

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20565-0001

March 26, 1996

Mr. Nicholas J. Liparulo Nuclear Safety and Regulatory Activities Westinghouse Electric Corporation P.O. Box 355 Pittsburgh, Pennsylvania 15230

Dear Mr. Liparulo:

SUBJECT: FOLLOWON QUESTION ON THE AP600

As a result of its review of the June 1992 application for design certification of the AP600, the staff has determined that it needs additional information in order to complete its review. The staff is concerned with Westinghouse's ability to support the design implementation and operation of the AP600 instrumentation and controls system in the future. See the enclosed question Q420.125. Please respond to this request within 60 days of the date of this letter to support the review of the AP600 design.

You have requested that portions of the information submitted in the June 1992 application for design certification be exempt from mandatory public disclosure. While the staff has not completed its review of your request in accordance with the requirements of 10 CFR 2.790, that portion of the submitted information is being withheld from public disclosure pending the staff's final determination. The staff concludes that these followon questions do not contain those portions of the information for which exemption is sought. However, the staff will withhold this letter from public disclosure for 30 calendar days from the date of this letter to allow Westinghouse the opportunity to verify the staff's conclusions. If, after that time, you do not request that all or portions of the information in the enclosures be withheld from public disclosure in accordance with 10 CFR 2.790, this letter will be placed in the NRC's Public Document Room.

These followon questions affect nine or fewer respondents, and therefore is not subject to review by the Office of Management and Budget under $P.L.\ 96-511$.

DFOI

^{*}The numbers in parentheses designate the tracking numbers assigned to the questions.

If you have any questions regarding this matter, you can contact me at (301) 415-1120.

Sincerely,

original signed by:

Thomas J. Kenyon, Project Manager Standardization Project Directorate Division of Reactor Program Management Office of Nuclear Reactor Regulation

Docket No. 52-003

Enclosure: As stated

cc w/enclosure: See next page

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Mr. Nicholas J. Liparulo Westinghouse Electric Corporation

cc: Mr. B. A. McIntyre
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
P.O. Box 355
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Mr. M. D. Beaumont Nuclear and Advanced Technology Division Westinghouse Electric Corporation One Montrose Metro 11921 Rockville Pike Suite 350 Rockville, MD 20852 Docket No. 52-003 AP600

Mr. John C. Butler Advanced Plant Safety & Licensing Westinghouse Electric Corporation Energy Systems Business Unit Box 355 Pittsburgh, PA 15230

Mr. S. M. Modro Nuclear Systems Analysis Technologies Lockheed Idaho Technologies Company Post Office Box 1625 Idaho Falls, ID 83415

Enclosure to be distributed to the following addressees after the result of the proprietary evaluation is received from Westinghouse:

Mr. Ronald Simard, Director Advanced Reactor Programs Nuclear Energy Institute 1776 Eye Street, N.W. Suite 300 Washington, DC 20006-3706

Mr. James E. Quinn, Projects Manager LMR and SBWR Programs GE Nuclear Energy 175 Curtner Avenue, M/C 165 San Jose, CA 95125

Barton Z. Cowan, Esq. Eckert Seamans Cherin & Mellott 600 Grant Street 42nd Floor Pittsburgh, PA 15219

Mr. Frank A. Ross U.S. Department of Energy, NE-42 Office of LWR Safety and Technology 19901 Germantown Road Germantown, MD 20874

Mr. Ed Rodwell, Manager PWR Design Certification Electric Power Research Institute 3412 Hillview Avenue Palo Alto, CA 94303 Ms. Lynn Connor DOC-Searach Associates Post Ofice Box 34 Cabin John, MD 20818

Mr. John E. Leatherman, Manager SBWR Design Certification GE Nuclear Energy, M/C 781 San Jose, CA 95125

Mr. Sterling Franks U.S. Department of Energy NE-42 Washington, DC 20585

Mr. Charles Thompson, Nuclear Engineer AP600 Certification U.S. Department of Energy NE-451 Washington, DC 20585

REQUEST FOR ADDITIONAL INFORMATION ON THE AP600 DESIGN

420.125

WCAP-14080, "AP600 Instrumentation and Control Software Architecture and Operation Description," states that the Intel PL/M class of languages (e.g., Fi/M-51, PL/M-86, and PL/M-96) was chosen for use in protection and control systems. In a recent technical discussion with computer software language consultants, the staff became aware that the PL/M language and compilers for PL/M-51, PL/M-86, and PL/M-96 are no longer supported by the Intel Corporation. Most PL/M programmers have moved onto working in other languages, and the currently available tools are being discontinued. The PL/M language has, therefore, lost its technological base for new development. Describe the strategy that Westinghouse will use to support the design implementation and operation of the AP600 digital instrumentation and control systems in the future, including software development, modification, configuration management, maintenance, and technical personnel training throughout the software life cycle given the apparent lack of support for PL/M.