#### Tennessee Valley Authority Regional Energy Resource Council January 20-21, 2016 Meeting Minutes

The Tennessee Valley Authority (TVA) Regional Energy Resource Council (RERC or Council) convened for the first meeting of its second term at 10:04 a.m. CST on Wednesday, January 20, 2016, at the Sheraton Memphis Downtown Hotel, 250 N. Main Street, Memphis, TN 38103.

Council members attending:

Ŭ		
Dus Rogers, Chair	Lance Brown	Anne Davis
Wayne Davis	John Evans	Rodney Goodman
Pedro Mago	Pete Mattheis	Alice Perry
Joe Satterfield	Jack Simmons	Stephen Smith
John Warren	Lloyd Webb	

Designated Federal Officer: Dr. Joseph Hoagland Facilitator: Jo Anne Lavender

Appendix A identifies the TVA staff, members of the public who provided oral or written comments, and others who attended the meeting.

Appendix B is the agenda for the meeting.

Appendix C contains the unanimous advice provided by the Council.

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

The majority of the meeting was devoted to presentations about TVA's coal combustion residuals (CCR) management and its environmental review of its plans to close CCR impoundments in accordance with EPA's CCR Rule.

#### 1. Welcome, Introductions, Safety Moment (slides 2-4)

#### 2. Meeting Purpose and Agenda Review (slides 6-9)

#### 3. FACA/RERC Orientation

Kelly Love, Senior Attorney, TVA Office of the General Counsel, provided an overview of the Federal Advisory Committee Act, key provisions of the RERC charter, and meeting protocols. (slides 10-13)

#### 4. Environmental Policy Update

Brenda Brickhouse, TVA Vice President, Environment and Energy Policy, provided an update on TVA's environmental policy outlook and key environmental regulations. (slides 24-31) Among recent EPA regulatory actions, Ms. Brickhouse highlighted the new ozone standard, under which TVA expects all areas of the Valley will be in attainment thereby providing economic development opportunities, and the CCR Rule, which is a major rulemaking that lines up with TVA's work to convert to dry handling and stabilize our ash storage facilities. Ms. Brickhouse provided a more detailed overview of the Clean Power Plan. With respect to the choice between regulating on mass vs. rate (slide 28), Wayne Davis asked how complicated it would be for TVA if the states in which it operates chose different approaches. Ms. Brickhouse responded that implementation can be complicated in that situation, especially with respect to compliance and reporting, but that diversity in the

fleet is giving TVA flexibility and resiliency in planning. She noted that trading of credits would be possible if the states chose the same method. Lloyd Webb asked how states with multiple utilities would approach implementation. Ms. Brickhouse responded that TVA has a collegial relationship with its peers and regulators, and TVA anticipates there will be a number of conversations to figure out the best implementation path. TVA is encouraging Valley states to prepare state plans. Mr. Webb said his understanding was that only one state has indicated they will not develop a state implementation plan, and Ms. Brickhouse said there is much uncertainty, with different states in different stages of considering the Plan and their actions. Alice Perry noted that Mississippi is participating in legal action, but at the same time is taking seriously its obligation to develop a state implementation plan, including regular engagement with stakeholders.

Jack Simmons asked whether litigation over the Clean Power Plan would affect TVA. Ms. Brickhouse said that TVA has been planning for a carbon-constrained world for some time, so TVA is on-track for compliance even if changes are made as a result of litigation. In addition, TVA does not have major generation decisions pending that are location-based. Stephen Smith asked TVA to share its comments on the Clean Energy Incentive Program and asked TVA to keep this in mind as a low-cost option for compliance. Ms. Brickhouse said TVA's comments are publicly available on EPA's website and explained that TVA isn't necessarily looking at this program as an aid for compliance but instead would evaluate clean energy projects as it does other generation projects, including on a cost-benefit basis. Dr. Smith also asked TVA to share its comments on the model rule.

