

Abstract Submitted
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Is increased Nuclear Energy a practical response to Global Warming? JEANNE STEVENS, The Evergreen State College — With the threat of global warming there has been renewed interest in nuclear energy as a carbon-free energy source. There are currently 15 nuclear power plants planned for completion in the U.S. by 2014. In the last 30 years, however, investment and public support for nuclear energy has been minimal. Some factors that led to this loss of interest - high economic costs, risk of accident and radiation exposure, and the challenges of storing nuclear waste - have been analyzed in several recent publications. Comparing the costs and risks of nuclear energy to the benefits in reduced carbon emissions is the goal of this report. Coal plants contribute the most carbon dioxide of all types of power plants. The method of this study is a direct comparison of coal plants and nuclear plants in four areas: the current cost per kWh, the predicted annual cost for health issues, the statistically predicted deaths, and the clean-up costs assuming each facility is as “green” as possible. A normalized cost/risk value is then calculated for each plant type. Discussion for how these values are likely to vary is included.

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