cleanenergy.org
Southern Alliance for Clean Energy

1.866.522.SACE
www.cleanenergy.org

P.O. Box 1842
Knoxville, TN 37901
865.637.6055

46 Orchard Street
Asheville, NC 28801
828.254.6776

250 Arizona Avenue, NE
Atlanta, GA 30307
404.373.5832

P.O. Box 310
Indian Rocks Beach, FL
33785
954.295.5714

P.O. Box 13673
Charleston, SC 29422
843.225.2371

Charles P. Nicholson
National Environmental Policy Act Project Manager
Tennessee Valley Authority
400 West Summit Hill Dr., WT 11D
Knoxville, TN 37902
(865) 632-3582
IRP@tva.gov

Re: 2015 Tennessee Valley Authority Integrated Resource Draft Plan Comments

The Southern Alliance for Clean Energy ("SACE") appreciates the opportunity to comment on the Tennessee Valley Authority ("TVA") Draft 2015 Integrated Resource Plan ("IRP"). SACE has been a leading voice for energy policy to protect the quality of life and treasured places in the Southeast since 1985. SACE staff was involved in TVA's 2011 IRP as members of the 2011 IRP Stakeholder Review Group. For the 2015 IRP process, SACE staff were members of the IRP Working Group, Energy Efficiency Information Exchange ("EE-IX"), Tennessee Valley Renewable Information Exchange ("TV-RIX"), and the recently created Regional Energy Resource Council ("RERC"), a formal advisory committee to TVA's Board of Directors.

TVA's commitment to public engagement throughout the IRP planning process has allowed for an exchange of information between stakeholders and utility staff that is unprecedented in the Southeast. SACE staff has gained valuable insight into TVA's planning exercises and decision-making criteria through engagement in both of TVA's IRP planning processes. Throughout the 2015 IRP process, SACE staff worked with other stakeholders and industry experts to provide TVA with current data related to performance and costs for both renewable energy and energy efficiency resources.

While the scope of the process has been unprecedented in the Southeast, there have been some significant gaps between the planning intent and recent decisions by TVA's management and Board of Directors. Recent TVA decisions reflect major investment decisions that appear to overreach on recent power plant decisions rather than following a least-cost, least-risk plan. Even as growth has slowed to only 1% per year, TVA's capital budget for 2015 is a record $3.5 billion. During the planning process, TVA proceeded to:

- Approve construction of gas plants at Allen and Paradise to serve not only reliability needs, but future growth needs;
- Purchase the Choctaw gas plant (which had been under contract); and

- Invest in costly environmental upgrades at the Shawnee coal plant, again without an immediate power need.

While TVA claimed that these decisions were consistent with the 2011 IRP, this capacity expansion policy was made concurrently with its failure to invest in energy efficiency and meet the commitments made in the 2011 TVA IRP. TVA's recent decisions to depart from the 2011 IRP planning guidance have not been adequately justified.

We commend TVA for demonstrating an organizational commitment to improvement in planning methods since the 2011 IRP. Many of the improvements effectively respond to concerns we raised in our comments on the 2011 IRP. TVA is commended for not only making these changes, but for the organizational discipline to track input and apply good ideas. In some cases, the recommendations we make for improvement can be appropriately addressed in future planning updates, but in other cases, time is of the essence and it is essential that TVA's IRP pathway drive the utility towards all cost-effective energy efficiency opportunities and seizing the opportunity to develop renewable energy rather than overinvesting in natural gas resources.

With respect to energy efficiency, TVA's Draft 2015 IRP does not meet the standard of taking all cost-effective steps to help families and businesses reduce their energy bills. In its 2011 IRP, TVA promised to become a regional leader in energy efficiency, helping customers cut energy bills by targeting energy savings as high as 1% of retail sales. Instead, TVA cut its energy efficiency budget and is stalled at one-third of its 2011 IRP goal. Even though the Draft 2015 IRP prompts TVA to resume program growth, the plan both falls significantly short of 2011 targets and fails to rely on best industry practices.

The two biggest departures from industry practices are growth caps and excessively high program cost assumptions. While it was reasonable for TVA to restrict the annual growth in energy efficiency programs at some level, utilities across the Southeast and the nation have recorded multiyear periods of annual growth rates that substantially exceed the restrictive caps used by TVA. TVA's recent sensitivity analyses show that these growth caps on low-cost energy efficiency resources drive up system costs.

TVA's Draft 2015 IRP also assumes that program growth will cause TVA's energy efficiency costs to skyrocket (contrary to other utilities' experience). This is accomplished both by significantly inflating the "Tier 2" and "Tier 3" energy efficiency resource block costs, and by applying a "planning factor" on top of these inflated costs. This undermines cost optimization in TVA's capacity expansion planning model, resulting in the model selecting resources whose costs exceed a best practice cost forecast. In addition to creating a cost bias against higher levels of energy efficiency, even those energy efficiency resources that are selected in the plan include these cost adders. For example, even though TVA is highly confident that it will be able to continue

implementing existing "Tier 1" level programs at current costs, the costs added using the "planning factor" form a part of the resulting cost estimate. Thus, assuming energy efficiency costs will skyrocket results in choosing too little energy efficiency, and overstating costs for the energy efficiency that is chosen in the modeling process.

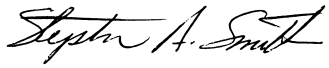
With respect to renewable energy, TVA's Draft 2015 IRP does not demonstrate a full awareness of, and progress towards, emerging opportunities that would lower power supply costs and risks. While the Draft IRP supports a reasonable growth rate for solar resources (potentially around 2,000 MW), we are dismayed by the skeptical posture that the planning staff has taken towards recent low-cost solar deals, dismissing the broad market for low-cost solar power as an anomaly. More disappointing is the response to data on the wind power market: TVA's Draft IRP relies on inflated cost assumptions and outdated technology assumptions, resulting in little to no wind development and suggesting that TVA may soon exit the wind market entirely at the very time when other Southeastern utilities are deepening their investment.

In fact, TVA's sensitivity analyses show that if TVA accepts the availability of cheap, plentiful and reliable wind energy (particularly Clean Line), then wind resources will drive down customer costs and rates, becoming one of TVA's leading energy resources as soon as the project can be completed.

In our attached technical comments, we lay out our concerns with the 2015 Draft IRP and suggest opportunities for TVA to improve the final 2015 IRP and TVA's ongoing planning process to include appropriate characterizations of the true value of energy efficiency and renewable resources. SACE, along with the Tennessee Clean Water Network ("TCWN"), Earthjustice, Environmental Integrity Project ("EIP"), and the Sierra Club, submitted joint comments on the 2015 Draft IRP Supplemental Environmental Impact Statement ("SEIS") separately. To the extent references to the SEIS were necessary to elucidate points in our IRP comments, we have made those references within our IRP comments.

On behalf of SACE, I thank TVA's staff and leadership for investing in a resource planning process that has truly faced outwards, and engaged the utility in critical questions facing the future of all electric utilities across the country.

Respectfully submitted,



Dr. Stephen A. Smith, Executive Director
Southern Alliance for Clean Energy