## 5. Introduction of Advice Topic (slides 34-35)

## 6. Coal Combustion Residuals Overview

Scott Turnbow, TVA's General Manager, Strategy and Engineering, Civil Projects & CCP Management, gave the Council an overview of TVA's CCR management, including how CCRs are produced, TVA's conversion process from wet handling to dry handling, TVA's initial stability investigations and improvements, TVA's instrumentation monitoring for impoundments, CCR dewatering facilities, new CCR landfills, and CCR Rule compliance information. (slides 36-57)

Dus Rogers asked whether fly ash, bottom ash, and gypsum are all sent to the same facilities/units, and Mr. Turnbow explained that these byproducts are handled differently at various plants, with some plants separating gypsum for marketing. Lloyd Webb asked whether the new Effluent Limitation Guideline (ELG) for the steam electric power industry limits how much wet material can be converted to dry handling. Mr. Turnbow explained that the ELG does not limit conversion but does speak to how TVA must treat the decant water.

In response to a question from Stephen Smith, Mr. Turnbow clarified that the Phase I activities (slides 39-40) were performed for both active and inactive management areas. Also in response to Dr. Smith regarding slide 43, Mr. Turnbow explained that a factor of safety below 1.0 indicates likely failure and that 1.5 is the goal; all of TVA's facilities were between 1.0 and 1.5 when initially assessed, and TVA made improvements to get all dikes up to at least 1.5. With respect to slide 46, Mr. Webb asked whether heavy rain could cause an alert in the automated monitoring. Mr. Turnbow responded that it usually would not but that it could. Dr. Smith followed up by asking whether river flooding that overtops the dikes would cause an alert. Mr. Turnbow explained that the instrumentation is measuring changes in pressure that likely wouldn't occur in that scenario; rather, the concern is rapid drawdown in either the pond or the river. With respect to slide 56, Dus Rogers asked whether the

Widows Creek Gypsum Stack is lined, what type of improvements could be built on the closed facility (e.g., solar panels?), and how long the closure process took. Mr. Turnbow responded that this facility is not lined, that TVA is investigating the possibility of installation of solar panels, and that closure of a site can take 1.5-2 years depending on the size of the site, weather, and other factors.

Dr. Smith asked whether all closed landfills have groundwater monitoring. Mr. Turnbow responded that they are not required to under the CCR Rule and that TVA will follow any applicable state requirements. Ms. Brickhouse also noted that TVA is not seeing off-site impacts from its existing facilities. Dr. Smith said that groundwater monitoring provides a level of safety to assure that closed units don't cause problems later and noted that TVA policy could require groundwater monitoring even if state or federal law do not. Wayne Davis asked whether there are any degassing issues post-closure, as you'd have with a municipal landfill. Mr. Turnbow responded that TVA does not have such issues. Dr. Smith asked how the ash island at Johnsonville is being treated. Mr. Turnbow responded that TVA conducts groundwater monitoring at the toe of the facility and biological monitoring in the river. Mr. Rogers noted that Stevenson, Alabama, withdraws its drinking water from the river in the vicinity of the Widows Creek Fossil Plant and asked about the impacts to drinking water supplies. Ms. Brickhouse explained that TVA conducts surface water quality monitoring and that the utilities themselves monitor their raw water intakes. TVA has not seen evidence of impact/influence in the river or at nearby drinking water intakes. After the Kingston ash spill, the City of Rockwood's downstream intake saw no exceedances.

The Council adjourned for lunch at 11:47 a.m. and reconvened at 1:06 p.m.

## 7. DFO Briefing

DFO Joe Hoagland provided a recap of the first term of the RERC, including its advice, and previewed the proposed topics for the second term of the Council. (slides 15-17) Dr. Hoagland also provided an update on several TVA business items. (slide 18) He reported that TVA is making some changes to its renewables program. Large scale solar is becoming competitive with other technologies, and TVA is recognizing the importance of medium scale solar on the distribution system and has reoriented its program for distributors and TVPPA to help this segment grow. With respect to Watts Bar Unit 2, Dr. Hoagland reported that TVA has completed the fuel load and expects to begin commercial operation this spring. John Evans asked about the size of Unit 2 and whether TVA would get credit for it under the Clean Power Plan. Dr. Hoagland responded that Unit 2 will be 1200MW, and Brenda Brickhouse responded that TVA will get credit. Dr. Hoagland also talked about TVA's management of the heavy rain during December and updated the Council on Raccoon Mountain's return to full operation. Finally, he explained the eScore program, an interactive tool that TVA created with local power companies to score houses based on insulation, heating/cooling systems, appliances, and other factors.

