

**MINUTES**  
**JOINT INTERIM COMMITTEE ON ENERGY**  
**Room 171, State Capitol**  
**Little Rock, Arkansas**  
**Monday, August 28, 2017**

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The Joint Interim Committee on Energy met at 1:00 p.m. Monday, August 28, 2017, in room 171 at the State Capitol in Little Rock, Arkansas.

**Committee members present:** Senators Scott Flippo, Vice-Chair; Cecile Bledsoe, Alan Clark, Linda Collins-Smith, Stephanie Flowers, and Eddie Joe Williams; Representatives Rick Beck, Co-Chair; Ken Henderson, Vice-Chair; Bob Ballinger, Ken Bragg, Justin Gonzales, Kim Hendren, Monte Hodges, Steve Hollowell, Jack Ladyman, Robin Lundstrum, Matthew Shepherd, James Sorvillo, Danny Watson, and Jeff Williams.

**Alternate members present:** Representatives Charlotte Douglas, Jon Eubanks, Mark McElroy, Ron McNair, Matthew Pitsch, DeAnn Vaught, and David Branscum.

**Also attending:** Senators Linda Chesterfield, and Trent Garner; Representatives Marcus Richmond, Trevor Drown, Vivian Flowers, Kenneth Ferguson, David Fielding, Charles Blake, Stephen Meeks, Charlie Collins, Kim Hammer, Jim Dotson, and Reginald Murdock.

Representative Beck called the meeting to order.

**CONSIDERATION TO APPROVE RESPECTIVE MINUTES**

**[EXHIBITS B1, B2]**

**Senator Bledsoe made a motion to approve the June 1 and June 2, 2017, meeting minutes. The motion was seconded by Senator S. Flowers, and the motion carried.**

**Dr. Todd Allen, Professor of Engineering Physics and Senior Fellow, University of Wisconsin, Third Way**, presented a PowerPoint entitled, “Observations on 21st Century Nuclear Energy”. He stressed technology, policy, and communication as key factors in maintaining and developing reliable energy generation.

He presented an electricity map, “Emissions”, showing in real-time where a country’s electricity comes from and how much CO<sub>2</sub> is emitted to produce it. Another graph illustrated the falling global carbon intensity of total world primary energy. His presentation highlighted the increasing interest in nuclear power and the next generation of reactors to produce it. **[PowerPoint Presentation 1]**

**Mary Pietrzyk, Senior Manager, Policy Development, Nuclear Energy Institute (NEI)**, presented a PowerPoint entitled, “The Future of Nuclear Energy”, and provided basic background on current nuclear energy production, noting there are 99 reactors located at 60 sites in 30 states. About 20% of U.S. electricity is provided by nuclear generation; and this industry is a solid provider to the economy. **[PowerPoint Presentation 2]**

**Tom Zachariah, Senior Project Manager, Risk Assessment, NEI**, continued with the second half of the PowerPoint entitled, “The Role of Nuclear Energy”, and noted the focus is grid reliability and resistance; zero-carbon generation; economy and jobs; and national security. Current nuclear plants

were built in the 70s and 80s with a projected 60-year lifespan. Two-thirds of nuclear plants are being built in China and Russia using the light-water reactor models (as is U.S. current nuclear fleet).

**Jordi Roglans, Director, Nuclear Engineering Division, of Argonne National Laboratory (ANL)** presented a PowerPoint entitled, “Sodium-Cooled Fast Reactors-Generation IV Systems”, and explained ANL’s historical role in reactors and fuel-cycle technologies. He noted Generation IV reactors are not water-cooled. The fast reactors can use spent-fuel rods, which contain 93% un-used uranium, and are currently stored in cement casks on-site at the nuclear facilities. The sodium-cooled fast reactors offer fuel cycle applications, inherent safety and passive cooling.

[PowerPoint Presentation 3]

**Mark Williamson, Manager, Nuclear Chemical Engineering Department, Nuclear Engineering Division, ANL**, presented a PowerPoint entitled, “A Sustainable Nuclear Energy System”, and explained currently the 99 U.S. nuclear facilities have no disposal pathway for their spent fuel. The Department of Energy announced in 2009 the Yucca Mountain Repository was no longer an option for long-term storage of used nuclear fuel; the license was pulled. He gave an analogy of a 10-foot high football field as the area needed to hold the 73,000 tons of currently spent fuel, which could supply hundreds of years of energy.

He noted the Generation IV fast-reactors are of modular construction which allows for an increase or decrease in the system size as needed.

[PowerPoint Presentation 4]

**CONSIDERATION OF MOTION TO ADOPT INTERIM STUDY PROPOSAL 2017-094, REQUESTING THAT THE JOINT COMMITTEE ON ENERGY STUDY THE LONG-TERM LIABILITY OF IMPLEMENTING PYROPROCESSING AND FOURTH-GENERATION MODULAR REACTOR PROCESSING TECHNOLOGY IN ARKANSAS.**

[EXHIBIT F-1]

**Representative Ken Henderson made a motion to adopt ISP 2017-094 for study; with a second by Senator Bledsoe, the motion carried.**

#### **OTHER BUSINESS**

Representative Beck reminded members the committee will meet at 9:00 a.m., Tuesday, August 29th.

With no further business, the meeting adjourned at 3:56 p.m.