

WORKING GROUP PRESENTATION FOR DISCUSSION PURPOSES. DO NOT QUOTE OR CITE AS AEO2015 MODELING ASSUMPTIONS AND INPUTS ARE SUBJECT TO CHANGE.

July 30, 2014

MEMORANDUM

TO: John Conti
Assistant Administrator for Energy Analysis

Jim Diefenderfer
Director, Office of Electricity, Coal, Nuclear, and Renewables Analysis

FROM: Coal and Uranium Analysis Team

SUBJECT: AEO2015 Coal Working Group Meeting I Summary

Attendees (39)

Name	Affiliation
Greg Adams (Moderator)	US DOE: EIA
Jim Diefenderfer	
Tyler Hodge	
Elias Johnson	
Ayaka Jones	
Eric Krall	
Laura Martin	
Mike Mellish	
Kate Schramm	
Sundar Thapa	
Kislear, Jordan	US DOE: FE/HQ
Benitez, Jose	US DOE: FE/NETL
Pickenpaugh, Gavin	US DOE: FE/NETL
Remson, Donald	US DOE: FE/NETL
Bergman, Aaron	US DOE: HQ
Schoeberlein, David	US DOE: HQ
Gehlhar, Mark	US DOI: OSM
Rockwell, Joshua	US DOI: OSM
Pierce, Paul	US DOI: USGS
Gigliotti, Stephen	US DOL: MSHA
Lundgren, Carl	US DOL: MSHA
Moxness, Greg	US DOL: MSHA
Fisher, Brian	US EPA
Meroney, William	US EPA
Stevens, William	US EPA
Blumenfeld, Andy	Arch Coal, Inc.
Holmes, Mike	Energy & Environmental Research Center
Kumar, Abhishek	Energy Ventures Analysis, Inc.
Marvin, Katie	Energy Ventures Analysis, Inc.
Medine, Emily	Energy Ventures Analysis, Inc.
Heller, Jamie	Hellerworx, Inc.
Venkatesh, Boddu	ICF International
Coleman, Leslie	National Mining Association
Georgia, Paul	National Mining Association
Evans, Carolyn	Norfolk Southern Corporation
Peters, Jamie	Union Pacific Railroad
Marmon, Greg	Wood Mackenzie
Echter, Dana	Xcel Energy
Shattuck, Paul	Xcel Energy

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AEO2015

EIA staff informed the coal working group participants that the AEO2015 will be a shorter, interim edition of the Annual Energy Outlook, and is scheduled for release in late 2014. The AEO2015 will include a smaller set of cases that will include the Reference, Low and High Economic Growth, Low and High Oil Price cases, and perhaps one or two additional cases. The shorter edition this year will include tables for these cases, along with brief discussions of the results. The AEO2016 will be the next full edition of the Annual Energy Outlook, with a planned spring 2016 release date.

CAA 111(b): New Source Performance Standards

EIA staff indicated that EPA's draft new source performance standards for electric generating plants (CAA 111(b)) are expected to be finalized in January 2015. Because this date falls outside of the AEO2015 cycle, EIA plans to defer representation of CAA 111(b) until the AEO2016 projection cycle. The draft standards establish CO₂ emission rate limits for new fossil-fueled power plants, which essentially require the use of carbon capture and sequestration (CCS) technology at new coal-fired generating. A couple of participants indicated that EIA may want to consider representing these requirements in the AEO2015, as the draft rule specifically indicates that the requirements are retroactive and are currently effective. **EIA staff indicated that they would consider this recommendation, but would likely stay with the current proposal to defer representation of CAA 111(b) in the AEO Reference case until the AEO2016 cycle, as EIA's standard policy for its Reference case projections is to include only legislation and environmental regulations that have been finalized prior to the date that modeling runs have been completed.**

CAA 111(d): Proposed Carbon Pollution Emission Guidelines for Existing Stationary Sources