Dr. Hoagland then talked about the evolving utility industry, including the decreasing use of coal and increasing use of natural gas and renewables, TVA's changing capacity and energy mix, TVA's reductions in CO<sub>2</sub> emissions, and the evolving utility paradigm, which is shifting from centralized generation to dispersed generation. (slides 19-22) With respect to TVA's energy mix, John Evans noted that TVA's large nuclear capacity positions it well and provides a hedge for TVA. Stephen Smith asked Dr. Hoagland to talk about storage, which is a game-changer regarding the intermittency of distributed generation. Dr. Hoagland said storage is critical to making renewables effective, and noted that small scale lithium ion storage is being developed but isn't quite ready. He said TVA is working with local power

companies to demonstrate a storage technology. Dr. Smith also asked for a status update on the Apex wind development. Dr. Hoagland responded that TVA had a preliminary conversation with the developers but TVA hadn't heard much from them since that meeting.

8. **Modeling Impoundment Closure Options: Electric Power Research Institute (EPRI)** Bruce Hensel, Senior Technical Leader, EPRI, presented a summary of the relative impact framework EPRI has developed to evaluate closure in place versus excavation and redisposal for ash surface impoundments. (slides 58-78)

Jack Simmons noted that many of the graphs in the presentation use a log scale, which means that some of the bars in the graphs are conveying an order of magnitude difference in values. Anne Davis asked about the availability of EPRI's framework report and the hypothetical site model report. Mr. Hensel said the framework is available now from EPRI for a cost, and the hypothetical site report will be made available when it's finalized. Ms. Davis asked what EPRI relied on for the worker safety assumptions and whether the worker safety statistics from actual removals occurring in North Carolina and South Carolina were considered. Mr. Hensel responded that number of trips, vehicles, and worker days were critical inputs. In the draft hypothetical site model, generalized published statistics were used, but Mr. Hensel said that EPRI is updating the numbers used in the final report by taking advantage of TVA data and talking to Duke to understand their safety record. Ms. Davis also asked whether the model makes assumptions about geology, and Mr. Hensel responded that it assumes alluvium as the geology of interest, as it's the most common. In response to a question from Ms. Davis, Mr. Hensel also said the model considers information on groundwater movement.

With respect to slide 68, John Evans asked why the excavation alternative showed higher relative arsenic values, whereas selenium and other elements show higher relative values for closure in place. Mr. Hensel explained that the driver is the mobility of the particular constituent of concern in an oxic environment. With respect to slide 71, Wayne Davis questioned the higher relative air impact of closure in place as compared to the baseline. Mr. Hensel explained that maintaining the impoundment is a low impact activity, in contrast to closure in place which would require trucks to deliver enough off-site dirt material to provide two feet of cover for the cap. He further noted that the impact of fly ash transport relative to dirt transport is much higher. Dr. Davis asked whether the model considers societal barriers to siting a new landfill, and Mr. Hensel responded that it does not.

Lloyd Webb asked how accurate the groundwater modeling assumptions are and what would affect their accuracy. Mr. Hensel responded by acknowledging that modeling is only as good as its inputs. He further noted that, with the relative impact analysis, the absolute concentrations aren't the key, but rather than comparison between the two options, which holds up better even if your inputs aren't perfect. Mr. Webb noted that people in areas near these impoundments will want to know the absolute numbers and understand what their risk is. John Evans suggested that EPRI should consider adding roadside emissions to the analysis.

