Tennessee Valley Authority Regional Energy Resource Council July 16, 2014 Meeting Minutes

The Tennessee Valley Authority (TVA) Regional Energy Resource Council (RERC or Council) convened for the fourth meeting of its first term at 10:02 a.m. EDT on Wednesday, July 16, 2014, on a webinar, with several members participating in person at TVA's Watts Bar Nuclear Plant site.

Council members attending:

Dus Rogers, Chair	Jillian Boxler	Anne Davis
Wayne Davis	Catherine Glover	Jason Keith
Bob Martineau	Jack Simmons	Stephen Smith
Don van der Vaart	Lloyd Webb	Susan Williams

Designated Federal Officer: Dr. Joseph Hoagland

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

Copies of the presentation given at the meeting can be found at http://www.tva.gov/rerc/. The meeting agenda is shown on slide 2.

The meeting was devoted to the environmental review of TVA's Allen Fossil Plant Emission Control Project. Council members asked clarifying questions about the review and the process. No formal consensus advice was provided by the Council at this meeting. No oral comment from the public was permitted during this meeting, but information was provided about how written comments may be submitted.

1. Designated Federal Officer's Report

Joe Hoagland reminded the Council of the context in which the Allen decision will be made. The 2011 IRP emphasized the need for a balanced generation portfolio. The IRP did not dictate specific asset decisions, which are based on environmental, grid-related, financial, and other considerations.

2. Overview of the Allen Draft Environmental Assessment

Amy Henry, Manager, TVA NEPA Program and Valley Projects, provided an overview of the draft environmental assessment prepared for the Allen Fossil Plant Emission Control Project. Ms. Henry first summarized the requirements of the National Environmental Policy Act (NEPA), under which federal agencies must evaluate the potential impacts of proposed actions. She described the three types of reviews under NEPA: environmental impact statement (EIS), environmental assessment (EA), and categorical exclusion. Ms. Henry also described the selection of alternatives, including the no action alternative, the proposed action alternative, and other possible action alternatives. She further explained the effects analysis performed in reviews, which includes analysis of a range of natural, cultural, and

social resources and of cumulative, irreversible, and irretrievable impacts. In the NEPA process, TVA also documents its compliance with associated permitting and consultation processes, including those under the Endangered Species Act and the National Historic Preservation Act. Ms. Henry explained that NEPA does not require selection by the agency of the alternative with the most favorable environmental impacts; rather, NEPA reviews are tools to educate decision-makers about environmental impacts, which represent one of the factors considered by TVA decision-makers.

Ms. Henry next provided a high-level overview of the Allen Fossil Plant and the draft EA prepared to analyze the plant's proposed emission control project. The purpose and need for the project is to reduce sulfur dioxide emissions in order to comply with agreements under the Clean Air Act executed by EPA, TVA, the State of Tennessee, the Sierra Club, and various other parties. Those agreements require TVA to reduce emissions across the TVA system including through retirement of certain units or installation of emission control technology. With respect to the Allen plant, TVA must install a flue gas desulfurization system (i.e., scrubber) or retire the plant by December 2018. To meet this purpose and need, TVA's proposed action is the construction and operation of a natural-gas fired plant, which could include one of various combustion turbine and/or combined cycle configurations, and the retirement of the three existing coal-fired units. Ms. Henry summarized the findings of the EA with respect to that proposed action: no significant environmental impacts were identified, and some positive benefits were identified, including reduction of emissions of carbon dioxide, sulfur dioxide, and nitrogen oxide; opportunity for reuse of gray water for cooling; and greater use of biogas fuel from the wastewater treatment plant.

Ms. Henry also summarized the alternatives examined in the draft EA. In addition to the no action alternative and the proposed action, the draft EA addresses six other alternatives. These six alternatives were deemed unreasonable because of worse environmental impacts, much higher costs, concerns for providing reactive power, or project schedule constraints.

The public comment period for the draft EA is from July 2 to August 5. TVA already held a public open house in Memphis on July 8. Ms. Henry explained that after the public comment period is closed, TVA will review and address all comments in the final EA. Assuming the analysis continues to show no significant impacts, TVA would then issue a Finding of No Significant Impact (FONSI). At that point, TVA decision-makers would consider the environmental review and other pertinent information to make a decision on the project.