EIA staff indicated that EPA's draft rule (Clean Power Plan) for reducing CO₂ emissions from existing power plants is not expected to be finalized until June 2015. Because this date falls outside of the AEO2015 cycle, EIA plans to defer representation of CAA 111(d) the AEO Reference case until the AEO2016 projection cycle. Participants provided a few comments regarding their understanding of EPA's Clean Power Plan. One participant indicated that States are not restricted to using the four building blocks discussed in EPA's Clean Power plan for achieving proposed reductions of CO₂ emissions. Another participant indicated that one of the supporting documents for the Clean Power Plan discusses the possibility of using mass-based CO₂ emission limits instead of rate-based limits. Another participant indicated EPA expects to receive many comments on the draft of their Clean Power Plan. **EIA staff indicated that they would take a closer look at the Clean Power Plan supporting document that discusses the rate- and mass-based approaches, and would follow up with staff from the EPA.**

Mercury and Air Toxics Standards (MATS)

EIA staff indicated that plans are to represent MATS in the same manner as it was represented in the AEO2014, with compliance required by the beginning of 2016. One participant indicated that many generators may actually be given a compliance extension until 2017. **EIA staff indicated that this is something that they would look into further, particularly in cases where reported retrofits of environmental equipment to EIA, such as FGD scrubbers needed for MATS compliance, are for years later than 2016.**

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Reported Coal-Fired Capacity Additions and Retirements

EIA staff indicated that current data collected on Form EIA-860 indicate only 584 megawatts (MW) of planned coal-fired capacity additions (the 522-MW Kemper County IGCC plant in MS and the 62-MW Spiritwood plant in ND), and 28 gigawatts of reported coal-fired capacity retirements for the years 2012 through 2021. One participant asked about whether or not EIA would be providing any preliminary updates regarding reported data on planned capacity additions and retirements. **EIA staff indicated that there have been some delays in EIA's data collection efforts this year due to OMB clearance issues, but further updates for planned capacity additions and retirements for the AEO2015 are expected based on new monthly respondent data reported on the Form EIA-860M survey.**

Rail Transportation Issues

One participant asked whether or not EIA expects any impacts in their AEO2015 projections regarding transportation issues encountered during the past year. EIA staff indicated that the recent rail-related issues were primarily considered to be a short-term issue and have been factored into EIA's short-term outlook for regional coal production. In the longer term, EIA projects that coal transportation rates will remain relatively flat on a constant dollar basis, increasing at the general rate of inflation. Another participant indicated that a flat long-term outlook for coal transportation rates on a constant dollar basis seems reasonable. However, this participant noted that going forward coal may become an increasingly lower priority with other types of rail shipments, such as oil and intermodal (truck trailers and containers) gaining in importance, leading to more periodic disruptions in coal rail service such as was experienced during the winter/spring of 2014. Another participant indicated that all rail service may experience increasing levels of congestion during the next few years if trains carrying shipments of crude oil are required to travel at reduced speeds due to safety concerns. In the long term, conditions should improve as newer and safer tanker cars are introduced into the fleet. **With the exception of the short-term impacts on regional coal production represented in EIA's Short-Term Energy Outlook, the impact of the recent rail service issues are not expected to significantly affect EIA's longer-term outlook for coal transportation rates and distribution patterns. The projected levels of coal transportation rates in the AEO2015 are expected to be similar to the AEO2014.**

U.S. Coal Exports

EIA staff noted that the most recent near-term projections for coal exports are trending considerably below the AEO2014 export projections. Recent declines in international coking coal prices lead to further declines in projections of U.S. coking coal exports in 2014 and 2015 in the July 2014 edition of EIA's Short-Term Energy Outlook (STEO), although continuing higher demand for coal for generation in Europe, particularly for Germany, leads to a slight uptick in EIA's projections for steam coal exports in 2015. **EIA staff indicated that the AEO2015 projections for coal exports will factor in this less optimistic outlook for coal exports in the near term, although some growth in U.S. coal exports is still expected in the longer term outlook.**