9. Overview: CCR Impoundment Closure Draft Environmental Impact Statement (EIS)

Amy Henry, TVA NEPA Program and Valley Projects Manager, introduced TVA's CCR impoundment closure draft EIS and its format, evaluation criteria, screening mechanism for alternatives, and preliminary results. (slides 80-85) Anne Davis asked whether the site-specific reviews in Part II of the EIS rely on the general EPRI model rather than a site-specific modeling effort. Ms. Henry confirmed that TVA relied on the general hypothetical

site report for Part II and that TVA has not obtained site-specific modeling. However, TVA did include other pertinent site-specific information, such as groundwater information, in the Part II analyses. Stephen Smith asked about the possibility of an extension on the time for comment responses. Ms. Henry responded that TVA is under schedule pressures so that timely decisions can be made about closing these impoundments and that it would be difficult to meet the current schedule and allow an extension. However, Ms. Henry encouraged the submission of any requests, and she said TVA would consider them. Lloyd Webb noted that pond closures represent a significant cost to ratepayers and said that he wouldn't advocate putting the schedule at risk if it would have significant cost impacts. Dr. Smith further commented that he is not comfortable with TVA's commitment to future groundwater monitoring. At a minimum, he said that, if TVA decides to close impoundments in place, TVA should err on the side of robust monitoring to properly characterize the impacts. He further clarified that such monitoring should go beyond any minimum legal requirements and represent a TVA policy with the goal of proving there is no ongoing migration of groundwater after the material is capped in place.

## 10. Public Comment Period

Three members of the public offered comments.

- Beth Alexander, with the Southern Environmental Law Center (SELC), noted SELC's regional initiative to promote the clean-up of coal ash. She said that TVA stores its coal ash in unlined ponds next to the river. While TVA has permits to discharge through outfalls from those ponds, Ms. Alexander said that TVA does not have permits for seeps and groundwater leakage. Ms. Alexander focused on two TVA facilities, Gallatin and Cumberland fossil plants. With respect to Cumberland, she told the Council that the facility is located on fractured bedrock created by the impact of a meteor. With respect to Gallatin, she said that sinkholes are located under the impoundments. Ms. Alexander told the Council that, given the geology of these areas, it is impossible for them to hold coal ash. She noted that Duke, Santee Cooper, and South Carolina Electric and Gas have agreed to move all or part of their coal ash to lined facilities and expressed her hope that TVA will do the same.
- Chris Ann Lunghino, with Community Sustainability USA, Inc., expressed three concerns. First, she noted concern with TVA's solar process and policy. She said that, since the IRP, TVA has entered into two power purchase agreements for large scale solar. She further said that TVA made cuts to its 2016 program without consulting the appropriate stakeholder group. Ms. Lunghino asked the RERC to investigate this and get the program back on track. Second, she asked the RERC to update or reissue its recommendation that the TVA Board of Directors open its committee meetings to the public. Third, Ms. Lunghino said that TVA has an opportunity to lead the southeast and exceed the goals for the Clean Energy Incentive Program under the Clean Power Plan.
- Scott Banbury, with the Sierra Club, noted that in Memphis two-thirds of residents are in a category where more than 20% of their income is spent on electricity. He expressed concern about impacts to low-income residents and the lack of permanent TVA energy efficiency (EE) programs beyond 2018. He encouraged the RERC to ask the TVA Board to implement more EE programs. Mr. Banbury further said TVA is not providing sufficient review time for the CCR pond closure draft EIS. He said that TVA is moving to complete this EIS quickly so that it can avoid long-term groundwater monitoring. He also criticized the lack of discussion in the EIS of the permeability between the ponds and the adjacent rivers and the lack of consideration of seismic risk and how it could be mitigated.

# 11. Preliminary Council Discussion

Anne Davis asked for an update on the Council's previous advice regarding opening TVA

Board committee meetings to the public. Dr. Hoagland said that he had communicated the Council's advice to the External Relations Committee, but the Board has not changed its policy. Jack Simmons asked Scott Turnbow to clarify the permeability and the relative levels of the river and ash ponds in flood events. Mr. Turnbow responded that during recent flood events, the pond levels rose because of rainfall, the river did not backflow into the ponds, and there was no permeability through the walls of the pond dikes and the river. In response, Anne Davis said there may be some correlation of water levels in areas that are karstic. Stephen Smith suggested that TVA scope out future meeting topics with input from the Council as a whole to ensure that everyone finds value in the topics being discussed and that all perspectives are explored.

