July 30, 2012

TVA Board of Directors
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MATRR
MOTHERS AGAINST TENNESSEE RIVER RADIATION
BECAUSE IT MATTERS

Dear TVA Directors,

We call on you to investigate economically and environmentally favorable alternatives to nuclear power. We hope you have read two very important books on this subject: the *Carbon Free Nuclear Free* book presented to each of you, and also the book by TVA's distinguished former Chairman, S. David Freeman's *Winning Our Energy Independence*.

We also hope you have read the paper by your board member Marilyn Brown with Benjamin Sovacool, "A Source of Energy Hiding in Plain Sight." It says, "In just the electric utility industry, cost-effective energy efficiency measures could reduce U.S. consumption by an astounding 30 to 75%." [1] We certainly hope you have read Ms. Brown's Georgia Tech study with Duke University, "Energy Efficiency in the South," where they found that energy efficiency in one decade could "lower our utility bills by $41 billion, create 380,000 new jobs" and "save 8.6 billion gallons of freshwater" in addition to reducing "the need for new power plants".[2]

With this knowledge in hand, TVA has chosen to increase its plan for energy efficiency from only 1% to only 6% by 2019. We again call on you to do better – especially now that you have created such massive TVA debts with your nuclear programs. We call on TVA to make a commitment to raise its efficiency spending from 6% to 30% by 2019.

In 2005, Tennessee ranked last in the nation in residential energy efficiency – 57% less efficient than California, 54% less efficient than New York, and 30% less efficient than the average U.S. resident. But Tennessee has shown it is capable of rising to the efficiency of the rest of the country. From 2005 to 2007, they moved their ranking from last to 46th; and in one year, 2007, Tennessee initiated a program that moved their efficiency ranking from 46th to 38th in the nation, saving 63,547 MWh of electricity; and TVA reports that Tennessee spent $18.5 million on energy efficiency in 2009, saving 120,769 MWh.[3]

We applaud your improvements in these areas; however, comparing the economics of efficiency to nuclear power, we think it should be clear that it is time to commit to efficiency. Again, we call on you to increase your budget commitment from 6% to 30%, and here is why:

Using TVA's estimation of 5,200 GWh savings by 2019 with a 6% efficiency improvement, then a 30% (6% x 5) improvement would achieve 26,000 GWh (5,200 x 5) savings.

This 26,000 GWh savings would eliminate the 22,000 GWh additional electricity needs that TVA anticipates, as well as your justification for building additional expensive and dangerous nuclear reactors in our valley. You will save money and liability.

According to an Energy Saavy and Efficiency First study, for half the cost of a 1000 MW nuclear power plant over its 40 year life span, Energy Efficiency Programs can replace the power need,

reduce utility bills for 1.6 million families and create 90 times more jobs – that's 220,000 jobs rather than 2,400 for nuclear – at half the cost.[4] Certainly this valley could use lower electric bills and more jobs, and TVA's massive debts would benefit from replacing these multi-billion dollar nuclear contracts with improved living conditions for the people of the Tennessee Valley.

We call on you to lead TVA out of this nuclear quagmire of old-school thinking wrapped in a new sales package. If we do need more capacity, then consider solar. A July 2012 National Renewable Energy Laboratory (NREL) report says Tennessee alone has the technical potential for 2,276,238 GWh of utility scale photovoltaic solar power.[5] "In just one month, Germany installed almost twice as many megawatts of solar than the entire U.S. developed in all of 2011. . . and the Germans installed all of that solar at almost half the price. The average price of an installed solar system in Germany came to $2.80[/W] in the third quarter of 2011. In the U.S., it was about $5.20[/W] in the third quarter." [6] In May of 2012, "German solar power plants produced a world record 22 gigawatts of electricity per hour - equal to 20 nuclear power stations at full capacity - through the midday hours on Friday and Saturday. . .The German government decided to abandon nuclear power after the Fukushima nuclear disaster last year, closing eight plants immediately and shutting down the remaining nine by 2022. . . The record-breaking amount of solar power shows one of the world's leading industrial nations was able to meet a third of its electricity needs on a work day, Friday, and nearly half on Saturday when factories and offices were closed."[7] Contrary to dire predictions, there were no blackouts. Electric rates went up briefly but returned to normal by year-end and are now lower than rates in 76% nuclear-electric powered France. The Historic Crossover where solar became cheaper than nuclear in the U.S. happened in 2010.[8]

We suggest TVA heed the forward thinking technological lead of Germany, rather than more costly contracts with the French government's nuclear corporation, Areva. As your esteemed former Chairman David Freeman said last April, "TVA is building yesterday's technology tomorrow."

Nuclear power has put TVA at risk financially and our valley at risk environmentally. TVA can rein in its finances, create jobs for valley residents, lower our utility bills, improve valley residences – and use the savings to pay down your debt and secure into hardened dry casks the highly toxic radioactive waste TVA is now storing in cooling pools. It is time to fulfill your mandate for our Tennessee Valley by leading us into a prosperous and environmentally safe future.

Thank you for your service and consideration of smart, new directions for TVA energy.

Respectfully submitted by
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MATTR.org – Because It Matters

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