

September 27, 2013

MEMORANDUM FOR: John Conti  
Assistant Administrator for Energy Analysis

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

Paul Holtberg  
Team Leader  
Analysis Integration Team

FROM: Electricity Analysis Team

SUBJECT: Summary of Second AEO 2014 Electricity Working Group Meeting held on September 25, 2013

ATTENDEES: Adams, Greg (EIA OEA)  
Aniti, Lori (EIA OEA)  
Bredehoeft, Gwendolyn (EIA OEA)  
Crozat, Matthew P. (US DOE: Office of Nuclear Energy)  
Diefenderfer, Jim (EIA OEA)  
Eynon, Bob (EIA OEA)  
Fan, Cha-Chi (EIA OES)  
Gospodarczyk, Marta (EIA OEA)  
Hagen, Ronald (US DOE: Office of Nuclear Energy)  
Jones, Jeff (EIA OEA)  
Kislear, Jordan P (US DOE: Office of Fossil Energy)  
Leff, Mike (EIA OEA)  
Lowenthal-Savy, Danielle (EIA OEA)  
Martin, Laura (EIA OEA)  
Milton, Carrie (EIA OEA)  
Namovicz, Chris (EIA OEA)  
Nethercutt, Elliott (North American Electric Reliability Corporation)  
Slater-Thompson, Nancy (EIA OEA)

WEBEX

ATTENDEES: Arguello, Ed (City of Colorado Springs Dept. of Utilities / NCTA)  
Benitez, Jose (US DOE: National Energy Technology Laboratory)  
Fleischman, Lesley (Union of Concerned Scientists)  
Gates, Kyler (Westinghouse)  
Goggin, Michael (American Wind Energy Association)  
Hodge, Tyler (EIA OEA)

WEBEX (con'd)

Holdsworth, Eric (Edison Electric Institute)  
Sattler, Sandra (Union of Concerned Scientists)  
Soni, Michael (The University of Texas at Austin)  
Stevens, Bill (US Environmental Protection Agency)  
Tibbs, Lynsey (Southern Company Services)  
Van Brunt, Michael (Covanta Energy)  
Williams, Emily (American Wind Energy Association)  
Wood, Frances (OnLocation)  
Wright, Evelyn (DecisionWare)  
Zelek, Charles (US DOE: Office of Fossil Energy, National Energy Technology Laboratory)

*Presentation topics covered included the main environmental regulatory assumptions that will be used in the AEO2014, enhancements incorporated into the model, updates to the data and input files, and preliminary model results as of September 20, 2013. Discussion of the environmental regulations centered on updates to the MATS modeling from AEO2013 and updates to RGGI. The model enhancements discussed included reserve margins and capacity payments, spinning and operating reserves, and carbon transport utilization and storage. The presentation concluded with a discussion of the changes in the AEO and IEO cycles moving forward.*

Specific topics that participants raised were as follows:

1. A participant inquired as to how EIA was incorporating information on plant retirements that appear in press releases. Staff explained that EIA's Electricity Analysis Team works with EIA's Office of Energy Statistics to resolve discrepancies between press reports and other sources versus information reported on the Form EIA-860 with respect to retirements. Staff indicated that NEMS makes every attempt to be consistent with the information reported on the Form EIA-860.
2. A participant wanted to know whether EIA planned to incorporate the greenhouse gas regulations that were announced last week. Staff pointed out that since the New Source Performance Standards were a proposal at this point they would not be incorporated into the reference case. However, there is a high probability that a side case will be run to examine the impact.
3. A participant wanted to know if EIA incorporates any additional capacity updates beyond what has been reported to EIA. Staff replied that while EIA does include the reported capacity updates in its projections, the model has the option to build additional nuclear capacity, which could effectively represent an update.
4. A participant asked what computer model is used, and Staff responded that we use the National Energy Modeling System (NEMS).
5. After the final slide, which explained the upcoming changes in the AEO and IEO cycles, a participant asked whether there would still be an early release. Staff informed him that there will be an early release for the AEO2014, but since an interim edition of the AEO would occur in 2015, EIA would only have a single release that year.
6. A participant wanted to know if the 1% annual growth in electricity demand throughout the forecast incorporated demand response. Staff responded that the demand modules don't model demand response explicitly, but would incorporate any changes in trends

reflected in recent data. The electricity model does allow a storage-type capacity to be built to offset peak demand, but the load is shifted and does not affect the overall level of demand.

7. A participant wanted to know when changes about cost assumptions would be available, specifically with respect to levelized costs. Staff said that the capital costs are the same as those used in AEO2013, based on the SAIC study. EIA will be updating the levelized cost report, sometime after the early release, but prior to the full release. Staff further indicated that generating unit information is still based on the SAIC report; however the levelized costs could change based on interest rates, the amount of builds, or the level of operation.
8. A participant asked about the drivers for the change in load growth from 0.9% to 1.3%. Staff clarified that the average annual load growth rate was similar to last year, only increasing from 0.9% to 1.0% per year. The total demand in 2040 has increased by 1.3% compared to last year.