

Victoria Stulgis, graduate intern for Scott Sklar of the Stella Group, Ltd. (<http://www.thestellagroupltd.com/>) compiled the following summary of an EESI (Environmental and Energy Study Institute, <http://www.eesi.org/>) briefing on Capitol Hill regarding “Nuclear Power and Proliferation Challenges” held May 20, 2010

Dr. Mark Cooper, Senior Fellow for Economic Analysis, Vermont Law School, compared the actual and projected price in \$/kW for nuclear power. In the 60s and 70s, vendors and early enthusiasts (the government) priced the \$/kW for nuclear power significantly lower than utilities; the “true cost” as determined by analysts was more expensive than both estimates. The same price discrepancy is occurring today; already utility estimates are substantially higher than those of the early enthusiasts. Dr. Cooper compared the price for nuclear with other low carbon alternatives: efficiency, landfill, geothermal, and onshore wind, which are all substantially more cost-efficient than nuclear. Dr. Cooper stressed going for the “fruit already on the ground”: efficiency. Efficiency alone can reduce baseload power by 30% over the next 20 years. Dr. Cooper displayed France's energy consumption per /GDP/capita, to demonstrate that the US can maintain its standard of living and still cut energy consumption by 50%.

When a utility commits to a nuclear reactor, the utility becomes crowded out by the nuclear project, overwhelmed with the management, and hostile towards alternatives and efficiency. States with nuclear reactors have a strong history of not being committed to alternatives or energy efficiency. In the early 1980s, Boston became interested in importing power from Hydro-Quebec; Seabrook blocked the development of a transmission line. Dr. Cooper estimated that the cost to the US of building nuclear reactors in place of alternatives would cost the US \$2 trillion in additional costs (200 new nuclear reactors).

Peter Bradford is a former Commissioner for the US Nuclear Regulatory Commission, and former Chair for the New York State Public Service Commission and Maine Public Utilities Commission. One year ago, the NRC had 18 applications for 29 units; the applications for loans relied on funding from the Energy Policy Act of 2005. The 18 applications from one year ago have all faced difficulties and are either cancelled or on hold of sorts; none have yet to materialize. Cost overruns coupled with the recession led to a backlash and rejection by all parties involved; as a result, the loan guarantees have shifted to the taxpayer. Since private companies refuse to take on the risk, the risk is spread to all the families in the US. These loan guarantees, however, do not really lower the price of nuclear; the risks are the same and materials are not cheaper. The \$8.3 billion dollar loan guarantee for the Georgia Reactors will add an exposure to risk of \$100 for each US family. The Kerry-Lieberman Bill would allow for “Licensing Shortcuts”, which seek to squeeze additional time savings from the nuclear licensing process. Telling the NRC to fast track licensing and let up on regulatory and safety issues is a *bad idea*.

Alex Glaser, a Princeton professor, discussed how today there are 438 reactors in 30 countries. According to the IAEA, there are 60+ countries currently considering nuclear programs; imagine

if this were achieved by 2050; many of these “newcomers” are from North Africa, the Middle East, and South East Asia; the world would be faced with critical issues of waste, safety and proliferation. Even with loan guarantees, there will be at best 5-9 new plants by 2020. For any “newcomer” countries, it takes 10-15 years to get into the business; this offers the world 10 years to understand the system: both the economic and safety constraints to see if nuclear makes sense in the future. Glaser suggested the development of an international fuel bank with joint ownership.

Nuclear technology is not new; the world still does not have a solution to nuclear waste, and the economics still do not work. What leads people to believe a solution will be found in the next 10 years?