## Tennessee Valley Authority Regional Energy Resource Council May 24-25, 2016 Meeting Minutes

The Tennessee Valley Authority (TVA) Regional Energy Resource Council (RERC or Council) convened for the third meeting of its second term at 10:10 a.m. EDT on Tuesday, May 24, 2016, at the Chattanoogan Hotel, 1201 Broad Street, Chattanooga, Tennessee 37402.

#### Council members attending:

Dus Rogers, Chair	Anne Davis	Wes Kelley
Jennifer Kelvington	Bob Martineau	Pete Mattheis
Alice Perry	Joe Satterfield	Jack Simmons
Stephen Smith	Lloyd Webb	Susan Williams

Designated Federal Officer: Dr. Joseph Hoagland

Facilitator: Liz Upchurch

Appendix A identifies the TVA staff, members of the public, and others who attended the

meeting.

Appendix B is the agenda for the meeting.

Copies of the presentations given at the meeting can be found at http://www.tva.gov/rerc.

The meeting was devoted to discussion about the electricity marketplace of the future, including the changing demands of consumers. No formal consensus advice was provided by the Council at this meeting.

- 1. **Welcome, Introductions, Meeting Purpose**, Dr. Hoagland (See the presentation materials for details)
- 2. Safety Moment, Overview of Agenda, Meeting Protocols, Ms. Upchurch (See the presentation materials for details)

### 3. DFO Briefing

Dr. Hoagland provided updates to the Council on several items:

- Watts Bar Unit 2 achieved initial criticality over the weekend, and TVA is anticipating commercial operation by the end of the summer.
- At its last meeting, the TVA Board declared surplus and authorized the sale of the Bellefonte plant site. In response to several questions by Stephen Smith, Dr. Hoagland said that the auction may be held as early as August and that TVA is in the process of determining the bidder qualification criteria and whether certain portions of the land (e.g., the shoreline area) will be held back from sale in accordance with feedback provided by several RERC members at the last Council meeting.
- Also at its last meeting, the TVA Board adopted a policy with respect to floating houses that provides for removal of the homes from TVA reservoirs within 30 years. Dr. Smith, Jack Simmons, and Susan Williams expressed support for the Board's decision. Mr. Simmons and Ms. Williams drew comparisons to the Bellefonte decision and the TVA Land Policy, respectively, concerning the appropriate use of TVA land for the public good.

- TVA recently submitted an early site permit application to assess the potential for construction and operation of small modular nuclear reactors (SMRs) at TVA's Clinch River site. In response to a question from Bob Martineau, Dr. Hoagland said that, assuming other factors fall into place, TVA expects to be ready to demonstrate the technology in the early to mid-2020s.
- TVA is planning to release in June its final Environmental Impact Statement (EIS) concerning TVA's Coal Combustion Residuals (CCR) Rule compliance plans, with a record of decision by the end of July. The final EIS will take into account public comments and comments provided by the RERC. TVA also has released for public comment a draft EIS concerning the proposed construction of a landfill for the disposal of CCRs at the Bull Run Fossil Plant.
- TVA published a Request for Information (RFI) on renewable energy sources that could supply power to TVA, including large-scale solar. Lloyd Webb cautioned against making decisions about renewables in reliance on the Clean Power Plan, which is now under challenge.

#### 4. TVA/Public Power Position

Al Berrong, TVA's Director of Financial Planning and Enterprise Forecasting, presented about TVA's load forecast and portfolio changes. Gary Brinkworth, TVA's Director of Technology Innovation, presented about opportunities for grid improvements and research in that area. Michael McCall, TVA's Senior Manager of Benchmarking & Performance Analysis, presented about the changing marketplace and TVA's business intelligence efforts. (See the presentation materials for details)

#### 5. **Deep Dive—The Consumer**

Ken Black, Co-Chairman of E Source, presented information about the changing profile of utility customers and the resulting need for innovation and change in the industry. (See the presentation materials for details) Mr. Black was not able to complete his presentation within the time allotted for the meeting on Tuesday, so the Council members agreed to adjourn for the day and continue Mr. Black's presentation on Wednesday.

The Council adjourned at 12:11 p.m. and reconvened on Wednesday, May 25, 2016 at 8:33 a.m. After a brief recap of the previous day's presentations and activities, Mr. Black completed his presentation on utility customers.

#### 6. Public Comment Session

No members of the public offered comments.

