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

CHAIRMAN

PDR

November 22, 1989

Ms. Emilie G. Heller
FEIAA Executive of the Year Committee
P. O. Box 1001
Great Falls, Virginia 22066-1001

Dear Ms. Heller:

I am pleased to nominate Clemens J. Heltemes, Jr., Deputy Director of the Nuclear Regulatory Commission's (NRC's) Office for Analysis and Evaluation of Operational Data, for the Federal Executive Institute Alumni Association's (FEIAA) 1989 Executive of the Year Award. Mr. Heltemes has made important contributions to the development and implementation of sophisticated, highly technical regulatory programs. His outstanding achievements in executive management and leadership have provided the NRC and the nuclear industry greater insight into the safe use of nuclear energy.

Sincerely,

Kenneth M. Carr

Kenneth M. Carr

Enclosure: Nomination statement

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1989 Executive of the Year Award Nomination Form

PLEASE USE THIS FORM AS THE COVER SHEET FOR YOUR NOMINATION

NOMINATIONS SHOULD BE RETURNED TO:

FEIAA Executive of the Year Award Committee
P. O. Box 1001
Great Falls, Virginia 22066
ATTN: Emilie Heller

THIS INFORMATION IS SUBMITTED TO SUPPORT THE NOMINATION OF:

Nominee's Name CLEMENS J. HELTEMES, JR. Title DEPUTY DIRECTOR, OFFICE FOR ANALYSIS & EVALUATION OF OPERATIONAL DATA (AEOD)

Agency U.S. NUCLEAR REGULATORY COMMISSION

Business Address U.S. NRC
OFFICE FOR ANALYSIS & EVALUATION OF OPERATIONAL DATA
WASHINGTON, D.C. 20555

NOMINATION SUBMITTED BY:

Nominator's Name KENNETH M. CARR, CHAIRMAN Organization OFFICE OF THE CHAIRMAN, U.S. NRC

Home or Business Address U.S. NRC, OFFICE OF THE CHAIRMAN
WASHINGTON, D.C. 20555

Phone 301-492-1759

Signature of Nominator Kenneth M. Carr Date 22 Nov 1989
KENNETH M. CARR, CHAIRMAN

BIOGRAPHICAL STATEMENT

Clemens J. Heltemes, Jr., is the Deputy Director, Office for Analysis and Evaluation of Operational Data (AEOD), in the U.S. Nuclear Regulatory Commission (NRC). In 1960, he joined the Atomic Energy Commission (AEC) as a nuclear engineer intern at the AEC's Operation's Office in Hanford, Washington, where he worked on experimental thermal-hydraulic programs. He transferred to the AEC Headquarters' Division of Reactor Development in 1964 and held a series of progressively responsible positions, including Assistant Program Manager for the Fast Flux Test Facility, which at the time was the Government's primary project for conducting experiments that would substantially contribute to the nation's understanding of advanced reactor technologies. In 1973, Mr. Heltemes became the Technical Assistant to William A. Anders, who served as an AEC Commissioner and later as the NRC's first Chairman. In 1976, Mr. Heltemes was appointed Chief of the Quality Assurance Branch in the Office of Nuclear Reactor Regulation (NRR). Subsequently, he was selected Chief of the newly-formed Standardization Branch in NRR. Mr. Heltemes served as the Interim Director of AEOD for several months prior to the appointment of the Director.

Mr. Heltemes graduated from North Dakota State University where he obtained B.S. and M.S. Degrees in Mechanical Engineering. He is also a graduate of the Argonne International Institute of Nuclear Science and Engineering, has performed graduate work at the University of Washington, and is a registered Professional Engineer in the fields of nuclear engineering and quality engineering.

NOMINATION STATEMENT

The Nuclear Regulatory Commission's (NRC's) Office for Analysis and Evaluation of Operational Data (AEOD) was established as the result of lessons learned from the accident at Three Mile Island. On his own initiative, Mr. Heltemes developed and implemented regulatory programs to investigate and analyze operational incidents and data from all NRC-licensed commercial nuclear power reactors and other large nonreactor facilities. Mr. Heltemes' objective was to evaluate the lessons learned from these experiences for other NRC offices, nuclear utilities, the domestic and international nuclear industries, and the public. His foresight and initiative have contributed significantly to the accomplishment of the NRC's mission to protect public health and safety, to the enhancement of the safety of U.S. operating reactors, and to the efficient use of limited NRC resources.

