



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

January 17, 1984

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Good stuff

MEMORANDUM FOR: R. Wayne Houston, Assistant Director  
for Reactor Safety  
Division of Systems Integration

FROM: William T. Russell, Deputy Director  
Division of Human Factors Safety

SUBJECT: REVIEW OF GESSAR-II DESIGN IMPROVEMENT

Your memorandum of January 6, 1984, same subject as above, requested DHFS comments on (1) the proposed GE response procedure in meeting the CP/ML Rule and (2) on the list of potential design improvements for GESSAR-II.

We have reviewed and concur with the proposed GE response procedure and with the list of potential design improvements. We recommend consideration of the following additional design improvements:

1. Incorporation of design features to improve maintainability and the incorporation of a "designed" preventive maintenance program
2. Consideration of advanced computer aided alarm and annunciation systems
3. Design of remote shutdown capability should be coordinated with control room design and habitability and with other design interfaces (e.g., fire protection) and should consider human factors engineering
4. The design of the safeguards (security) system should consider the safety-safeguards interface with respect to access of operators in emergency conditions (e.g., fires, shutdown outside the control room, etc.).

*William T. Russell*  
William T. Russell, Deputy Director  
Division of Human Factors Safety.

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