

**United States House of Representatives Committee on Natural Resources  
Subcommittee on National Parks, Forests" and Public Lands  
Hearing on The Role of Federal Lands in Combating Climate Change  
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**"Access to Non-Polluting Energy Resources on Public Lands"**

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Federal Lands could have a dramatic role in combating climate change while decreasing our nation's dependency on foreign energy supplies if and only if these lands are managed to encourage and promote uranium mining and the production of nuclear energy. Although wind and solar energy may represent important components of an equation toward the mitigation carbon dioxide emissions, the large scale application of these techniques will result in a massive degradation of Federal lands and leave a lasting legacy of a failed government program that will embarrass its supporters and infuriate future generations.

Twenty percent of this nation's electrical energy is generated by 103 reactors producing 100,000 megawatts of electricity. Palo Verde, a single generating station located 45 miles west of Phoenix, Arizona produces 3800 megawatts of clean, non polluting electricity or approximately 3.8 percent of our nation's consumption. The Palo Verde power station uses only waste water from the city of Phoenix for cooling, stores all high level radioactive waste on site, and with all attendant facilities disturbs a total surface area of 4.5 square miles. To produce an equivalent amount of energy by wind generators would require a disturbance of 760 square miles and solar panels would require 190 square miles.

The amount of land disturbed by solar and wind generating systems is enormous when compared to nuclear power plants. Wind generators have an average operating capacity of 25% compared to 97% by nuclear plants. When considered with land disturbance caused by thousands of miles of power lines and hydroelectric storage facilities for the intermittent power, the total disturbance of wind power is approximately 160 times the total disturbance of nuclear energy for a similar generating capacity. Solar energy disturbs over 40 times the surface area of nuclear power and costs over 5 times more per kilowatt hour.

If 20% of the electrical power used by the US was produced by wind energy, the facilities would cover a surface area of 20,000 square miles; an area slightly less than the entire state of West Virginia. Because efficient use of the wind generators requires a location along hill tops and ridge lines, more than 80,000 miles of horizons in the US would be bristling with wind mills and power lines; a sight that many would not like to experience. As the wind generators reach the end of their estimated 25 year life, maintenance may no longer be feasible or possible due to changing economic or political environments and thousands of miles of rusting junk will remain as a

monument to yet another failed energy policy. The US will remain dependent on foreign energy during the waning phase of the world's oil production.

The Executive Secretary of the Intergovernmental Panel on Climate Change (set up by the World Meteorological Organization (WMO) and by the United Nations Environment Program) stated at Bali that: "***I have never seen a credible scenario for reducing emissions that did not include nuclear energy.***"

A recent British White Paper on nuclear power concluded that nuclear power is the most cost effective low-carbon generation technology available. Volatility in oil prices and the clash between Russia and Ukraine over gas pipelines has made nuclear power - with virtually zero carbon dioxide emissions - a more attractive option for Europe. There are now 196 nuclear power plant units with a net capacity of 170,000 MW in operation in Europe and 14 new units with under construction in five countries. Moratoriums against building new reactors and mandatory phase outs of existing nuclear generating facilities are being lifted in Switzerland, Sweden, Italy, and England as well as several eastern European countries. Approximately 80% of France's electrical energy is now generated by nuclear power. According to BHP Billiton, 33 reactors are currently under construction globally, another 94 are estimated to be either on order or in the advanced planning stage while there are proposals for a further 222 generators.

There are those that want to stop uranium mining in the US and fear the use of nuclear power. This is understandable considering the amount of misinformation cited in newspapers and editorials by a few activists. Why should we trust this industry? Perhaps we should try to inform ourselves on how the rest of the world is dealing with these issues and learn why so many of the world's scientists are encouraging the use of nuclear energy. Gwyneth Craven in a recently published book titled ***Power to Save the World: The Truth About Nuclear Energy***, published by Alfred A. Knopf, a division of Random House, Inc., 2007, provides a well-researched and readable examination of nuclear energy from mining and energy production to the final storage of waste.

If the US wants to use public lands to fight global warming without the disturbance of enormous land areas and thousands of miles of scenic vistas, the only effective and cost efficient manner is to encourage and promote uranium mining and the production of nuclear energy on Federal lands. This is truly an issue that "transcends politics". Nuclear energy is critical to the economy and future well being of our nation.

Respectfully submitted

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