The RERC adjourned for the evening at 4:08 p.m. CST and reconvened on Thursday, January 21, 2016, at 11:04 a.m. CST.

### 12. CCR Impoundment Closure Draft EIS

Amy Henry provided more information on the National Environmental Policy Act (NEPA) and TVA's draft EIS for CCR impoundment closures. (slides 93-101)

Stephen Smith asked why TVA broke out the EIS into a programmatic review and some sitespecific reviews. Ms. Henry responded that the programmatic review analyzes the two general options and associated impacts that are common to all potential projects and explained that this allows TVA to streamline the analysis by looking at this information once. Other site-specific reviews may be tiered from this EIS. Dr. Smith asked whether TVA would get public input again on those subsequent tiered site-specific reviews, and Ms. Henry responded that it depends on the particular project and the draft EIS lays out TVA's thought process on future reviews. Anne Davis asked how TVA chose the 10 specific units included in the draft EIS. Scott Turnbow responded that two of the ponds at Allen and Widows Creek are not regulated by the CCR Rule but were in TVA's long-range closure plans, and the remainder were driven by CCR Rule considerations.

With respect to slide 97, Dr. Smith asked whether TVA is gaining insights on operational logistics from its peers who are removing ash from ponds. Ms. Henry responded by giving a couple of examples. Removal of ash at John Sevier would take 100 trucks/day for five months; thus, both closure alternatives are feasible. In contrast, removal of ash at Bull Run would take 100 trucks/day for 10 years; removal of this ash within two years would require 1.300 trucks/day, or 162 trucks/hour. With this increased truck traffic come air, safety, and road condition impacts. Lloyd Webb noted that the front-end assessment by these other utilities of these types of impacts likely wasn't as thorough as TVA's approach, and he said that if you live close to the plant, the truck impact is huge. Anne Davis noted that Duke is excavating ash at seven sites, some of which have significant volumes of ash (7.2 and 5.7 million tons at two sites, respectively). She said TVA's analysis should also consider the environmental justice impacts of living near plants with contaminated groundwater. Mr. Webb responded that risk and probability play into the analysis and said those factors are known for the truck traffic but are less known for groundwater. Ms. Davis also asked about the volume of ash, length of time, and worker facilities during the Kingston project. While Ms. Henry did not have the statistics at that moment, she said TVA does have Kingston-related information, which will be brought into the final analysis, and she further noted that TVA built a rail spur at Kingston to reduce truck traffic. Dr. Smith then asked whether there are truly sites without rail access or where rail access can't be accommodated. Dr. Hoagland noted that an important component of this issue is rail access at the receiving landfill, and Ms. Henry said that each site-specific section of the EIS includes a rail availability analysis.

Dus Rogers asked TVA staff to comment on surface water testing. Skip Markham, TVA Director, Environmental Permitting & Compliance, responded that water plant operators test the water quality in their intakes and, if the system is big enough, consumer sampling will also be conducted periodically. He noted that TVA doesn't sample at nearby water system intakes, but TVA does conduct river biomonitoring. Ms. Henry also noted that one screening criteria in the draft EIS is impact to other environmental areas (e.g., will TVA violate its permits, endanger protected species, or adversely affect wetlands?), and TVA has not seen any areas of concern. Anne Davis noted that state regulators tested the Gallatin Public Utilities intake, which is one mile downstream of TVA's Gallatin plant, and found evidence of hexavalent chromium above a risk-based screening level. Mr. Rogers asked whether the treatment processes remove these contaminants, and Ms. Davis responded that Gallatin Public Utilities does not treat for hexavalent chromium.

