

**DRAFT MINUTES**  
**ARKANSAS ALTERNATIVE ENERGY COMMISSION**  
**[Established by ACT 1301 of 2009]**  
**Southwestern Energy Office – 1000 Southwestern Energy Drive, Conway, Arkansas**  
**Thursday, August 16, 2012**

The Arkansas Alternative Energy Commission (AAEC) met Thursday, August 16, 2012, at 10:00 a.m. at the Southwestern Energy (SWN) Office in Conway, Arkansas.

**Commission members present:** Leo Hauser, Chairman; Kathleen Alexander; Warren Allen, John Gallegly, George Heintzen, Jr., Mikel Lolley, Mike Pinkett, Rita Potts, and Richard Smith.

**Also attending:** Senator Jason Rapert and Representative Linda Tyler.

Mr. Hauser called the meeting to order. He welcomed members and guests and thanked SWN for hosting the commission.

**CONSIDERATION TO APPROVE JUNE 21, 2012, MINUTES [EXHIBIT B]**

**Ms. Alexander made a motion to approve the June 21, 2012, meeting minutes. Mr. Allen seconded the motion, and the motion carried.**

Mr. Hauser thanked Mr. Heintzen for his work on organizing the meeting and recognized him for comments. Mr. Heintzen thanked SWN and recognized special guests Senator Jason Rapert, Representative Linda Tyler, and Jack Bell, Assistant to the Mayor of Conway.

**COMPRESSED NATURAL GAS AS A MOTOR VEHICLE FUEL [ HANDOUTS 1 & 2]**

**Mr. Donny McCallum, Supervisor, Midstream Planning, SWN,** showed a video entitled, "Learn about Horizontal Drilling" [ATTACHMENT 1]

Available at: <http://filesource.abacast.com/sw%20energy/web/index.htm>

Mr. McCallum presented a PowerPoint entitled, "SWN Arkansas Compressed Natural Gas (CNG) - Powered by the Fayetteville Shale", [ATTACHMENT 2] and said he paid \$22.33 for 15.5 gasoline gallon equivalents (GGE) of CNG in North Little Rock today, noting the obvious reason to use CNG as vehicle fuel is economics. CNG vehicles emit 25% fewer greenhouse gases than gasoline or diesel engines, so the environment is the second most important reason to invest in CNG.

CNG fueling stations depend on distribution networks to deliver gas, and that can present challenges. General Electric is developing a "CNG Station in a Box" that stores, compresses, filters, and removes moisture from the fuel. Using a 400 horsepower motor, the station dispenses seven gallons of CNG/minute.

CNG vehicles perform almost identically to vehicles with gasoline and diesel engines. When CNG goes into a vehicle, an onboard computer integrates the vehicle's fuel-management system. The engine starts with gasoline and switches to CNG when it reaches a certain temperature.

About 65% of the conversion cost is the price of the tank. Most tanks last about 20 years, and owners can transfer them to different vehicles. Home-fueling stations are available in the U.S., so most users only need a tank that holds enough CNG for their daily commute. He noted SWN has a successful employee-incentive plan for purchasing CNG vehicles.

As of today, the company has converted 168 vehicles in their fleet to CNG; their goal is to convert at least 185 by the end of 2012.

The CNG industry is shifting focus from conversion to manufacturing. Europeans are experienced CNG users, and they design vehicles around tank size and placement. Dodge plans to build 2,000 CNG pickups that Fiat (the largest CNG vehicle producer) designed. Ford sells a manufactured CNG pickup for about \$9,500 more than the price of a gasoline or diesel truck. Volvo and Peterbilt Motors Company are investing in proven technology to develop fleet CNG vehicles. Mr. McCallum said the key to CNG's success is for Ford, Chevrolet, and Chrysler to start building the vehicles on their assembly lines. As more companies invest in CNG, more products will come to market and pricing dynamics will change.

