

**Friends of the Earth ♦ Greenpeace ♦ Southern Alliance for Clean Energy
♦ South Carolina Chapter-Sierra Club
♦ NC Waste Awareness and Reduction Network
♦ Georgia Womens' Action for New Directions ♦ Nuclear Information and Resource Service ♦
Beyond Nuclear ♦ NIRS-Southeast ♦ AP1000 Oversight Group**

October 19, 2009

Secretary of Energy Chu
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Mr. Richard Frantz
Director, Loan Guarantee Program
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

**NRC Reveals AP1000 Nuclear Reactor Design Problems,
DOE Must Halt Issuance of Conditional Loan Guarantees to Utilities Pursuing AP1000**

Dear Secretary of Energy Chu and Director Frantz:

In a surprise move with potentially serious impacts, the Nuclear Regulatory Commission (NRC) revealed on October 15 that the AP1000 nuclear reactor design may be lacking ability to meet regulatory safety requirements. Thus, **any announcement of conditional loan guarantees being considered by the Department of Energy (DOE) for issuance to utilities utilizing the unproven AP1000 design must immediately be halted.**

Not only will the NRC news impact the already delayed review of the AP1000 design but will also possibly negatively impact the license applications of utilities which have applied for combined licenses based on the Westinghouse AP1000 design. The Southern Company and South Carolina Electric & Gas (SCE&G) appear to be at the top of DOE's loan guarantee short list but a number of other utilities pursuing the AP1000 also applied for loan guarantees, as you well know. This situation demands that DOE fully consider the implications of any move to issue loan guarantees involving all reactor designs under review and move to assure the public that utilities considering questionable reactor designs will not be backed by DOE.

In its unprecedented news release entitled *NRC Informs Westinghouse of Safety Issues with AP1000 Shield Building*, the NRC said that "staff has informed Westinghouse that the company has not demonstrated that certain structural components of the revised AP1000 shield building can withstand design basis loads," and stated that the unsuccessful efforts to secure

information had gone on for a year. The NRC went on to say that “This is a situation where fundamental engineering standards will have to be met before we can begin determining whether the shield building meets the agency’s requirements.” This strong language, in short, makes it clear that there are grave doubts if the protective structure of the AP1000 nuclear reactor can withstand hurricanes, earthquakes, tornadoes and the impact of a commercial airliner, as required by the NRC’s regulations. Additionally, questions have arisen about the shield building’s ability to support the emergency cooling water tank on the top of the structure, which would up to 8 million pounds of water.

Given that the action by the NRC is so serious in nature, it is imperative that the Department of Energy immediately halt the issuance of any conditional loan guarantees to any utilities which are basing their plans on the AP1000 reactor design. Issuance of DOE loan guarantees at this time to companies which are considering a reactor which may well have serious design problems would not only heighten public concern about DOE’s regard of oversight of nuclear reactor safety but would also further call into question the methodology applied by the DOE’s Loan Guarantee Program as it considers which reactor applications garner a loan guarantee subsidy.

That the LGP has been considering issuing loan guarantees to reactors that do not have final certification and also do not have construction and operating licenses is now clearly revealed to be an extremely risky approach. As we now see that it is far from certain if reactors or combined licenses will win regulatory approval, any move to now issue conditional loan guarantees is premature and opens DOE to justified criticism.

The dramatic move by the NRC makes even clearer that there is now no established review schedule for the AP1000 design. On August 27, in a letter to Westinghouse, the NRC pointed out that the company had failed to respond to “fundamental questions” concerning issues related to cooling water circulation and went on to advise the company that a “revised schedule” for reviewing the reactor design would have to be established. While it is not clear if a new review schedule can ever be established, it is clear that a cascade effect of negative impacts to possible AP1000 reactor licensing is at hand and we urge extreme caution on the part of DOE’s Loan Guarantee Program.

Given the serious issues now raised by the reactor regulatory agency itself, we call on DOE to immediately halt issuance of conditional loan guarantees and take action to publicly assure the public that this is the case.

Sincerely,

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