Mr. Webb asked how TVA might address a situation in which EPA later determines that the level of groundwater contamination should be reassessed (i.e., what was previously not considered a risk is later determined to be a risk). Dr. Hoagland responded that TVA would first assess the viability of groundwater remediation technology, which might allow TVA to leave the ash in place. Stephen Smith said that TVA has a responsibility to go above and beyond with its monitoring to assure that it knows what is occurring in the groundwater in a closure in place scenario. Anne Davis said that it is hard to reconcile TVA's environmental stewardship mission with TVA's decision to close ponds in place regardless of whether the pond is within the uppermost aquifer. Dus Rogers agreed that TVA has a responsibility when it closes ponds in place to perform monitoring to assure residents are protected. Wayne Davis noted that the Allen plant sits on a fault and that this represents a good reason not to have an ash unit near the river. He questioned whether TVA evaluated the potential impacts of a hypothetical long-term catastrophic event. Ms. Henry said there is some discussion of seismic risk, and there is also an effort underway to look at seismic stability.

With respect to slide 98, Jack Simmons noted that the cost figures in the chart are per site and that the cumulative total cost could have significant rate impacts. Lloyd Webb said he wasn't sure the estimated costs capture the social justice impacts of any rate changes that would be necessitated. Anne Davis said that Santee Cooper has said their removals will have no rate impact. Ms. Davis questioned the basis for TVA's conclusions related to worker safety and the dangers of moving the ash.

### 13. Council Discussion and Advice

Jo Anne Lavender reintroduced the advice questions and facilitated the Council's discussion. (slide 104)

With respect to question 1, Anne Davis said it was a great idea to hold public hearings around the Valley, but said the process feels rushed and lacking all necessary information. She requested an extension of the comment period on the draft EIS and said that it would be hard to give intelligent comments without access to the EPRI study and without site-specific information on water tables, whether ash is intersecting groundwater, etc. Stephen Smith said it is significant whether the ash is in regular contact with groundwater and that this information needs to be known and shared with commenters to enable thoughtful input.

With respect to question 2, Jack Simmons said information is needed on the anticipated impact of these closures on rates and the resulting social/environmental justice impacts. Lloyd Webb noted that the cost spread between the two closure options isn't very large at

some sites, and that it may be better for TVA to remove the ash at those sites to mitigate concerns like risk of a catastrophic event. Jack Simmons said TVA needs to ensure that readers understand that coal ash isn't a hazardous material. Dr. Smith said TVA should carefully evaluate the risk and cost of dealing with future problems, perhaps within a larger footprint, when selecting an action today and noted that such retroactive action can be quite costly. Wayne Davis talked about differences in bottom ash and fly ash in terms of leachability and said that TVA should consider removal of ash at some locations where the cost is lower compared to the other plants (e.g., Allen). Anne Davis said TVA should consider the risk of future liability of closure in place versus removal, should appropriately analyze impacts to groundwater and surface water, including where the uppermost aquifer is located, and should factor into its analysis the real world experiences of TVA and others with ash removal projects.

Stephen Smith proposed for the Council's consideration of an advice statement urging TVA to adopt a groundwater monitoring policy above compliance minimums. He noted this was particularly important for the subset of ponds for which the CCR Rule does not require long-term monitoring, and he said such a TVA policy would build public confidence in TVA's decision to close in place and would not be a significant cost. Jack Simmons expressed concern about implying that regulators aren't properly handling the risks with their regulations. Lloyd Webb said the Council can emphasize TVA's environmental stewardship mission. Rod Goodman said TVA has a responsibility as a public entity and noted that "minimum compliance" does have a negative connotation and that the public would feel better knowing TVA was monitoring impacts. Anne Davis agreed that the public would feel better if TVA were not escaping monitoring by closing these ponds early under the CCR Rule. Mr. Webb said TVA could realize future risk mitigation through its closure alternatives, and encouraged TVA to look at the spread between the alternatives rather than absolute values. The Council engaged in further discussion regarding the specific wording of the advice statement.

Dus Rogers moved to approve the Council's advice statement. Anne Davis seconded the motion. The Council unanimously approved the advice statement reflected in Appendix C.

The meeting adjourned at 1:19 p.m. CST.

