## Elizabeth Wiggins Written Brief 1

As a member of the Southern Company, Georgia Power supplies 92 million MWH of electricity to 2.4 million citizens of Georgia through using a combination of coal, oil and natural gas, along with renewable and nuclear energy sources. Specifically Georgia's electricity comes from 65% coal, 21% nuclear, 10% natural gas, 4% water, and 0.01% oil. The large majority of the energy source is from coal due to the fact that the eastern United States has a relatively abundant supply and thus it is readily available and easily transported. It has been estimated that there is at least 200 years worth of coal reserves still remaining in the United States.

Due to pressure against using fossil fuels from environmental concerns and their resulting regulations Georgia Power is beginning a slow shift towards more balanced resource exploitation. The problem arises due to a combination of economics, politics, and policies that make the transition more difficult. With the current abundance of coal any major switch in the energy source would cause a sharp rise in the price of electricity, and as a utility company working towards customer satisfaction this would be unacceptable.

Also in order to employ other energy sources as a feasible way to supply electricity to a large percentage of the customers of Georgia Power the magnitude of their implementation would need to be rather large. For example 1 wind turbine generates 3MW of electricity; solar panels give 50MW, biomass 100MW, Dams 45 MW, and coal supplies 1000MW. For these other sources to be on the same scale as coal there would need to be quite a significant number of them, and the creation or transition of an energy plant is very expensive. Thus while coal is the company's current majority, there will be a slow transition to alternative energy sources.