## Tennessee Valley Authority Regional Energy Resource Council May 2, 2016 Meeting Minutes

The Tennessee Valley Authority (TVA) Regional Energy Resource Council (RERC or Council) convened for the second meeting of its second term at 10:34 a.m. EDT on Monday, May 2, 2016, on a webinar.

## Council members attending:

Dus Rogers, Chair	Anne Davis	Wayne Davis
Wes Kelley	Pete Mattheis	Alice Perry
Stephen Smith		

Designated Federal Officer: Dr. Joseph Hoagland

Facilitator: Jo Anne Lavender

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

Copies of the presentations given at the meeting can be found at http://www.tva.gov/rerc. The meeting agenda is shown on slide 7.

The meeting was devoted to discussion about TVA's potential sale of the Bellefonte Nuclear Plant site. The Council did not have the required quorum of members present, and no advice was provided by the Council at this meeting. No oral comment from the public was permitted during this meeting, but information was provided in the meeting notice in the *Federal Register* and during the webinar about how written comments may be submitted to the Council. No written comments from the public were received prior to the meeting.

- 1. Welcome and Meeting Purpose, Dr. Hoagland, Dus Rogers (slides 2-3)
- 2. Webinar Logistics and Agenda Review, Ms. Lavender (slides 4-7)
- 3. Overview of Bellefonte Nuclear Plant and Proposed Sale, Dr. Hoagland (slides 8-11)
- 4. Council Questions (slide 12)
  - Wayne Davis asked whether the site is currently suitable to continue being built as a nuclear plant and, if so, whether TVA would be required to buy the power produced if the site were completed by a third party entity such as Duke or Southern Company. Dr. Hoagland responded that the technology is sound and the site does have potential to be completed as a nuclear plant, but it would have to be licensed appropriately by the Nuclear Regulatory Commission (NRC). When TVA's recent Integrated Resource Plan (IRP) analyzed the possible completion of Bellefonte, TVA found it was not cost-effective. Dr. Hoagland explained that, if a third party were to complete the plant, TVA would not be obligated to purchase the output. TVA would have to provide interconnection at an appropriate charge, but the third party would be responsible for any upgrades to the transmission system necessary to transmit the power out of the TVA service territory. Thus, there would be no impact to TVA ratepayers in that event. Dr. Davis also asked what would happen if TVA received no bids, given the significant

- power plant infrastructure. Dr. Hoagland said that the purpose of this proposal is to explore options and opportunities for the property, including whatever creative ideas developers may have for its future use.
- Wes Kelley asked whether TVA had held public auctions for plant sites it has shuttered, including the recent coal plant decisions. For recently shuttered or to-be-shuttered coal plants, Dr. Hoagland explained that there would be various decommissioning activities that must take place first and then TVA will examine each individual site to see how it can be repurposed. The 17 nuclear sites TVA historically owned have had various dispositions, including other TVA purposes, industrial purposes, and sale to third parties. Dr. Hoagland said the disposition decision is case-by-case based on TVA's needs and the community's needs. Mr. Kelley asked whether this site could be used for experimental reactor development to support the Clinch River small modular reactor (SMR) project. Dr. Hoagland responded that the timing for the two sites does not line up well, as there remains much work to be done on SMRs to determine whether TVA would use that technology.
- Stephen Smith asked how easy it would be to transfer Bellefonte's construction license. Dr. Hoagland responded that transfer is NRC's decision. Dr. Smith asked TVA to confirm that Bellefonte is a clean site (i.e., no radioactive materials have ever been onsite), and Dr. Hoagland confirmed that is accurate. Dr. Smith further asked about whether the removal of parts from Units 1 and 2 by non-nuclear contractors might impact QA/QC requirements if a purchaser wanted to complete the plant. Dr. Hoagland said that the purchaser would be responsible for verification that those requirements are met. Dr. Smith also asked how much riverfront shoreline is associated with the site; TVA staff was not certain of this number, and Dr. Smith asked for this information to be sent to Council members. Dr. Smith said that, in contemplating this sale, TVA should consider its stewardship obligations and goals with respect to water quality, habitat protection, and river biological health, and should try to maintain the riparian zone around the site by attracting economic development opportunities that do not require use of the shoreline or water. Dr. Smith also asked about the condition of the transmission infrastructure on-site. Dr. Hoagland said the equipment is in good shape, but whether improvements would be required depends on the configuration of the ultimate use.
- Anne Davis asked about the timing of the Board's decision, and Dr. Hoagland responded that the Board would consider the potential sale at its meeting on Thursday, May 5, 2016. Ms. Davis further asked whether TVA had analyzed other potential generation uses of the site other than natural gas and nuclear generation, such as production of renewable energy. Dr. Hoagland responded that TVA had analyzed use of the site for various types of generation and that TVA considers whether there is a place for renewables at all of its sites. In selling this site, TVA would be seeking the maximum benefit for everyone.