Mr. Heltemes' past assignments and present position reflect his strong capacity to provide leadership and direction in implementing policy as well as in using NRC resources efficiently and productively. To achieve these goals, he has created a number of innovative programs and systems, including the following:

- Mr. Heltemes has provided outstanding leadership in collecting, analyzing, and communicating the lessons of operating experience. He developed revised reporting requirements for operational events at power plants that resulted in a 50% reduction in the number of reports required of licensees over the first year, provided substantial improvements in the consistency and completeness of reporting, and narrowed the scope of reporting requirements to only those events with potential safety significance. Further, he developed and directs a highly structured and systematic program to map the thousands of operational events from U.S. nuclear power plants and to analyze these events for coherent patterns. These patterns, in turn, form the basis of trends that are examined for potential adverse effects. Mr. Heltemes led this pioneering effort in nuclear regulation, which involved the development of new techniques for encoding and retrieving data about operational nuclear plants.

- When responsibility for the Licensee Event Report (LER) computerized storage and retrieval system (the system that documents significant deviations from normal operations) was transferred to Mr. Heltemes, he significantly restructured the system to produce more readily usable data more efficiently. By terminating unnecessary data files, reducing the number of routinely published LER monthly reports from nineteen to one, conducting a detailed user survey, introducing report distribution for those who needed the information and providing information on a subscription basis for others, providing for data searches for non-NRC users on a cost-reimbursable basis, and eliminating a separate LER report published by a National Laboratory, he successfully eliminated four to five staff years of effort and saves the NRC $200,000 annually in contractor support charges.

- Both the NRC and the regulated industry required component failure information from each power plant on a routine basis. For a number of years, the NRC had provided financial support to obtain the data. Mr. Heltemes arranged for the industry's Institute of Nuclear Power Operations to assume total financial responsibility for this system so that the NRC effort was reduced to monitoring the data to verify its adequacy. The original data acquisition required a full-time staff of 14 individuals and extensive computer facilities. The equivalent level of NRC resources has been made available for other high priority activities. This transfer has eliminated overlapping and duplicative data collection and saves the NRC $1.4 million annually.

- Under the leadership of Mr. Heltemes, NRC has made significant improvements in obtaining foreign reports on power plant operating experiences and in improving the technical content of these reports. As a result, unique, valuable information that is directly applicable to U.S. reactors is now available in the U.S., enhancing NRC's ability to take regulatory action without committing additional resources.

- Mr. Heltemes established a close working relationship through a Memorandum of Agreement with the industry's Institute of Nuclear Power Operations and the Nuclear Safety Analysis Center. This arrangement permits the NRC and the industry to share the results of completed studies and information from related computerized data banks and has resulted in significant cost savings to all parties by the elimination of unnecessary duplication. As a result, the NRC saves an estimated 45 staff years of effort each year.

Mr. Heltemes is recognized nationally and internationally for his work in identifying reactor operations safety issues. He is a principal spokesman for the U.S. and the NRC on programs for assessing operational data and for the performance of the U.S. nuclear industry. Mr. Heltemes presented 32 technical papers at U.S. and international conferences and has co-authored two additional papers at International Atomic Energy Agency conferences. He has written a number of technical articles and, in response to requests by outside organizations, has given numerous speeches and presentations on technical subjects. He has been an invited lecturer at the Massachusetts Institute of Technology (MIT) on the subject of U.S. nuclear reactor operating experience.

In recognition of his extraordinary achievements, Mr. Heltemes has received many prestigious awards that include the NRC Distinguished Service Award, the NRC Meritorious Service Award, the William A. Jump Meritorious Award for Exemplary Achievement in Public Administration, and the Presidential Meritorious Executive Award in the Presidential Rank Award Program for the Senior Executive Service.

In summary, Mr. Heltemes has made important contributions to the development and implementation of sophisticated, highly technical regulatory programs. His achievements in executive management and leadership have provided the NRC and the nuclear industry greater insight into the safe use of nuclear energy.

REFERENCES

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