2012-00578

## RECEIVED

Date: 06 May 2013

MAY 09 2013 PUBLIC SERVICE COMMISSION

To: Kentucky Public Service Commission P.O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602-0615

Subject: Future Energy Issues

**Reference**: Kentucky Power Co.'s proposal to retire one unit at Big Sandy Plant and purchase replacement generating capacity

Dear Commission Members,

Kentucky Public Service Commission is to identify 40-year energy used to drive electrical turbines at Big Sandy unit. It is is necessary to understand future global warming energy need for the Commission to respond.

## Carbon Dioxide Level is Increasing - Global Warming is Increasing

In 2013, for the first time since the Pliocene epoch 5.3 to 2.6 million years ago, atmospheric level of carbon dioxide will exceed 400 parts per million. As carbon dioxide level increases so does Modern Global Warming Era temperatures continue to increase beyond capability of human race to survive.

Early humans migrating out of Africa adapted to Britain's then freezing climate more than 800,000 years ago. Before 1750 Industrial Revolution start, historical carbon dioxide had averaged ~283 ppm and methane was ~0.700 ppm.

Earth's global average surface temperature rose 0.6 to 0.9 degrees Celsius (1.1 to 1.6° F) between 1906 and 2005, and rate of temperature increase has nearly doubled in last 50 years. Since Industrial Revolution began, carbon dioxide levels have increased about 38 percent as of 2009 and methane levels have increased about 148 percent. By increasing concentration of greenhouse gases, we are making Earth's atmosphere a more efficient greenhouse.

Since 1750 Industrial Revolution, or in last 150 years or so, as man started burning fossil fuels (lignite, coal, oil, and natural gas) in earnest, atmospheric carbon dioxide has risen by

about an (extraordinary) one-third. Temperatures are certain to greatly increase.

With rate of greenhouse gas emissions increasing; with commitment of 2017 'carbon infrastructure' exceeding 'carbon cycle' 'carbon budget'; and rate of Earth's global warming gas accumulation increasing; carbon dioxide level will exceed 450-ppm prior to 2030 -- in less than 20-years. There is considerable concern that defined global warming response time is limited and there is significant political unwillingness to avoid exceeding carbon dioxide level 450-ppm, Earth's human population is approaching unsustainable life support systems.

"Safe level" of carbon dioxide is considered to be around 300-ppm. In apocalyptic, but not unreasonable, scenarios painted by climate scientist James Hansen, if nations of the world continue emitting carbon dioxide at current rates, a level of 560-ppm will be reached by end of century. At that point huge parts of many of world's largest cities will be inundated by nine meters (29.5 feet) of rising sea water. All of human life would have been previously terminated 2050-2055.

Concentrations of carbon dioxide in atmosphere and rising global temperatures are increasing at an accelerating rate from decade to decade. Arctic Region methane hydrate dissociation due to warming remains a global warming wild card.

2013 exceeding 400-ppm threshold is a sobering milestone, and should serve as a wake-up call for politicians to support appropriate clean energy technology and reduce emissions of greenhouse gases, before it is too late for under 30 age group, our children, and grandchildren.

## **U.S. Political Energy Deceptions**

Government and private global warming numbers and statements are a mixed bag. President Obama's Staff and Czars change numbers and formulas. Differentiation between the administration's political half truths, deception, and truth can be difficult.

April 2013, U.S. Geological Survey announced that there is probably at least twice as much oil and natural gas trapped under parts of western United States as previously estimated. It is not that U.S.G.S. found twice as much oil and natural gas, it is that accurate government reporting has been withheld by politicians to promote a misguided public fear that the U.S. is running out of carbon energy.

U.S.G.S. previous claim that the nation is low on fossil fuels was part of a larger political/special interest public perception scheme to promote "green" energy diversions by politicians and special interests. U.S. energy cabal promoted ineffective green alternatives to energy while expanding carbon lignite, coal, oil, and natural gas sectors.

For more than two decades scope and goals of global warming have been sidetracked by political process of deceit, lies, misrepresentation, dishonesty, greed, and corruption. A U.S. political/special interest national energy scheme worked this way --

In 1974 politicians created Nuclear Regulatory Commission (NRC) to stop expansion of nuclear energy and build more dependence upon carbon energy. By 1990's, United Nations engaged in attempting greenhouse gas emissions reductions to prevent further global warming. Kyoto Protocol was signed by many nations, but not signed by U.S. Senate.