## 5. Council Discussion (slide 13)

Jo Anne Lavender introduced two questions proposed for discussion by the Council and solicited Council members' individual comments.

- All Council members who could not be present were offered an opportunity to submit written comments to be read by the Council Chair Dus Rogers. Jennifer Kelvington and Lloyd Webb provided the following comments.
  - Jennifer Kelvington: The decision whether to sell the site should depend on economics in consideration of the likelihood that NRC will grant future license

extensions at the Browns Ferry Nuclear Plant to operate beyond 2050. If Browns Ferry is shut down between 2033 and 2036, new nuclear reactors may be necessary to maintain TVA's high level of energy assurance. Nuclear plants are a clean, safe, dispatchable, and reliable energy resource with on-site fuel storage. The recent IRP provided analysis of TVA's resource requirements only through 2033. The decision whether to sell the Bellefonte site should be based on an IRP that looks beyond 2036 and shows whether completion of Bellefonte is financially prudent. If a sale is approved, priority should be given to bidders who will complete the nuclear plant.

- Lloyd Webb: If TVA has no plans to use the site in the next 10 years, TVA should sell the site. This position is based on the assumption that none of the existing equipment could be put into service at a future date and that powering the site would be cost-prohibitive, as it would require additional costs for demolition of existing structures and equipment. With respect to a potential sale, the site should be sold at no cost to ratepayers, including no cost for demolition, remediation, or future cost obligations that impact electricity rates. Further, a sale should support the local community in terms of job creation, generation of tax revenue, and enhancement of future economic development opportunities.
- Dus Rogers: If TVA will not complete the plant, TVA should sell the site. The local community has experienced many ups and downs as TVA has considered its course of action over the years. TVA should sell to an entity who will complete and operate the site as a nuclear plant. If that is not possible, TVA should seek out a purchaser who will operate the site as another type of generation plant or as a large industrial installation, which would ensure capital investment in the community and job creation in order to avoid negative impacts to the local tax base. The site should not be used by a purchaser for residential or recreational purposes.
- Anne Davis: TVA should not retain or sell Bellefonte for the purpose of finishing the reactors. The IRP did not predict a need for additional nuclear capacity beyond some potential uprates at Browns Ferry, and TVA has been reporting even less demand than projected in the IRP. As the IRP results indicate, TVA's modest capacity needs in the short term can and should be filled by energy efficiency and renewables, which are flexible and easily scalable resources. These resources are already competitive with natural gas and do not have the same fuel cost volatility. Over the longer term (5-20 years from now), the Southern Environmental Law Center (SELC) is confident that capacity additions that include a mix of in-Valley and out-of-Valley renewables, including HVDC wind, storage, and energy efficiency, will provide reliable, affordable electricity without the need for a costly capital-intensive investment in baseload nuclear at Bellefonte, or any significant commitment to untested nuclear technology like SMRs. In addition, investment in renewables and energy efficiency will contribute to developing a more diverse, lower-risk portfolio for the benefit of TVA's customers and end-use consumers. These resources are—and even under the acquisition levels in the IRP continue to be—significantly underrepresented in TVA's portfolio. Instead, TVA should evaluate the site for renewable energy development and, based on the results of that analysis as well as its capacity needs and the renewable energy requirements of its customers, determine whether to develop renewable energy assets itself or sell the site for renewable energy development or another use. If TVA decides to sell for another use, consistent with all the prongs of its mission, including economic development and innovation, affordable electricity, and environmental stewardship, TVA should build on its growing success at attracting forward-thinking companies that represent the future of the

Valley as a hub of technological innovation. The buyer should reflect these values, including in its commitment to energy efficiency and renewable energy. TVA's recent partnership with Google, bringing data centers to Alabama and Tennessee, is a terrific example of this approach. SELC encourages the Board to embrace the growing demand for low-cost renewable energy.

