

May 4, 2007

Comments on the Draft Strategic Plan

I am the Conservation Chair of the Harvey Broom Group of the Sierra Club and TVA Chair for the TN Chapter of the Sierra Club.

I am primarily concerned about energy efficiency, climate change, and renewable energy.

I am pleased that the objectives, metrics, and conclusions in the Strategic Plan include energy efficiency.

The objectives include:

Partner with distributors and customers to encourage conservation, reduce peak demand and volatility in rates, and participate in power supply

Balance TVA's production capabilities and load by adding assets, improving energy efficiency and shaping load

The metrics include:

Megawatt Demand Reduction

Load Not Served

The conclusions include:

Promotes demand-side management to help consumers reduce their peak power consumption through products and services that support energy efficiency;

On climate change, I support the objective:

Reduce the emissions of green house gases by 90% by 2050.

The appropriate metric is: metric tons of CO2 equivalent.

I am very disappointed that the SEC FORM 10-K filed by TVA in December 2006 had the following comments: "The causes and importance of climate change observed over recent decades continue to be widely debated. CO2 is a greenhouse gas and is believed by some to contribute to global warming."

On renewable energy, I support the objective:

Increase the generation from renewable resources.

The appropriate metric is: GWh from renewable resources.

As part of the Strategic Plan or in a companion plan, I would like to see 50 year plan for the TVA service area. The plan would include of future population, economic growth and energy supply and demand. There would be a range of possible scenarios. The next 50 years will probably include a peak in world production of both crude oil and natural gas. In an environment with high gasoline prices, there could be major demand for electric cars.

Twelve years ago, TVA published a similar plan. In 1995, TVA published Energy Vision 2020, which was both a 25-year Integrated Resource Plan and a Programmatic Environmental Impact Statement. As an Integrated Resource Plan it considered both energy supply options and

demand-side management options. The goals for energy efficiency were 0.65 gigawatts by 2002 and 2.20 gigawatts by 2010. The report had three volumes: 1 Overview, 2 Technical Details, and 3 Public Comments. The first two volumes had 867 pages. In Volume 2, there were more than 100 pages on 40 energy efficiency options and 10 local generation options.

The Strategic Plan says that TVA's peak load is growing almost 2 percent per year. Forecasts indicate that the Tennessee Valley region will need from six to 12 gigawatts of additional capacity over the next 10 to 15 years. I would like to have energy efficiency supply a large fraction of that additional capacity. I am very impressed with the Energy Right Program that TVA has in place (<http://www.energyright.com/index.htm>). A recent newspaper article reported that TVA planned to spend \$7 billion on new nuclear plants. I would like TVA to spend a similar amount on energy efficiency options. The Energy Right Program has an Energy Efficient Mortgage (EEM) that can pay the extra costs of energy efficient buildings.

TVA, ORNL, and Habitat for Humanity have built near-zero- energy homes in Lenoir City, TN. The walls and roof are structural insulated panels, heating and cooling is provided by a geothermal heat pump, and high-performance windows are located under deep roof-overhangs. The houses have mechanical ventilation system to bring in fresh air and a heat-pump water heater. A well-funded Energy Right Program could make a large fraction of new buildings in the TVA region be as energy efficient as the Lenoir City houses.

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