

August 21, 2015

Presentation to the TVA Board of Directors from Garry Morgan, BREDL/BEST/MATRR, Scottsboro, Alabama.

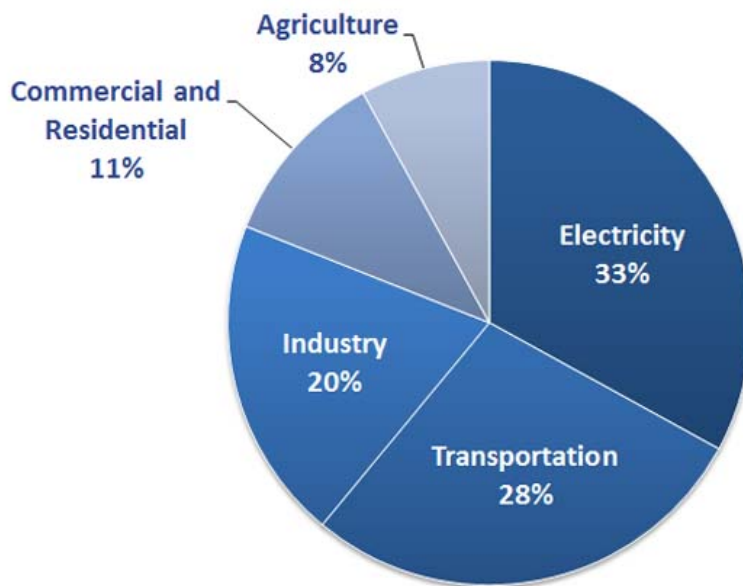
Subject: Watts Bar Unit 2, Fallacies and TVA Finances

TVA Board of Directors, Mr. Rich, Mr. Johnson and Ratepayers of the TVA; I am Garry Morgan from Scottsboro, Alabama representing BREDL/BEST/MATRR. Let's talk about fallacies and money.

Fallacy 1 - According to TVA, and many nuclear proponents, Watts Bar Unit 2 is the first new reactor of the 21st century, this is not true, and it is propaganda. Watts Bar Unit 2 began in 1973, 42 years later it is nearing completion. That is not new technology, it is a reactor design of the late 1960's and early 1970's with upgraded instrumentation and parts, but it is not new, it is old, expensive technology with expensive upgrades.

From start to finish it is estimated that Watts Bar Unit 2 will cost \$6-6.5 billion dollars, but that does not count the interest on the power bonds that finance TVA's nuclear construction, and will cost the ratepayers another \$4-6 billion dollars in interest payments. Ratepayers may count on Watts Bar Unit 2 costing \$10-12 billion dollars, not counting the necessary decommissioning costs, fuel costs, down time, and operational costs.

Fallacy 2 – Clean Energy, quote - "Watts Bar will be credited for lowering carbon emissions because it does, in fact, lower emissions for Tennessee." I've heard this fallacy from many folks including those in the environmental movement, it is not true. What has lowered carbon



emissions is the shuttering of coal fired facilities. TVA is to be commended for this and the continuing closing of coal fired facilities. However, the benefits will be short lived as vehicle travel and the number of vehicles increase, along with large-scale natural gas power generation expansion. I submit to you a chart describing carbon emissions by source. Source - EPA Carbon-Emissions-By-Sector in 2011 Link to other info:

<http://www.c2es.org/technology/overview/electricity>

Rarely do we hear about the emissions from nuclear power facilities, such as, tritium and other radionuclides which bio-accumulate in our environment. Tritium's, half-life is 12 and half years (remaining radioactive for 125 years) and like all radionuclide contaminants it bio-accumulates in our environment.

Just a few short words about Bellefonte, near Scottsboro, Alabama: It is costing ratepayers approximately \$66 million dollars annually to maintain the once cancelled and re-issued construction license of this plant. Current power usage estimates and TVA's recent IRP demonstrate there is no need for the Bellefonte nuclear facility. Wouldn't the facility be better utilized as a large scale solar power station? Utilizing the nearby assets of the industrial park to build the necessary components which would facilitate high tech industrial growth in our Jackson County Alabama community. TVA has accomplished many wonderful deeds in its economic incentive programs under Bill Johnson's leadership, such as Google at the former Widows Creek coal fired facility. You have an opportunity to continue your community investments.

One of those opportunities involves Combined Heat to Power (CHP) Engines. These engines utilize heat energy to drive power generators. This technology may be utilized for any number of applications, such as solar dish collectors or waste heat generators, to increase power output of any heat generator at existing power facilities and industrial operations.

It is time to move forward, we do not have to utilize outdated, dirty technology to generate electrical power. We encourage the TVA to expand Energy Efficiency, CHP, wind, solar, small scale hydro investments, pumped storage; and to diversify power distribution systems by increasing community-based, distributed power generation, which will protect communities in case of a catastrophic event destroying central power generation locations.

Thank You,

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