

MINUTES
LEGISLATIVE TASK FORCE ON SUSTAINABLE BUILDING DESIGN AND PRACTICES
OF THE
ARKANSAS GENERAL ASSEMBLY

Monday, April 9, 2012
1:30 P.M.

Room 151, State Capitol
Little Rock, Arkansas

The Legislative Task Force on Sustainable Building Design and Practices met at 1:30 P.M., Monday, April 9, 2012, in Room 151 of the State Capitol in Little Rock, Arkansas. The following members attended:

Legislative Members: Senator David Johnson; Senator Jake Files and Representative Greg Leding, Co-Chairman.

Non-Legislative Members: Chris Benson, John Coleman, Richard Davies, Charlie Foster, Anne Laidlaw, Barbara Nix, Mark Robertson, and Kenneth Smith.

Representative Leding called the meeting to order.

CONSIDERATION TO APPROVE MARCH 12, 2012, MINUTES [EXHIBIT C]

Without objection, the March 12, 2012, minutes were approved.

ARKANSAS BUILDING CODE DISCUSSION

Mr. J.D. Lowery, Renewable Energy Programs Manager, Arkansas Energy Office (AEO), Arkansas Economic Development Commission (AEDC), presented a PowerPoint entitled, "Arkansas Energy Code" (**ATTACHMENT 1**), and said implementing minimum building standards and energy codes are the most cost effective way to mitigate increasing energy demands. The AEO develops and promulgates building energy code rules; the legislature reviews and adopts them.

The Arkansas Energy Code has three components:

- Commercial - American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1 2007
- Residential - International Energy Conservation Code (IECC) 2003
- Arkansas Supplements and Amendments - administrative aspects and details specific to Arkansas

In January 2012, the legislature approved the commercial code upgrade from ASHRAE 90.1 2001 to ASHRAE 90.1 2007. Buildings affected by the upgrade can expect a three to four percent increase in efficiency. This will be effective January 1, 2013. The AEO proposes to upgrade the residential component from the 2003 IECC to the 2009 version, which would include consolidating Arkansas Residential Energy Code Zones from four zones to two. (**HANDOUT 1**) Mr. Lowery said the AEO hopes the residential upgrade will also be ready to go into effect on January 1, 2013.

The approval process involves two phases:

- The AEO meets with stakeholders to determine supplement and amendment specifics.
- The AEO holds public hearings and presents the information to the legislature for review.

Mr. Lowery noted the process takes three to four months.

Mr. John Coleman, Director, Northwest Arkansas Regional Office, Viridian Sustainable Building Consulting (VSBC), presented a Powerpoint entitled, "ENERGY STAR Qualified Homes, Version 3 Savings & Cost Estimate Summary" (**ATTACHMENT 2**), and said city leaders in Fayetteville recently asked VSBC to compare the national effect of the 2004 IECC to Versions 2009 and 2012, and Energy Star Version 3 (ESV 3). The study showed that ESV 3 offers homebuyers an immediate savings. Then, Fayetteville leaders focused on Arkansas Residential Energy Code Zone 4 (Northwest Arkansas) and had a panel of builders, architects, and Home Energy Rating System (HERS) raters which identified differences between each code; builders established cost differentials between current building codes and each upgrade; and HERS raters analyzed projected energy savings according to each code.

(ATTACHMENT 3) The study revealed that when additional building costs are amortized over thirty years, every upgrade to the code provides immediate energy cost savings to the homebuyer.

Mr. Coleman said upgrades introduce new technologies, and builders must be able to implement and execute the improvements. The panel recommended the Fayetteville City Council adopt the 2009 IECC with a required HERS rating. They developed a "sustainable sticker" (**ATTACHMENT 4**) that can be applied to homes on the market to indicate a property's HERS rating and estimated monthly utility costs. Mr. Coleman said the group is confident the city council will adopt the recommendations soon.

In response to a question from Senator Files, Mr. Coleman said many appraisers do not understand the value of energy saving features or recognize the value of energy codes in the marketplace. Fayetteville leaders support the appraisal value issue and pledge to help builders get more value for energy saving improvements. Progressive builders believe implementing minimum building standards and energy codes are the way of the future, and this Task Force can help the Arkansas Appraiser Licensing & Certification Board (AAL&CB) understand their value. Representative Leding agreed and suggested inviting members of the AAL&CB to a Task Force meeting.

Mr. Ron Hughes, Green Job Training, Pulaski Technical College, said buyers, sellers, and appraisers need comparables to measure the value of energy saving features. The construction industry needs a "green list" that provides Energy Star, Leadership in Energy and Environmental Design, National Home Builders Association and HERS ratings.

Mr. Charley Foster, Foster, Currence, Gray Architects, introduced Terri Kissinger, Sustainability Manager, North Little Rock (NLR), and said NLR leads by a "sustainable" example. In 2008, the city established the Green Agenda Committee and developed an Energy Code Task Force. They plan to create a rating system that equally compares energy saving enhancements in new construction. Mr. Foster noted that realtors, appraisers, and bankers should be taught to appreciate energy saving features in the value of new construction; and implementing energy saving strategies with energy efficient buildings are good ways to reduce increasing energy demands.

