AEO2015 Transportation Working Group Meeting Wednesday, July 30, 2014 2:00 – 3:00 p.m.

Attendees in person:

Austin Brown (NREL)

Christopher Ramig (EPA)

David Babson (EPA)

Devi Mishra (EIA)

John Maples (EIA)

Lauren Rafelski (EPA)

Mindi Farber-DeAnda (EIA)

Nicholas Chase (EIA)

Patricia Hutchins (EIA)

Salil Deshpande (Energetics)

Tom Stephens (ANL)

Tom White (DOE)

Attendees on the phone:

Aaron Hula (EPA)

Alicia Birky (TA Engineering)

Chris Nevers (EPA)

Chris Roof (Volpe)

Christopher Grillo (IHS)

Dallas Burkholder (EPA)

Don Pickrell (Volpe)

Ed Coe (EPA)

Erik Herzog (EPA)

Frances Wood (On Location)

Jarrod Brown (EPA)

Siddiq Khan (ACEEE)

Stephen Zoepf (DOT)

Therese Langer (ACEEE)

Walter Gazda (Volpe)

Yan Zhou (ANL)

Questions asked by attendees:

- 1. When will the AEO2015 be published?
 - a. The *AEO2015 Shorter Summary*, which replaces the Early Release this year as the final AEO publication, will be published in December 2014.
- 2. Although there will only be 6 cases in the *AEO2015*, will the table browser format stay the same?

- a. Yes, the table format will stay the same, but it will only contain information for the 6 cases. There <u>may</u> also be additional transportation information/data made available in the tables that were not previously made available.
- 3. Will there be any updates to 2013 electric vehicle battery or systems costs? Are there any thoughts on adding more electric vehicles, e.g. a 300-mi EV?
 - a. There are no plans for updating electric vehicle costs for AEO2015.
 - b. The availability of Bloomberg PHEV/EV pack prices was mentioned.
 - c. There are no plans to add other vehicles for *AEO2015*, but this could be revisited for *AEO2016*.
- 4. Mention of the ZEV standards, specifically the 8 states with 2025 target.
 - a. EIA is planning to better capture the ZEV standards in the AEO2016.
- 5. Will EIA be considering the local subsidies in California for ZEVs?
 - a. Currently, EIA does not consider local ZEV subsidies due to the difficulties of collecting the information.
- 6. How are the hybrid vehicles defined? How does EIA capture such technologies as range extenders?
 - a. EIA light-duty vehicle technology options include micro hybrid and mild hybrid that are separate from full hybrid electric vehicles (HEV). Micro hybrid technology incorporates start/stop technology that allows the engine to turn off when the vehicle is coasting or idling, but does not provide any motive power. Mild hybrid technology incorporates start/stop technology, as well as some power assistance to the drive train but no electric-only motive power. Vehicles with these technology options are not connected to the electrical grid.
- 7. Has EIA made any improvements to the VMT modeling?
 - a. For *AEO2014*, EIA updated the population, licensing rates, and travel behavior for 5 age categories, and two gender categories, from a previous single age and gender category. This analysis can be found in the *AEO2014* publication.
- 8. How is EIA planning to deal with the potential for E15 warranted vehicles entering the market place?
 - a. The transportation module does not currently have an E15 vehicle in the model, nor do we plan to explicitly model one. The potential for E15 in the market place will be determined by the Liquid Fuels Market Module, which will consider a number of parameters that will ultimately limit supply.
- 9. Will the new freight updates allow for the transportation module to better link up with all NEMS commodities?
 - a. Currently, coal is linked up to the freight model, but no other energy commodities are available. The goal for *AEO2016* is to pull out other energy commodities for modeling freight demand and to expand aggregated commodity categories from 10 to 43.
- 10. EIA's shift from using the CFS to the FAF is well received by the attendees. With this freight data change to the model, do you expect any gross changes for truck?
 - a. After employing the FAF updates, the heavy-duty vehicle demand will be slightly lower than last AEO.

- 11. Why don't we see an increase in freight energy demand?
 - a. The ton-mile allocation from the FAF analysis differs from the previous CFS analysis and results in lower travel demand growth.
- 12. Does EIA plan to incorporate any updates in reference to the Phase II HDV standards?
 - a. The transportation module currently accounts for the 13 size classes within the heavy-duty sector, although the online data reporting does not include information to that disaggregation. EIA plans to update the model with any necessary changes from Phase II in AEO2015, potentially as a side case, and in the AEO2016 Reference case if the Final Rule is promulgated on schedule.
- 13. How are 2b and Class 3 pick-ups accounted for in the model? Vocational?
 - a. As mentioned in the previous answer, EIA does include the 13 class breakouts for fuel economy and application of standards, although we do not provide it publicly. EIA hopes to provide disaggregate data by all HDV classes in future AEO publications.
- 14. Was the FAF used for modeling aircraft energy demand?
 - a. No. The air model is separate from the freight model. EIA does model both passenger and freight aircraft energy demand.
- 15. What will the updates to the air model look like in the projections?
 - a. The updates to the air model have not been completed yet, but we do not expect a major change. We are working with Boeing and if we see anything extreme we plan to contact them.
- 16. Does the transportation model take into account changes to petroleum pipelines?
 - a. Petroleum pipeline expansion occurs in the Liquid Fuels Market Module.
- 17. What about petroleum exports and their impact on transportation demand? How are they being captured in the AEO?
 - a. Crude oil exports are not being considered in the AEO2015; however, there will be projections for petroleum product exports, including condensates. Work is being done to analyze the impact of petroleum exports through a number of different EIA products. EIA expects to issue an update of petroleum product exports using NEMS either later this year or possibly early next year.
- 18. How is the *AEO2015* dealing with liquid fuel transport by rail (crude by rail), particularly in response to 2014 policy?
 - a. AEO2015 is not addressing rail transport, especially crude by rail (CBR), in our Liquid Fuels Markets Module (LFMM). We're investigating CBR in order to estimate a data baseline, and incorporating CBR into our other inter-PADD movements by pipeline, tanker and barge. Our goal is to explain more how crude arrives to the refineries where it is processed on a monthly basis. CBR will be incorporated into LFMM once we establish the baseline, possibly for AEO2016.