Minutes Approved:

Dus Rogers, RERC Chair

Date: <u>3/28/</u>16

Appendix A	
<b>Non-Council Meeting Attendees</b>	

TVA Staff				
Brenda Brickhouse	Cathy Coffey	Amy Henry	Joe Hoagland	
Beth Keel	Jo Anne Lavender	Kelly Love	Skip Markham	
John Myers	Michael Scalf	Chris Stanley	Scott Turnbow	
Liz Upchurch				

Members of the Public Who Made Oral Statements		
Beth Alexander		
Scott Banbury		
Chris Ann Lunghino		

Other
Jennifer Torregiano – TVA Office of the Inspector General
Derrick Chatman, Amanda Rhodes – TVA Police
Julie White – Elite Reporting (Stenographer)
Bruce Hensel – EPRI; Presenter

## Appendix B Meeting Agenda

# **Regional Energy Resource Council** January 20-21, 2016

Sheraton Memphis Downtown Hotel Magnolia Room 250 N Main St, Memphis, TN 38103

January 20, 2016			
10:00AM - 3:15 PM	Accept Public Requests to Comment		
10:00	Welcome - Dus Rogers, Chairman		
	Joe Hoagland, Designated Federal Officer (DFO)		
	Vice President, Stakeholder Relations		
	Introductions - Council Members Jo Anne Lavender, Facilitator		
	Safety Moment Building Emergency Plan Lavender		
10:15	Meeting Purpose Hoagland		
10:20	Overview of Agenda Lavender		
10:25	FACA / RERC Orientation Kelly Love, Senior Attorney		
10:30	DFO Briefing: RERC and TVA Update Hoagland		
10:45	Break		
11:00	Policy Update Brenda Brickhouse, Vice President,		
	Energy and Environment Policy		
11:45	Lunch St Louis Room		
1:00	Introduction of Advice Topic Lavender		
1:10	Orientation - Coal Combustion Residuals (CCR) Scott Turnbow,		
	General Manager, Strategy and Engineering		
1:45	Modeling Impoundment Closure Options: Electric Power Research		
	Institute Bruce Hensel, Senior Technical Leader		
2:30	Break		
2:45	Overview: Coal Combustion Residual (CCR) Impoundment Closure		
	Dratt Environmental Impact Statement (EIS) Amy Henry, Manager,		
	NEPA Program and Valley Projects		
3:05	Preliminary Discussion Council		
3:30 - 4:30	Public Listening Session Lavender Facilitate		
4:30	Wrap Up, Overview of Evening and Day 2		

January 21, 2016				
12:30	Welcome, Review of Day 1LavenderReview Day 2 AgendaLavender			
12:45	CCR Impoundment Closure Draft EIS Henry			
1:15	<ul> <li>CCR Discussion and Advice to TVA Lavender, Council</li> <li>1. What do you think about TVA seeking public comment on these closure alternatives including holding meetings in communities near coal-fired</li> </ul>			
	<ul> <li>plants?</li> <li>2. TVA has evaluated multiple criteria (listed below) in the Draft EIS. Is there anything important that we missed? <ul> <li>Volume of CCR materials</li> <li>Mode and duration of transport (borrow/fill) activities</li> <li>Schedule of closure (milestones of CCR Rule)</li> <li>Impoundment Stability (static, seismic)</li> <li>Risk to human health &amp; safety (workers, motorists)</li> <li>Effects to adjacent environmental resources (wetlands, groundwater, surface water, air, biota, historic resources)</li> <li>Environmental Justice</li> <li>Cost</li> </ul> </li> </ul>			
	3. From your perspective, what are the pros and cons for the closure in place alternative and for the closure by removal alternative?			
2:15	Break			
2:30	CCR Discussion and Advice to TVA (cont'd)			
3:30	Summary, RERC Next Steps Hoagland and Rogers			
3:45	Adjourn			

# Appendix C Council Advice

TVA, with its mission in environmental stewardship, should ensure that it has a robust policy on monitoring of CCR facilities to ensure that TVA is not causing environmental damage.