## Green Jobs and their Role in our Economic Recovery

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Madam Chairman, members of the Committee, it is an honor to testify before you today. I represent a nonpartisan organization whose several hundred members are concerned about our energy policy, greenhouse gas emissions, acidification of the oceans, and the future of this planet. Our mission is to educate relative to all things nuclear, including commercial nuclear power. We are headquartered in Aiken, SC. We are very proud that more than half of our electricity in SC comes from nuclear power plants and more is on the way. We are also proud that our entire federal delegation, senators and representatives, republicans and democrats are strong supporters of nuclear power. We believe this is the way it should be. After all, nuclear energy provides the least expensive, cleanest, safest source of energy for our citizens.

How shall we define Green jobs? It seems to me that we should define "Green" as being low or no harmful emissions released to the environment such as particulates, carbon, sulfur, or nitrogen oxides.

What are the needs addressed by Green jobs? Two types of electrical generation need to be satisfied in the future. One will be "niche" applications to bring power to a remote location or a mobile facility, or to augment power from the grid in certain commercial and real estate applications. A second need, requiring many times more energy than niche markets is baseload energy. This is the electricity that is produced 24

hours a day, 365 days a year. We have basically two options for providing baseload electricity – fossil fuel and nuclear. Some will argue that wind and solar energies can provide baseload energy, but, by definition, baseload is constant and these two sources are extremely variable. Nuclear already provides 20% of our nation's electricity which equates to 75% of our country's emission-free electricity production. We believe that workforce development to support a needed Nuclear Renaissance is vitally important. Retirement rates among existing nuclear workers may exceed 50% in less than ten years, and the pipeline of new workers hasn't been filled for 30 years.

What are the desirable characteristics of the jobs created? We should maximize the social good to come from these programs by investing in skills, trades, and education. We should not spend the money training people to perform menial tasks associated with a particular technology and then be faced with retraining when the demand for that particular task diminishes. When we talk about workforce development for the Nuclear Renaissance we are talking about skills and crafts such as certified welders, pipefitters, health protection technicians, maintenance mechanics, operators, and electricians as well as graduate engineers in nuclear, civil, materials, chemical, electrical and mechanical fields not to mention all the support personnel. We are talking about investing in people in a way that they can be a resource for the economy in good paying jobs, no matter in which industry they eventually work.

What is the role in the economic recovery and long-range impact? Supporting workforce development in the nuclear industry will provide short-term education and training for needed replacements in the industry and will make it possible for new nuclear plants to be designed, licensed and built. Hundreds of thousands of jobs are likely to be created. Quick action is needed if we are to fill those jobs domestically instead of importing people with the required skills from other countries.

One scenario for energy independence is that, if we move toward electric vehicles, plug-in hybrids or hydrogen powered autos, we will need enormous amounts of electricity that must be produced in a clean, safe manner. This would require a huge expansion of the nuclear energy supply and perhaps open opportunities in the niche markets for solar and wind power, and we would be independent of foreign oil.

In August, 2008 the laboratory directors of the Department of Energy's National Laboratories issued a report entitled, "A Sustainable Energy Future: The Essential Role of Nuclear Energy." This report is a roadmap for nuclear energy policy produced by the leaders of some of our greatest science and technology resources. Dr. Chu is a signer of that document. One of the marquee recommendations of the report is "Establish a national priority to immediately deploy advanced light water reactors to meet our nation's increasing energy demand, while limiting greenhouse gas emissions ..."

In conclusion, I would like to emphasize that we believe nuclear is the greenest of the Green energies and we request that Congress pursue public policy initiatives that will support growth of the nuclear industry to help make us energy independent.

Thank you for allowing me to speak and I will be happy to answer your questions.