E. INCENTIVES FOR COMPRESSED NATURAL GAS (CNG) FUELING STATIONS AND VEHICLE CONVERSION

Mr. Michael J. Callan, President, Arkansas-Oklahoma Gas Corporation (AOGC), said AOGC is a small natural gas utility in Fort Smith that has operated most of its fleet with CNG since 1982. The Oklahoma Legislature implemented acts that help the CNG industry be successful such as a CNG fueling station must be installed on every 100 miles of the Oklahoma interstate corridor by 2015; every 50 miles by 2025. Today CNG in Arkansas costs \$1.34/gasoline gallon equivalent. CNG and traditionally fueled vehicles get virtually the same rate of miles/gallon. Chevrolet dealerships in Fort Smith will convert a standard fuel vehicle into CNG for about \$10,500. The three major automobile makers will introduce CNG-ready vehicles this year.

Ms. Kelly Volin, Industry Program Manager, AEO, AEDC, said between August 2011 and January 31, 2012, the AEO's Compressed Natural Gas Conversion Rebate Program provided grants to 31 fleets and 17 individuals; and 200 vehicles were converted from standard to CNG fuel. The grants were funded by the American Recovery and Reinvestment Act, which expires April 30, 2012. Ms. Volin said the AEO does not expect additional funding for projects like these.

Mr. Callan said the Federal Energy Information Office reports that at current production levels, the U.S. has more than a 100-year supply of natural gas. The advent of shale plays continues to increase production levels, while consumption decreases as the world becomes more efficient. AOGC built a CNG fueling station in Fort Smith for \$537,000; Love's Travel Stop can install two CNG pumps for about \$600,000; and slow-fill CNG stations are available for around \$5,000. CNG is the cleanest burning fossil fuel, and AOGC vehicles run longer with the alternative fuel.

Oklahoma offers several one-time income tax credits for CNG development:

- 75% for installing a commercial CNG fueling station
- 50% for installing a home CNG fueling station
- 50% of the marginal cost to put a new alternative-fueled vehicle into service

Mr. Callan said it makes sense to offer CNG incentives to fleets first. When CNG fleets are developed, it creates a core business and private enterprises invest in fueling stations. At that point, individuals come on board.

Ms. Teresa Marks, Director, Arkansas Department of Environmental Quality (ADEQ), said ADEQ offered grants funded by the Diesel Emissions Reduction Act. Most of the money was awarded to retrofit diesel engines with new technology that reduces emissions; some grants were used to retrofit diesel engines to CNG. Ms. Marks noted that funding for these grants will be zeroed out at the federal level. **(HANDOUT 2)**

Ms. Karen Bassett, Chief Deputy Director, ADEQ, said it would be difficult to compare what impact having more CNG vehicles in service has on local ambient air quality. Research shows that mobile sources are not the highest contributors to particulate matter issues. Arkansas has several large transportation corridors that cause concern for ozone nonattainment, but the areas are primarily affected by vehicles that move through the state. Areas that have officially been declared a nonattainment zone may qualify for federal funds that help alleviate the mobile source portion of the status.

Ms. Marks said emissions near drilling sites are being extensively researched at state and federal levels. According to the EPA, there are no pollutants being emitted (to the point of being regulated) currently. Continued research will provide understanding in regard to needed regulations.

Mr. John Theis, Assistant Commissioner for Policy and Legal, Division of Revenue, Arkansas Department of Finance and Administration (DFA), said DFA has never been asked to study legislation from other states that pertain to CNG fleet and station development. If the Task Force submits a written request that outlines the parameters to be studied, the economic analysis folks will look at other states' experiences and transpose the information to Arkansas. Senator Johnson said the Task Force will submit a written request to DFA.

Mr. Theis said Arkansas funds highway construction and maintenance with fuel taxes. As more alternative fuel vehicles come into service, the state must consider how to fund highway and construction maintenance with fuel tax revenue. In 1993, the Arkansas General Assembly levied a tax on CNG and liquefied natural gas used to fuel a motor vehicle. They based the rate on the number of vehicles licensed at the Department of Motor Vehicles that use alternative fuel and established a graduated scale that set the rate at 5¢/gallon equivalent if fewer than 1,000 vehicles are registered. The scale tops out at 16.5¢/gallon equivalent if 3,000+ vehicles are registered. There are 400 alternative fuel vehicles registered in Arkansas now. The gasoline tax is 21.5¢/gallon, the diesel tax is 22.5¢/gallon. All fuel taxes are metered separately so counties receive appropriate funding for highway improvements. Arkansas law states that one gallon of gasoline is equal to 100 cubic feet of CNG; federal differs and states that one gallon of gasoline is equal to 126 ²/₃ cubic feet of CNG.

Ms. Cynthia Edwards, Deputy Secretary, Arkansas Agriculture Department (AAD), said the AAD Alternative Fuel Program recognized CNG as an alternative fuel in 2009. The AAD authorized two \$300,000 grants to build two CNG fueling stations. NLR received one grant and completed a station in 2011. White County received the second grant, but Chesapeake Energy left the county and the matched funds fell through. The project never materialized. Ms. Edwards said the AAD has no more funding for alternative fuel programs, and there is no indication that more is coming.

With no further business, the meeting adjourned at 3:00 P.M.