DRAFT MINUTES JOINT INTERIM COMMITTEE ON ENERGY

Room 171, State Capitol Little Rock, Arkansas Friday, May 13, 2016

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The Joint Interim Committee on Energy met Friday, May 13, 2016, in Room 171 at the State Capitol in Little Rock, Arkansas.

Committee members present: Senators Cecile Bledsoe, Ronald Caldwell, John Cooper and Jimmy Hickey, Jr.; Representatives Bob Ballinger, Co-Chairman; Rick Beck, Vice Chair; David Fielding, Kim Hendren, Jack Ladyman, Mark McElroy, Betty Overbey and James Sorvillo.

Alternate members present: Representatives Jon S. Eubanks, and Vivian Flowers.

Also attending: Senator Jonathan Dismang; Representatives Andy Davis, Jim Dotson, Dan Douglas, Mike Holcomb, Stephen Meeks, Dwight Tosh and Grant Hodges.

Representative Ballinger called the meeting to order.

CONSIDERATION TO APPROVE MEETING MINUTES

[EXHIBIT B]

Representative Fielding made a motion to approve the March 16, 2016, meeting minutes. The motion was seconded by Senator Bledsoe, and the motion carried.

DISCUSSION REGARDING PROPOSED GAS TO LIQUIDS FUEL PLANT IN PINE BLUFF AREA

Mr. Roger D. Williams, Chief Executive Officer, Energy Security Partners (ESP),

was recognized and discussed the economic development and potential incentives of the GTL Americas (GTLA) \$3.7 billion project in Jefferson County, Arkansas to catalyze the conversion of natural gas to liquid (GTL) fuels. The U.S. is short on liquid transportation fuels, which is a hi-value product. The economic and environmental incentives of the GTLA Project includes: [Pwr Pt. Presentation]

- No impurities in diesel produced from natural gas, therefore lower emissions.
- Estimated 100-150 megawatts of surplus electricity will be generated from waste heat, 24 hours a day.
- 2,500 construction jobs plus operational employment of about 240 direct jobs and 350 indirect jobs during phase 1 of the project.
- Products shipping will be multimodal nationwide and possibly overseas. Jefferson County is near several major gas and product pipelines, the Arkansas and Mississippi Rivers, the Union Pacific Railroad, and near I-530 and State Hwy 365.
- A new highway from Stagecoach Road to the project site and beyond to the river will create a new port facility for other businesses and developments.
- The waste products are heat and water. The plant will be taking water from the Arkansas River and ground water wells for supplement with minimal impact. The plant will be putting more water into the river than is taken out.
- GTL diesel can be used as a drop-in fuel, (put straight into the tank). There is no need for a change in infrastructure, transportation, or storage.
- The project's estimated production is 33,000 barrels/day.

ESP's legislative needs are infrastructure grants, such as the Governor's Quick Action Fund, and incentives to encourage and support the GTL industry, such as adopting an excise tax for GTL diesel that is lower than that of regular diesel. This will help stimulate the industry.

Representative Ladyman asked about the amount of GTL emissions reduction compared to regular diesel; how long have the existing plants been in operation, who are their customers, and how are they doing economically.

Mr. Williams noted there is roughly a 30% emission reduction. The industry began as coal to liquid (CTL) and in the 1950s, South Africa was instrumental in CTL development. In the late 1980s and early 1990s with more stranded gas discoveries around the world, which means large gas deposits with no market to sell, South Africa began to convert some of its CTL to GTL facilities. In the 1990s, Shell built a GTL facility in Malaysia, which has since expanded. Shell also went to Qatar, which was one of the smallest and weakest Arab emirates, but has the largest gas field in the world which is shared with Iran. The Qataris are now a world power when it comes to energy and influence as a result of the GTL industry. The technology has been in use for decades, it has not been used in the U.S., because there was not a price differential between oil and natural gas. The value difference wasn't there until the shale gas revolution. Now the value differential is apparent for decades to come, and currently there are no major sales in the U.S.

