

November 22, 1998

Dr. Andrew Kadak  
Department of Nuclear Engineering, 24-207  
Massachusetts Institute of Technology  
77 Massachusetts Avenue  
Cambridge, Massachusetts 02139-4307

Dear Dr. Kadak:

I am responding to your letter to Dr. William D. Travers, dated November 6, 1998, regarding a small, modular, pebble-bed reactor design. You requested information or regulatory guidance on licensing such a design. As noted in your letter, the current Nuclear Regulatory Commission (NRC) regulations provide a process in 10 CFR Part 52 for licensing next-generation (advanced) reactor designs. Specifically, Section 52.47(b)(2) provides a process for licensing an advanced design or unique design features by testing.

Some background information and guidance on licensing gas-cooled reactor designs can be found in NRC staff reports: NUREG-1226, "Development and Utilization of the NRC Policy Statement on the Regulation of Advanced Nuclear Power Plants" (June 1988), and NUREG-1338, "Draft Preapplication Safety Evaluation Report for the Modular High-Temperature Gas-Cooled Reactor" (March 1989). Also, Chapter 21 of NUREG-1512, "Final Safety Evaluation Report Related to Certification of the AP600 Standard Design" (September 1998), contains the NRC staff's evaluation of the testing programs performed by Westinghouse for the AP600 standard design. The enclosed notice explains how these reports can be obtained.

Mr. Jerry Wilson is the cognizant member of my staff who can answer questions on the licensing process under 10 CFR Part 52. Please contact him by telephone at 301-415-3145 or by e-mail at [jnw@nrc.gov](mailto:jnw@nrc.gov) if you have any further questions on this matter.

Sincerely,

*Original Signed By*

9812080003 981122  
PDR NUREG  
1226 C PDR

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

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FROM:

DUE: 11/25/98

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FINAL REPLY:

Dr. Andrew Kadak  
Massachusetts Institute of Technology

TO:

Travers, EDO

FOR SIGNATURE OF :

\*\* GRN \*\*

CRC NO:

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DESC:

REGULATORY GUIDANCE CONCERNING ADVANCED REACTOR  
DESIGN

ROUTING:

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DATE: 11/09/98

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