CAIR's effect until MATS kicks in and the model is left with a large bank of sulfur dioxide allowances.
8. One participant asked why there is a dip in coal consumption early in the projection. Staff responded that this is primarily due to the low gas prices seen recently. Staff mentioned that low gas prices have made modeling coal markets more challenging.

9. One participant asked what the coal team means when it mentions that western coal typically is the marginal coal supplier. The coal team indicated that, as a rule of thumb, when there is higher demand for coal in general, western coal typically fills in the gap. Likewise, when there is a decline in electricity coal demand, western coal typically falls off first.
10. A participant asked if Appalachian prices were driven by changes in prices for Northern Appalachia or did prices reflect the changes in all of the Appalachian regions. Staff responded that the prices reflect similar trends in all of the Appalachian regions, but noted that some of the higher average prices seen in recent years also reflect the higher coking coal prices. Staff indicated that higher coal export prices in 2011 accounted for much of the roughly \$5 to \$6 per short ton increase in the overall average U.S. minemouth coal price that occurred in 2011.