Representative Meeks asked about GTLA's ownership.

Mr. Williams stated that ESP currently owns 100% of the company. As equity capital is raised for the project, ESP will be selling ownership interest in GTLA. There is a possibility to convert GTLA's limited partnership into a master limited partnership and take it public.

Senator Bledsoe asked about the skilled workforce need in order to maintain the plant.

Mr. Williams explained workforce development and technical training are critical needs as this is a chemical engineering plant. It will have highly skilled workers, chemists and people who understand those operations. There must be improvement in technical training at the high school level and upward into the college levels. This is at the highest level of chemical engineering globally.

Senator Caldwell asked about the diesel consumption in Arkansas. Mr. Williams noted it is about 60,000 barrels/day.

In discussing profitability, Mr. Williams noted the models reveal the point where GTLA would break even with financing and paying off the debt is about \$35/barrel for the diesel. If debt free, it would be closer to \$25/barrel to be profitable. The current price is \$45/barrel so the plant would be profitable even at today's pricing. The actual break-even price for the U.S. oil industry is about \$75/barrel. The U.S. oil industry is currently in crisis as roughly a third of all the U.S. oil companies are getting close to being insolvent due to the continuous low cost per barrel. Between 2009 – 2012 there was a dramatic undersupply globally. That's why the price of oil rose and stayed at \$100 - \$110/barrel. The global requirement right now is about 95 million barrels/day. A few quarters ago, there was global production of 97 million barrels/day, 2 million more than required. That margin in oil is considered excessive; therefore the price has dropped. Projections show by the third quarter this year, globally there will be an undersupply situation again. Fundamentally it is possible to increase the price back up to \$100 - \$140/barrel in 2-3 years. Iran and Saudi Arabia are trying to produce more oil so the U.S. will be dependent on imported oil. This is a global struggle. ESP recognizes this and believes security is the key. The

goal is to take the abundant natural gas in Arkansas and the U.S. and replace the imported oil with U.S. resources.

Mr. Williams also noted he sees diesel use expanding to cars. There is a move to replace gasoline with diesel. In France and Germany 50% of the automobiles are diesel engine driven, because diesel is a more efficient fuel.

DISCUSSION REGARDING ADVANCED TRANSMISSION LINE TECHNOLOGY

Mr. Bradley Hardin, State Government Affairs Manager-Arkansas, AEP Southwestern Electric Power Company, explained Interim Resolution 2015-004, Supporting the Deployment of Advanced, Innovative Electric Transmission Technology.

[EXHIBIT D]

There are new and emerging technologies pertaining to the transmission of electricity. AEP is currently utilizing some of these new technologies with 3 projects under construction--one in South Texas and two in Indiana. The new technology refers to the engineering design of transmission structures and the configuration of the lines that are attached to the structures. It is a compact design optimizing the electrical performance. He noted,

- Current design structures average about 145 feet, whereas the new design is about 99 feet wide;
- Right-of-way width will then be narrower;
- Improved aesthetics and environmental impact;
- Increased capacity of 42% to 60%;
- 33% reduction in energy loss;
- More reliability;
- Fewer transmission lines required.

Senator Hendren asked if this process is a patented procedure and how does the Public Service Commission feel about this new technology.

Mr. Hardin clarified that the BOLD transmission process is a product of AEP.

Mr. John Bethel, Director, Arkansas Public Service Commission (PSC), stated the PSC is not for or against the resolution but is okay with it. It is consistent with how new technologies are identified and brought forward. The PSC's position is to ensure a safe and reliable utility service at a reasonable price.

Representative Ladyman made a motion to adopt Interim Resolution 2015-004. The motion was seconded by Senator Cooper and carried unanimously.

OTHER BUSINESS

Representative Hendren made a motion to support the Governor's effort to address some of the directives that come from the federal government that lack common sense. Representative Ladyman seconded the motion. The motion carried.

There being no further business, the meeting adjourned at 2:45 p.m.