

AEO 2013 Liquid Fuels Markets Working Group 2

October 4, 2012

Attendance (In Person)

Beth May, Mike Cole, Arup Mallik, Vish Mantri, Irene Olson, Julie Harris, Michael Schaal, Andy Kydes, Tom White, Adrian Geagla, Jennifer Li.

Attendance (WebEx)

Mac Statton, Dave Schmalzer, Jarrod Brown, John Prydol, Russ Smith, Rodney Geisbrecht, Dallas Burkholder, Kristen King

Notes by Slide

Slide 2

The reference case in 2013 has a lower oil price compared to last year's AEO out to 2040.

Slide 10 –

Includes modeling of pyrolysis oils

Slide 11 –

This year's AEO includes the California LCFS because the judicial stay was lifted. The LCFS results in imports of Brazilian sugarcane ethanol and consumption of most if not all of the Nation's cellulosic ethanol in California.

Q. What is the effect of the California LCFS in AEO2013?

A. The LCFS results in imports of Brazilian Sugarcane ethanol into California and consumption of cellulosic ethanol in California.

Slide 12 –

Corn Oil and Tallow are needed for biodiesel to meet the LCFS

Slide 13 –

Energy crops are needed to meet the LCFS

There is not enough cellulosic production to meet the LCFS

Slide 17 –

Q. What is driving the refinery yield changes?

A. API gravity of the crude slate is about constant throughout the projection period so it is refinery configuration that allows yield increases.

Slide 14/15 –

Q. Why is GTL included in the projection if the U.S. is an exporter of products?

A. Converting gas to liquids and exports the liquids is economic given the price of gas.

Q. What is the refinery utilization rate with GTL plant builds coming online?

A. Slide not included in deck and the team will follow up.

Other Questions/Comments:

Q. What has changed about the assumptions for drop-in biofuels?

A. Last year it was assumed that the drop-in fuels were sold to refiners, but in practice this probably doesn't happen. This year drop-in fuels are represented in a more expensive fashion.