

State Energy Policy Council Second Quarter Meeting Meeting Minutes

Wednesday, June 5, 2019

I. Welcome/Agenda Overview

Joe Hoagland welcomed the attendees and acknowledged appreciation for those that participated in the Webinars that occurred since the last meeting. Discussion today would focus on what deliverables the council must provide to the state. Recommendations need to be back to the state in the fall.

II. Roll call

SEPC Members: Chairman Joe Hoagland, Dale Barnett (TN Poultry Assoc.), Hash Hashemian (AMS Corporation), Stephen Smith (Southern Alliance for Clean Energy), Molly Cripps (TDEC), Mike Ellis (Tennessee Gas Association), Justin Ball representing Ashley Euqua (Tennessee Department of Treasury), Zach Sims, UT, Brian Solsbee (TN Municipal Electric Power Association), Senator Steve Southerland

III. Approval of February meeting minutes

Senator Steve Southerland motioned to approve February's meeting minutes, Molly Cripps seconded, all approved

IV. United States Energy Employment Report (USEER) – Tennessee Data Review

David Foster, Distinguished Associate, Energy Futures Initiative talked through the USEER report based on an annual supplemental employer survey that is integrated with the BLS Quarterly Census on Employment and Wages. It studies employment in the following sectors: Fuels, Electric Power Generation (EPG), Transmission, Distribution, and Storage (TDS), Energy Efficiency (EE), and Motor Vehicles. Fuels, EPG, and TDS make up the traditional energy sector.

Hash mentioned three takeaways for discussion:

- Tennessee has the centers for innovation for excellence that gives us a head start in grid modernization, smart grid, EE lead, high efficiency HVAC system, electric vehicle.
- Concentrate on the lead areas and work on being the national experts in this area.
- Tennessee size of the economy vs other states in the new technology energy space.

V. Drive Electric TN Consortium – Electric Vehicle Roadmap // Assessment of Electric Vehicle Supply Equipment in Tennessee

Ryan Stanton, Senior Consultant for Strategic Energy Initiatives, Tennessee Department of Environment and Conservation's Office of Energy Programs (TDEC OEP); Drew Frye, Program Manager of Grid Edge and Electric Vehicle Strategy, TVA; and Bill Copeland, Director of Business Intelligence, EPB of Chattanooga led the discussion:

- Convergence of trends and interest
 - Longer range EVs, lower prices
 - Growing consumer awareness / adoption
 - TVA and Local Power Companies
 - TDEC / Volkswagen Settlement
 - Research Institutions
 - Industry, OEMs, fleets
- Benefits of promoting electric vehicles in Tennessee
 - Inexpensive to operate – 65% less to “fuel”, no oil changes
 - Keep money in the valley – Electricity is produced here, O&G isn't
 - Clean air – lower emissions, less pollution
 - Money for roads – Improve act \$100 EV fee
 - Jobs/Econ Development – Manufacturing Nissan leaf, VW
- TN Drive Electric Roadmap
- Next Steps:
 - EV Infrastructure Build Out -- TVA Statewide infrastructure study, TDEC RFI for light duty EV Charging funding, and 7 new DC fast charging locations (Electrify America)
 - Hiring a Full-time coordinator
 - Driving Awareness – employer ride and drives; promotion at larger events (lung walk, earth day, etc.)
- Discussion among the group on:
 - Importance to the growth of EV power in Tennessee to an LPC – increase in flat load due to EV use, electrification and flexibility on

demand side resources is important to get a positive increase in sales, EV use decreases utility expenses for everyone including customers

- How to collect data from private charging stations
- Having off peak structures -- EVs are affecting the load
- TVA's IRP - EVs
- Technology will change how we look at transportation in the future
- Generational differences between owning your own vehicle and ride share options
- New generations will have the same issue with EVs and no driver behind the wheel because it will be the norm

VI. U.S. Department of Energy's Clean Cities Program – Alternative Fuel and Advanced Vehicle Technologies

Alexa Voytek, Energy consultant and Senior Program Manager, TDEC OEP//Coordinator, Middle-west Tennessee Clean Fuels and Shauna Basques, Communications Coordinator and energy Analyst, TDEC OEP

According to EIA, the transportation sector is the largest energy consuming end-use sector in Tennessee, representing 28.9% of Tennessee's total energy consumption in 2016.

DOE Clean Cities Program – advances the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels and technologies. There is a network of nearly 100 Clean Cities Coalitions.

Information provided about the different fuel types – Biodiesel, Ethanol, Natural Gas, Propane, Electric, and advanced vehicle technologies

DOE Deliverables: Alternative Fuel Station openings and closings, alternative fuel price tracking, vehicle and station cost tracking, and annual progress report

VII. Overview of the Tennessee Department of Transportation's Three-Year Plan

Ryan Stanton, Senior Consultant for Strategic Energy Initiatives, TDEC OEP

- TDOT Mission: to serve the public by providing the best multimodal transportation system in the nation. Not just roads – TDOT is a multimodal agency with responsibilities in aviation, public transit, waterways, railroads, and cycling and walking.

VIII. Energy in Transportation – Research and Development Activities and Opportunities

Rich Davies, Deputy Director of the Sustainable Transportation Program, ORNL

- History of ORNL – Nuclear, neutron scattering, computing resources, basic research in all life sciences
- ORNL is a leading science and energy laboratory
- Energy research is 14% of ORNL
- Distinctive facilities and R&D development and deployment in: Electrification efficiency of combustion, data science and automated vehicles,
- Some current projects **are: charging vehicles while driving, battery improvements including “skateboard” design** ORNL science and technology areas – powering and charging, cybersecurity, energy and environment, vehicle system integration and controls, big data and HPC
- New areas – energy storage, net-zero carbon fuels, powertrain materials, and HPC & AI
- Potential state opportunities – electric vehicles, TennSMART, Innovation Crossroads, Net Zero carbon fuels

Group discussion:

- Getting the trucking industry into the conversation of going electric
- Net zero carbon fuels not feasible now, but in the future
- How to manage conversion to electric vehicles throughout the country
- What about solar panels on EVs – does it work?
- Importance for collaboration with other government agencies, industries, universities, and other partners – TennSMART as an example

IX. Examples of other States’ Energy Plans

Molly Cripps, Assistant Commissioner, TDEC OEP

- Provided information on other states energy plans by email – while reading over the material group should think about what the group could recommend.

- State does not regulate TVA with regard to how rate-payer funded program dollars are spent or fuel mix
- Other states may have that regulation for electricity
- TDEC does regulate in areas such as air quality and environmental oversight

X. Discussion – Additional Energy Topics to address next steps of Developing Work Products

- Group discussed how to be effective – this group can set very specific recommendations, but could provide broader options to the state/governor.
- Once this group has determined its broader recommendations – further discussion and development of option (s) of interest to the state
- Discussions around vision, the customer and what is expected from the council
- Discussion around how to be efficient in the energy space, save money, and be a leader in the innovation space. What are the technologies to focus on that are the best use of the state’s time and money.
- The council discussed how the world is evolving in regards to energy, and should provide options that the council thinks the state needs to invest in, and then ask the state what it would like the council to concentrate on

The group voted that it would produce a policy whitepaper with four or five options that the state should focus on. It was determined that the Baker Center would help the group develop a whitepaper.