Ms. Henry shared the various ways in which members of the public may submit comments on the draft EA. Copies of the draft EA are available on TVA's web site and in the Memphis public library. The final EA will be posted on TVA's web site.

3. Council Discussion

<u>Stephen Smith</u> asked whether TVA, in reviewing alternatives to the proposed action, had considered renewables, energy efficiency, and purchased power and whether TVA had examined the ability to combine a smaller gas plant, an asynchronous condenser, energy efficiency, and purchased power in order to meet its needs. Ms. Henry responded that TVA has received comments similar to Dr. Smith's question and will be fully responding in the

final EA. Dr. Hoagland added that TVA's needs at this location include both real power and reactive power, and the alternatives considered must be able to meet both of these needs. Dr. Smith also asked whether the EA analyzed the full lifecycle of methane in discussing the greater use of methane from the wastewater treatment plant. Ms. Henry responded that the draft EA looked only at local impacts, but TVA has received comments on this issue and plans to develop an appropriate response in the final EA.

<u>Lloyd Webb</u> asked whether the cooling system is once-through or closed loop and whether the available gray water would be sufficient to meet the plant's needs or whether additional make-up water would be necessary. Ms. Henry responded that TVA expects to meet its needs with the gray water; if additional water is needed, TVA does not plan to use surface waters.

<u>Don van der Vaart</u> asked Ms. Henry to clarify why NEPA was triggered in this instance, since the impacts appear to be positive, and Ms. Henry responded that NEPA is triggered for any proposed federal action.

<u>Susan Williams</u> asked about the anticipated economic impacts to the Memphis community. Ms. Henry responded that the proposed gas plant would require fewer employees than the existing coal plant, so there would be some impacts to individuals. Without diminishing the real and regrettable impact to those individuals, within the scope of the larger local community, the anticipated job loss is less than 0.1% of the local workforce. During construction, some temporary job opportunities would exist.

<u>Jack Simmons</u> asked Ms. Henry to confirm his understanding that other buildings on the site, such as the existing combustion turbine units, were out of the scope of this proposed action, and Ms. Henry confirmed that understanding.

Anne Davis asked what kinds of comments were made at the public open house in Memphis. Ms. Henry responded that, among other things, attendees expressed concern about local jobs, provided positive feedback about the reuse of gray water, applauded TVA's consideration of sources other than coal-fired units, and encouraged TVA to meet its needs through solar and other renewable sources. Cathy Coffey further responded that attendees also asked about transmission line impacts, new jobs during the construction phase, and wind power, renewables, and energy efficiency. Over 80 people signed in at the public open house.

<u>Dus Rogers</u> asked about the current capacity versus the expected capacity under the proposed action alternative. Ms. Henry responded that the current capacity of the three coal-fired units is 990 megawatts, and the expected capacity of the proposed natural gas-fired plant ranges from 800 to 1,400 megawatts, depending on the configuration.

Mr. Rogers also asked how far the supply gas line would run, and Ms. Henry responded that it would be 13 miles. Ms. Williams asked whether Memphis Light, Gas, & Water (MLGW) would be constructing the gas line, and Ms. Henry confirmed that it would. Dr. Smith asked whether MLGW would be selling gas to the plant, and Ms. Henry responded that it would.

The meeting adjourned at 10:55 a.m. EDT.

Minutes Approved: 10:55 a.m. EDT.

Date: 17/23/14

4. The next meeting of the Council will be held October 15-16, 2014, in Knoxville, Tennessee.

Appendix A Non-Council Meeting Attendees

TVA Staff				
Gary Brinkworth	Cathy Coffey	Ashley Farless	Amy Henry	
Beth Keel	Jo Anne Lavender	Kelly Love	Tom Rice	
Greg Signer	John Thomas	Liz Upchurch		

Members of the Public			
Matthew Larson	Simon Mahan	John Metz	

Other	
Jessica Monroe and Sylvia Whitehouse – TVA Office of the Inspector General	