- Wayne Davis: While holding no strong position on the question of retention or sale, it is obvious that TVA has no immediate plans to complete the site. It is unclear whether third parties would find completion of the site any more economical than TVA does, especially considering the additional costs that a third party would have to incur and the age of the design. Thus, it may not be feasible for a third party to buy the site for the purpose of completing it as a nuclear plant. In terms of a sale, TVA should look for ways to provide strong economic value to the north Alabama region. If TVA will not use the site, it should be sold to a responsible party who could help improve the economic condition of the region. Consideration should be given to protecting the river frontage and maintaining the environment along the shoreline.
- Wes Kelley: The Valley's ratepayers paid for the facility and the installed infrastructure. While the entire site may not be needed, the core of the site, with its riverfront access, switchyard, and transmission interconnection, could be useful to future ratepayers, as it would be expensive to duplicate if needed elsewhere or at another time. While nuclear generation is not needed today, other generation technologies could benefit from the site. This is based on the assumption that this site was a good location for generation development when chosen and remains so. The due diligence required to select the location for a large generation facility is a costly and difficult process. TVA could shorten future site work by retaining this site. A 20+ year planning horizon is relatively short when considering utility infrastructure. Thus, TVA should retain the core of the site and consider selling other portions for industrial use. Residential use of a portion of the site is not appropriate given the possible future generation use.
- Pete Mattheis: TVA's industrial customers have no objection to TVA selling or retaining
  the site. In making this decision, the Board should consider what is in the ratepayers'
  best interest and take whatever action (sale, lease, etc.) provides the most value to
  ratepayers. TVA should eliminate as much of its costs as possible and maximize the
  value of the site to TVA and to the Valley. With respect to north Alabama, the primary
  concern is jobs and capital investment.
- Alice Perry: Overall, it sounds like it is in TVA's best interests to sell the site. There is a
  question whether it would be cost-prohibitive for another power company to use the site
  for generation purposes. The Board should use a process that gives TVA the best
  options to get the best deal for the site. What's best for the local economy and best for
  the ratepayers should be primary considerations, but that should be balanced with the
  long-term environmental health of the Tennessee River in that area.
- Stephen Smith: TVA should not sell the portions of the site along the Tennessee River, which hold value for the entire TVA region. TVA should also maintain the core of the site where the switchyard and transmission infrastructure are located, as ratepayers have paid for those improvements. TVA should seek economic development on the site in a way that supports TVA's maintenance of the transmission infrastructure and TVA's commitment to the Tennessee River. Since the site is clean, it should not be sold as a potential nuclear site. Completion of the site with the current technology is unlikely, and the local community should have finality on this issue. Instead, TVA should recruit clean businesses that can contribute to economic development, and TVA should be sensitive

to types of development that could create loading issues in the river. TVA can drive the sale to support development with less environmental harm. With the existing transmission infrastructure, installation of renewables on the site would be viable, and TVA could pilot utility-scale storage options to provide leadership on storage innovations.

The meeting adjourned at 11:30 a.m. EDT.

Minutes Approved:

Dus Rogers, Council Chair

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## Appendix A Non-Council Meeting Attendees

TVA Staff				
Cathy Coffey	Scott Fiedler	Joe Hoagland	Jo Anne Lavender	
Kelly Love	Barbara Perdue	Michael Scalf	Greg Signer	
Liz Upchurch				

Members of the Public In Attendance				
Scott Banbury	Sara Barczak	Lauren Bellero		
Jarrod Clark	Jessica Clark	Janice Ceperich		
Blake Farmer	Dave Flessner	Amanda Garcia		
Heather Garner	James Green	Jim Hughes		
Sandy Kurtz	Jonathan Levenshus	Travis Loller		
Marilyn Lott	Ed Marcum	Jeff McCrary		
Kirk Menard	Gary Poole	Bradley Potter		
Melton Potter	Robert Schaaf	Stephen Sondheim		
Kristi Swartz				

Other		
Kristin Leach, David Shields, Rick Underwood – TVA Office of the Inspector General		
Ed Carmack, Frank Persia – Chorus Call (webinar technology)		