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U.S. Nuclear Regulatory Commission
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For the Nuclear Regulatory Commission:

Please register and respond to the following questions concerning a proposed second nuclear reactor at the Callaway site in Callaway County, Missouri.

1. Negative Effects of Radiation Not Taken Into Account When Discussing Alternatives

In the Callaway II Combined License Application Report, Chapter 9, Section II, AmerenUE compares the environmental impact of different energy producing methods to nuclear power. The company determines that an additional nuclear power plant at the Callaway site would damage the environment less than coal-fired generation, gas-fired generation, or combined use of gas-fired generation with wind and solar energy. It dismisses all other alternatives as economically and/or environmentally unfeasible at this time. In their assessment, AmerenUE claims that the environmental impact of nuclear power is small in every important respect, except aesthetics. The categories the company uses are air quality, waste management, land use, water quality, aesthetics, cultural resources, ecological resource, threatened and endangered resources, socioeconomic, accidents and human health.

Radiation poses a threat to human life. A nuclear power plant routinely releases radiation. An accident or terrorist attack could produce catastrophic results such as those seen at Chernobyl and Three Mile Island for human beings, plants and animals. Presently there is no permanent place to store deadly radioactive nuclear waste produced alongside useful nuclear energy – waste that remains dangerous thousands of years longer than waste products produced by other power generating methods.

Only by not considering the effects of radiation could someone claim that a nuclear power plant would have a small environmental impact in every way but aesthetics. This is what AmerenUE does. It does not consider radiation as a serious environmental contaminant. Given the real world problems and dangers inherent in nuclear power production, AmerenUE greatly underestimates the negative environmental impact that Callaway 2 would cause. Will the Nuclear Regulatory Commission require AmerenUE to rewrite Chapter 9, Section II in a way that seriously takes into account the effects of radiation on people and the environment?

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2. Growth Rate in Energy Demand Overestimated

In calculating future energy demand in the Callaway II Combined License Application Report, Chapter 8, AmerenUE projects a 1.4% annual growth in energy demand within its service area in the next decade. The Department of Energy estimates a 1.1% annual growth rate. Both the AmerenUE and the DOE analysis were written before the present economic crisis, and both are now likely to be much higher than actual growth rates. AmerenUE's request to build a nuclear power plant is based on the projection that their customers will need the 1600 mW of baseload energy production that it expects to produce at Callaway 2. Will the NRC require AmerenUE to produce a revised analysis of power demand, based on dramatically changed economic conditions?

3. Potential Gains from Increased Efficiency Underestimated

In the Callaway II Combined License Application Report, Chapter 9.2.1.1 AmerenUE determines that that at best Demand Side Management (increased energy efficiency) strategies could create 450 mW of peak demand generation reduction by 2020, which is less than the 1600 mW of energy Callaway 2 is expected to produce. Recent studies on energy management, such as the Energy Efficiency Task Force of the Western Governors Association in 2005, show the feasibility of reducing energy use by 20% by the year 2020, much more than the 450 mW that AmerenUE projects as its maximum achievement. Presently, according to the American Council for an Energy Efficient Economy, Missouri is the 7th least energy efficient state in the country. There are great gains to be made. AmerenUE has taken and continues to take impressive steps in its efficiency programs, investing increasing resources every year, but presently there is not an incentive structure in place for the company to invest in efficiency with the same amount of resources that it invests in energy production.

Missouri Senate Bill 376, called the "Missouri Residential and Small Business Energy Efficiency Investment Act", introduced by Senators Lager and Callahan, would allow utilities to treat a dollar invested in energy efficiency just like a dollar invested in a power plant. Utilities would be allowed to recover the revenue lost due to their energy efficiency programs. If this bill passes, it will likely force AmerenUE to reevaluate its perception of what is and is not possible to achieve through Demand Side Management by 2020. Will the NRC require AmerenUE to reevaluate its assessment of possible gains in efficiency and how this will affect the need for Callaway 2 if Missouri Senate Bill 376 becomes law?

Sincerely,



Andy Heaslet