Kyoto Protocol is a protocol to United Nations Framework Convention on Climate Change, aimed at combating global warming, adopted in Kyoto, Japan, in December 1997 and entered into force February 2005. Its first commitment period started in 2008 and ended in 2012. Over 20-years and 17 talks nothing has been produced that leads to greenhouse gas reductions. Not responding to global warming was for years planned and acted upon by politicians and special interests.

Political and special interest development of lignite, coal, oil, and natural gas intrigue and schemes were in place in 1990's. Those diversion/deception schemes that were produced in late 1990's continue to promote 21st Century carbon lignite, coal, oil, and natural gas energy use.

To date, politicians (and special interests) continue U.S. lignite, coal, oil, and natural gas dependence while undermining nuclear energy. However, politicians (and special interests) needed to respond to Kyoto Protocol with some sort of U.S. energy proposal. Politicians and special interest came up with alternative green energy solar, wind, ethanol, etc. as a replacement "clean energy." U.S. politicians promoted "green-clean" subsidies of more than a hundred billion taxpayer dollars (or more than cost of net 15,638 MW of new nuclear facilities).

Green energy technology has been around for many years and is well understood. Known

by engineers and scientists was that green energy output would always be limited and expensive as energy sources. While knowing limits to green energy, politicians and special interests promoted green energy anyway as a clean alternative to (or as replacement for) lignite, coal, oil, and natural gas. Instead of reducing greenhouse gases (as required by Kyoto Protocol) the Democratic Communist Congress and President Obama deflected global warming greenhouse gas attention from carbon to green alternatives to energy. With politicians directing attention to "green-clean," the continued use of carbon energy was assured.

Since 1990's, politicians have wasted critical global warming response time. Clean nuclear energy continued to be under attack with erroneous nuclear "safety" and "waste" claims. Global warming greenhouse gases continue to rise, Earth's temperatures continue to increase. And, unless energy use is changed very soon, Earth's human race will be terminated 2050-2055.

Many 'greenhouse gas clean energies' are proposed but few work well and not all are practicable. Only viable clean energy technology with sufficient expandable capacity technology is found within nuclear energy sector. Around one-third of human greenhouse gas emissions are produced by carbon energy used to generate electrical energy. Only nuclear energy has capacity that may curb global warming -- without nuclear energy there is no curbing of global warming temperature increase.

Generating electricity with nuclear energy (instead of the use of lignite, coal, oil, and natural gas energy) is only viable global warming reduction technology available in time to reduce global warming greenhouse gases.

With existing U.S. regulation, required environmental impact reports, funding uncertainties, and NRC members -- it does take much more than ten-years to complete a operational U.S. nuclear facility -- politicians and special interests have created significant unnecessary costly uncertainties within nuclear energy sector. These nuclear energy issues need to be corrected before countering global warming is to be successful.

Major problem with decreasing greenhouse gas emissions is some congressional politicians and special interest groups are more concerned about making money and being elected than they are concerned about saving human race.

Only option available to saving human race is to curb global warming. Science of global warming is known. How and when to reduce greenhouse gases is known. The only thing

lacking to save human races are prompt and correct responses from politicians.

Before there is a valid response to curbing global warming, politicians have to be provided a necessary response plan to respond to.

## **Global Warming Response Planning**

Necessary reductions to global warming greenhouse gases is politically and media opposed. Nuclear energy is only clean energy source that can provide energy for global economic expansion. There are no technical reasons not to rapidly expand nuclear energy. If we are to achieve human greenhouse gas emissions-cap by 2020 and zero human emissions by 2050 -- nuclear energy is required. Continue use of fossil fuel destroys all human races 2050-2055.

No nation maintains a viable organization to respond to countering global warming temperature increase. Not in place is needed central organization to coordinate implementation of identified needed energy, social, and environmental responses.

Global warming response planning is a technical problem that must not be politically controlled or influenced. For U.S. Congress of 2013-2014 to participate in preventing 2017 exceeding of 'global carbon budget,' the 1974 Nuclear Regulatory Commission's (NRC's) membership is to be replaced by four senior nuclear specialists and one presidential appointee. Revised scope of revised NRC membership is to include supervisions of U.S. 'Nuclear Fuel Cycle' and rapid expansion of U.S. nuclear energy. Nuclear energy costs are to be reviewed for appropriate reductions. Global and U.S. plans for global warming reduction are to be produced by intelligence agencies with international cooperation.

Sincerely,

Maver I Sel

David G Eselius Santa Cruz, California