**Mr. Michael Gallup, Transportation Manager, SWN**, said the company is a strong believer in employee training sending ten employees to Oklahoma City Community College for CNG vehicle maintenance, conversion, and station management classes; others studied with an aerial group in Ohio that makes well compressors for the company; and about 40 employees took one-week classes in Texas, Oklahoma, and Wisconsin for specialized training courses. Mr. Gallup is working with Dr. Larry Davis, Chancellor of the University of Arkansas Community College at Morrilton to develop a CNG-related curriculum. Mr. McCallum noted there are abundant job opportunities for people with CNG industry-related experience, skills or training.

Oil is a global commodity that is easily portable, so it trades at global prices. Natural gas is captive to areas that produce it, making it easier to lock in a price. The biggest issue facing the CNG industry in America today is lack of fueling stations. About half of the U.S. CNG stations are privately owned and not for public use. Corridor projects drive development, so SWN worked with the Arkansas Energy Office and Encana Corporation to map-out the best locations for building CNG stations in Arkansas. Mr. McCallum noted Waste Management is building 22 CNG stations throughout the U.S., and many will be available for public use.

Senator Rapert asked the commission to be an advocate for converting Arkansas municipal/state fleets and school buses to CNG. He explained the cost differential would save the state billions of dollars to invest in education, facilities, programs, etc. Using natural gas for utilities saves energy and money thus providing more money for consumers to put back into Arkansas's economy.

Mr. McCallum said SWN is a CNG producer and does not want to be a retailer explaining there are enormous tax consequences for independent oil and gas companies such as Exxon. SWN takes advantage of incentives to find more natural gas so it can provide affordable, dependable energy options. The company wants to help develop infrastructure for delivering CNG to stations. Mr. McCallum noted SWN is proud to dispense its own Arkansas-produced Fayetteville Shale CNG at its Damascus station. Although the station is available for public use, SWN built it to serve their 400 trucks operating in the area. The station has special features, such as decorative rock, that drove its cost to \$1.5 million, but a more realistic figure for building a CNG station is \$700,000 to \$1 million.

Commissioner Lolley said "Ten Trends to Track: State Policy Innovations to Advance Energy Efficiency and Renewable Energy" [HANDOUT 3] indicates energy-plan patterns are emerging in every state. He asked members to compare the report to the commission's 2010 report. Mr. Lolley said the paradigm is shifting and Arkansas is in a race to develop comprehensive energy policies. He wants to pursue areas of future study and put pressure on legislators and the governor to establish Arkansas's energy policies.

Mr. Hauser said the next commission meeting is October 18. Commissioner DeLoach will explain the relationship between state education and the energy world. She will share ways Arkansas promotes energy efficiency and alternative energy in schools.

In response to a question, Mr. Hauser said AAEC's primary mission is reporting global alternative energy issues to the Arkansas House of Representatives, Senate, and Governor's Office to help them make decisions for developing the state energy plan. The commission reports on topics discussed at meetings and makes recommendations for policymakers.

Mr. Hauser will contact commissioners via email regarding the subsequent meeting schedule and report preparation. He will also check on updates to the commission's website.

The meeting adjourned at 12:05 p.m.

#### **TOUR OF SWN REGIONAL HEADQUARTERS**

After the meeting, Commissioners toured SWN's Regional Headquarters, where the company has operated for more than one year. It is a certified gold Leadership in Energy & Environmental Design (LEED) building. The company makes it available for community use. SWN's 125,000 sq. ft. building sits in The Village at Hendrix in Conway and houses 300 – 350 employees. SWN employs about 1,300 people in Arkansas. The headquarters is home to SWN's unique Logistics Operation Center (LOC) where they monitor about 1,000 truck loads per day. Employees in the LOC work 12-hour shifts at adjustable workstations. SWN's Well Drilling Center also operates at the headquarters monitoring wells in real-time 24 hours/day, seven days/week. Mr. McCallum said these innovative practices save SWN millions of dollars every year.