### 7. Understanding the Evolution of the Marketplace

Mr. Black presented introductory materials concerning disruptions in a marketplace that can derail once-successful companies. He then facilitated group discussions of three case studies involving companies facing non-traditional competitors and how those companies might react (Verizon, Marriott, and Yellow Cab). Following the case study exercise, Lloyd Webb noted that companies often focus on return on investment of capital assets and are reluctant to walk away from those assets even when it should be clear that they aren't the future of the company.

#### 8. Council Discussion

Liz Upchurch introduced three questions proposed for discussion by the Council and facilitated comments by Council members.

- 1. Given TVA's Mission of low cost power and the 3 E's, what factors might TVA consider when making decisions on new power sources when customers want it?
- 2. What value do consumers want from the Utility (trusted source, power provider, service provider, etc.)?
- 3. How do we address those not benefitting from Customer Choice?
- With respect to question 1, several Council members noted the role that rates play in making distributed generation opportunities a reality. Pete Mattheis suggested the need for more rate granularity and associated customer education. Susan Williams agreed, noting that TVA doesn't currently offer an option for customers who are willing to pay more for renewables and emphasizing that education will be important to reach those customers, likely millennials, if such options were available. Dus Rogers noted that many consumers in rural areas cannot afford their bills currently and, while they may like the idea of clean power, they have no resources to fund it. Jennifer Kelvington suggested that crowdfunding might be an option for a utility-scale solar project. Anne Davis cautioned TVA to take care to accurately consider costs, using the cost of ash disposal associated with coal-fired power plants as a lesson learned.
- With respect to question 2, Anne Davis said that, in addition to low cost and reliability, some consumers value sustainability and environmental protection. Pete Mattheis said consumers value stability. Susan Williams said consumers of the future will want utilities to be flexible and innovative. Lloyd Webb echoed this sentiment, saying that utilities should identify opportunities to use their existing assets in new ways.
- With respect to question 3, Jack Simmons cautioned that, while utilities shouldn't be a barrier to distributed generation, they shouldn't unfairly shift cost. Anne Davis said TVA should not inhibit innovation and choice and that it should look for ways to incorporate renewable choices into its rates. Wes Kelley questioned whether a rate structure could be based on the type of generation. Mr. Simmons noted there may be contractual implications associated with distributed generation and asset cost recovery.

Dr. Hoagland thanked t	the Council member	s for their input and no	ted that TVA anticipates
talking more about this	issue at the next RE	ERC meeting in the fall.	. The meeting adjourned at
noon FDT		11	, ,

Date: 6/10/16

Minutes Approved:

Dus Rogers, Council Chair

## Appendix A Non-Council Meeting Attendees

TVA Staff			
Al Berrong	Brenda Brickhouse	Gary Brinkworth	Cathy Coffey
Joe Hoagland	Beth Keel	Kelly Love	Kellie Matthews
Michael McCall	John Myers	Barbie Perdue	Michael Scalf
Liz Upchurch			

Members of the Public In Attendance		
Amy Eskind	Amanda Garcia	Tyler Jeffrey
Harrison Pirtle		

Other	
Ken Black – E Source; Presenter	
Michael Driver – TVA Office of the Inspector General	
Paul Tanis – TVA Police	

## Appendix B Meeting Agenda

# 2<sup>nd</sup> Term Regional Energy Resource Council (RERC) May 24 - 25, 2016 The Chattanoogan Hotel, Chattanooga, TN

## May 24, 2016

10:00	Welcome - Joe Hoagland/ DFO		
	Introductions - Council Members, Liz Upchurch, Facilitator		
	Today's Meeting Purpose Joe Hoagland		
10:10	Safety Moment, Overview of Agenda, Meeting Protocols Upchurch		
10:15	<b>DFO Briefing: RERC and TVA Update</b> Hoagland		
10:20	TVA / Public Power		
	<ul> <li>Load Forecast and Portfolio - Al Berrong</li> </ul>		
	Grid Opportunities - Gary Brinkworth		
	Changing Marketplace - Michael McCall		
10:50	Break		
11:00	<b>Deep Dive - The Consumer</b> Ken Black, Co-Chairman, E Source		
12:00	Adjourn		

## May 25, 2016

8:30	Welcome - Dus Rogers, Chairman
	Recap Day 1 / Field Trip Observations
9:00 - 10:00	Public Comment Period
10:00	Understanding the evolution of the marketplace – setting the stage for the future – Exercise Ken Black
10:50	Break
11:00	RERC Discussion
11:50	Wrap Up and Next Steps
12:00	Adjourn Meeting