

MINUTES

**JOINT INTERIM COMMITTEE ON ENERGY
Austin Hotel Ballroom
305 Malvern Avenue, Hot Springs, Arkansas**

Thursday, September 25, 2014

The Joint Interim Committee on Energy met at 10:00 a.m. Thursday, September 25, 2014, at the Austin Hotel Ballroom, Hot Springs, Arkansas.

Committee members present: Senators Linda Chesterfield, Chair; John Cooper, and Eddie Joe Williams. Representative Denny Altes, Vice Chair; and David Fielding.

Alternate members present: Representatives Sue Scott, John Hutchison, Mark McElroy, and George McGill.

Also attending: Senator Joyce Elliott; Representatives Monte Hodges, Fredrick Love, Reginald Murdock, and Frederick Smith.

Senator Chesterfield called to meeting to order.

CONSIDERATION TO APPROVE JULY 31, 2014, MINUTES [EXHIBIT C]

Senator Chesterfield asked if there are any corrections or objections to the July 31, 2014, meeting minutes, and without objection, she noted the minutes stand approved.

ENERGY SECURITY – GRID SECURITY

Mr. Michael DeLoach, American Electric Power (AEP), Director, NERC [PwrPoint Presentation #1] Regulatory Compliance, was recognized and stated in 2003, a major blackout in the northeastern United States affected 45 million people in eight states. The outage lasted eight days, resulted in eleven deaths, and cost the U.S. economy approximately \$6 billion. This led to the Energy Policy Act of 2005 whereby Congress assigned the Federal Energy Regulatory Commission (FERC) the entity responsible for regulation reliability. The intent was to stop the grid's cascading failure. FERC delegated North American Electric Reliability Corporation (NERC) as the Electric Reliability Organization (ERO) responsible for writing, monitoring, and enforcing mandatory standards.

Mr. DeLoach defined AEP's footprint:

- 5+ million customers covering 197,500 square miles across Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia.
- More than 40,000 circuit miles of transmission and 186,000 circuit miles of distribution lines.
- AEP Companies operate in 4 NERC Reliability Regions, including:
 - Reliability First Corporation (RFC)
 - Southwest Power Pool (SPP)
 - Texas Reliability Entity (TRE)
 - Southeastern Region Reliability Corporation (SERC)

He stated AEP's large footprint requires compliance with 75% of NERC's 106 Standards and 62% of its 1,454 requirements.

The Critical Infrastructure Protection (CIP) standards are NERC's latest standards. NERC did not have the cyber security standards written when they were assigned the ERO role. The first standards went into effect after 2007 and are under constant revision. He stated due to what is known as Advanced Persistent Threats (APT) an electric utility could comply with all of the CIP standards and still have vulnerability.

Mr. DeLoach stated AEP's current issues and concerns are the unsolved Metcalf Station attack [4/16/13, San Jose California], Geo Magnetic Disturbance (GMD)/Electro Magnetic Pulse (EMP), CIP, and reliability assurance initiative.

He noted cyber security and physical security are being handled largely at the federal level with NERC regulations. Because AEP is in 11 states, it would be difficult to have 11 different forms of regulation to make sure the grid is secure.

Mr. Paul Means, Manager, Governmental Affairs, Entergy Arkansas, Incorporated, [PwrPoint Presentation #2] stated Entergy Arkansas has over 37,737 miles of power lines, 322 substations, and covers a service territory of approximately 40,880 square miles. He stated each year Entergy Arkansas experiences damage to its generating units, transmission lines, substations, and distribution lines due to severe storms and vandals. Entergy responds to these situations as quickly as possible. The sheer size of Entergy's system makes it difficult to protect against vandalism, which is an on-going problem with no good practical solution.

Mr. Curtis Warner, Director Compliance and Support, Arkansas Electric Cooperatives, Incorporated, [PwrPoint Presentation #3] stated the biggest threat to the security grid is the government by way of the 111d EPA Proposed Rule. He stated AEC's goal is to be reliable, affordable and responsible. AEC is a generation transmission cooperative, and Arkansas has the second lowest wholesale rates in the country and nationally the fifth lowest.

Senator Elliott asked how Mr. Warner's presentation concerning the EPA Proposed Rule 111d relates to grid security.

Senator Chesterfield asked what AEC is doing to secure their grid? What would AEC do in the case of a cyber attack, vandals, or weather related issues? She stated he did not address these topics in his presentation.

Mr. Warner stated AEC's system and procedures are very similar to Entergy Arkansas's procedures.

Mr. Jason Carter, Interim General Manager, North Little Rock (NLR) Electric, [PwrPoint Presentation #4] stated NLR Electric is very similarly situated to other utilities and the cooperatives. Their goal is to be reliable, affordable, and responsible business partners. However, local government electric service is different in the following ways:

- They are one of the three electric business models;
- There are 15 municipal power providers in Arkansas;
- Not regulated by the Public Service Commission;
- Informally organized as the Arkansas Municipal Power Association or "AMPA";
- Members are transmission dependent; and
- Many members own generation assets, but most buy power to meet their needs.

Mr. Carter stated securing the electrical system is important and the threat is evolving and our vulnerability is evolving, therefore, the law should evolve. New vulnerability lies in threats that are coming from phishers, hackers, insiders, criminal groups, spyware/malware, nations, and terrorists. Sub-stations are sometimes vandalized by copper thieves. The 2011 copper theft from NLR's Galloway substation did approximately \$300,000 in damage.

Mr. Carter stated the Arkansas Freedom of Information Act (FOIA) is a security challenge, because it allows disclosure of vulnerability assessments, blueprints of generators and facilities, computer and communication system architecture, security camera layouts, intrusion detection diagrams, software vendors, incident response plans, and detailed customer information. There is no exception to mandatory disclosure of records pertaining to electric system security or detailed customer information. Information sharing requires a framework of trust between government and the electric industry. He cited ACA 25-19-105 and ACA 25-19-103(5)(A).

He concluded by stating:

- “New technology has created new vulnerabilities in the energy industry.
- Security must be upgraded to meet evolving threats, but the precise solution is elusive.
- Resiliency is as important as security.
- Narrowly craft exceptions to FOIA that protect our electric infrastructure and the privacy of our customers.”

There being no further business, the meeting adjourned at 11:42 a.m.