

March 9, 2016

MEMORANDUM FOR: JOHN CONTI
ASSISTANT ADMINISTRATOR FOR ENERGY ANALYSYS

MICHAEL SCHAAL
DIRECTOR, OFFICE OF ENERGY ANALYSIS

JOHN POWELL
TEAM LEADER, LIQUID FUELS MARKET TEAM

MINDI FARBER-DeANDA
TEAM LEADER, BIOFUELS & EMERGING TECHNOLOGIES
TEAM

FROM: LIQUID FUELS MARKET TEAM

SUBJECT: Second AEO2016 Liquid Fuels Markets Working Group Meeting
Summary (presented on 02-24-2016)

Attendees: (EIA) John Powell, Mindi Farber-DeAnda, Adrian Geagla, Beth May

Jennifer Li (US DOE)

Attending by Phone: Niko Kydes (OnLocation Inc), Joanne Shore (AFPM),
Jarrett Whistance (FAPRI, University of Missouri),
Barbara Treat (Hawaii Gas, LNG)

Presenters: John Powell (EIA), Mindi Farber-DeAnda (EIA)

Presentation:

The presentation identified the changes made to the LFMM since AEO2015, and presented preliminary results related to liquid fuels prices, production, and exports, as well as projected ethanol and E85 production and consumption levels. An important change in assumption made to the LFMM since AEO2015 was the allowance of unrestricted crude exports. Another important change was made in response to a stakeholder's observation that the fuel oil pricing in Census Division 9 to electric utility sector should be based on the historical price in Hawaii since nearly all the consumption in this sector/region is in Hawaii. John Powell (EIA team lead for the Liquid Fuels Markets Team) went quickly through the presentation of the AEO2016 vs AEO2015 Brent spot price path, Brent-WTI spread, and motor gasoline and diesel prices, with the explanation that the lower values in 2016 and 2017 reflect short-term forecasts (February 2016 STEO) and the rise in product prices follows the Reference case Brent prices path. John pointed out that the rise in domestic crude production is paired with a decline in net crude imports, and crude exports (beyond Canada/Mexico) were observed beginning in 2032. This increase in crude exports represents a rebalancing of light and heavy crude processed at domestic refineries. Gross product exports are a function of the product import and export curves defined in the

model. Net share of product supplied follows the pattern of net crude imports. Refinery utilization includes ADU and splitter capacity, and falls between 87 and 91% over the projection years. And, finally, John showed that the model has improved the relationship between residual fuel oil prices in CD-9 and Brent prices by basing the algorithm on demands and prices in Hawaii. Mindi Farber-DeAnda (EIA team lead for the Biofuels & Emerging Technologies Team) pointed out the projected decline in total gasoline consumption that includes only a small rise in E85 consumption. She also noted that total ethanol production has a similar projection to AEO2015. However, cellulosic biofuels production is expected to be much lower due to current start-up issues, reduced crude oil prices, and the economy in general.

Discussion/questions

A question was asked and EIA confirmed that the LFMM is representing tier 3 motor gasoline.

There was interest in the RFS assumption for AEO2016, because a separate model used by the attendee shows more growth in ethanol/E85 than EIA's preliminary results. EIA reiterated that the new RFS targets issued in November 2015 have been incorporated, and that those interested may want to get more information from the RFS testimony Howard Gruenspecht (EIA Deputy Administrator) just presented that morning to the Senate Committee on Environment and Public Works.

A question was asked about the destination of crude exports. EIA explained that the base level of exports reported (630,000 b/d) includes about 75,000 bpd trade to Mexico, and the rest to Canada. The destination of crude above this base level is not explicitly modeled in the LFMM, but is expected to be to countries close to the US and not China (for example). This will be analyzed more thoroughly before AEO is released. The rationale for asking the question was concern for market saturation.

Several attendees asked when AEO2016 will be released, to which EIA responded that the plan is to release the full AEO2016 before the Energy Conference in July 2016. After pointing out how useful the AEO data are to their planning/estimations, a request was made to have EIA release preliminary results for the Reference case, as has been done in the recent past. EIA said they will pass this comment/request to upper management.

Actions to be taken in response to the discussion above:

- Send PDF copy of presentation to phone attendees prior to posting on EIA website (DONE)
- John Powell will ask upper management if a preliminary release of the AEO2016 Reference case is possible
 - o EIA plans to release a comparison of the AEO2016 Reference case with and without the inclusion of the Clean Power Plant assumption, prior to release of the full AEO2016, including update of the website table browser.

Next LFMM Working Group meeting: tentatively, summer 2016