

Attachment 3

Chronology of AEOD's Creation and Development – Attachment to SECY 98-228 of October 1, 1998

In the late 1970's, the NRC was primarily focused on the review and approval of reactor designs, the licensing of new plants, and the inspection of plant construction and testing. NRR had a single Division of Operating Reactors and each region had a single branch focused on operating reactors. The Office of Operations Evaluation, established by the AEC in 1972 to evaluate licensee event reports and to perform other analyses, had been dismantled in an NRC staff reorganization in 1975, and as a result, the level of attention afforded to evaluating operating experience and communicating lessons learned to the industry was significantly reduced. While NRC requirements for reporting operating experience resulted in an enormous amount of data being provided to the NRC, there was no systematic method for evaluating this information. In addition, NRC reporting requirements varied from plant to plant and did not differentiate the significant from the trivial. As a result, the reported data exceeded the limited capability of the NRC to identify, evaluate, and disseminate potential safety concerns. Also, at that time, individual utilities did not have the resources to systematically evaluate operating experience, nor was there any industry group such as the Institute of Nuclear Power Operations (INPO) in existence then to perform such a function.

In 1978 the General Accounting Office (GAO) evaluated the NRC's program for collecting, assessing, and disseminating operating experience information. The GAO found that the NRC had no systematic, defined, or dedicated program to analyze and feed back the lessons of experience to licensees and to the nuclear industry. The GAO identified the need for the NRC to establish uniform reporting requirements and a system to "promptly identify all safety-related problems from licensee event and/or incident reports." In response to the GAO report, the Commission, in February 1979, requested a briefing on the NRC's program for operational data collection, assessment, and feedback. Before this briefing could be held, the accident at Three Mile Island, Unit 2 occurred on March 28, 1979.

The investigations into the TMI-2 accident found that two virtually identical precursor events had occurred, one in 1974 at a Westinghouse reactor at the Beznau plant in Switzerland, and the other in September 1977 at the Davis-Besse plant in Ohio, a Babcock and Wilcox (B&W) reactor similar to TMI-2. The NRC did not learn of the foreign reactor incident at the Beznau reactor until after the TMI-2 accident. The event at Davis-Besse was analyzed by the licensee, B&W, and the NRC. The NRC's analysis was not comprehensive and, because there was no effective system for communicating operating experience, the lessons learned were not provided to the TMI licensee. These failures to adequately evaluate operating experience and disseminate safety-significant information pointed out the need for a systematic, effective program for collecting, evaluating, and communicating the important lessons of operating experience.

On April 19, 1979, the staff briefed the Commission on its data collection, assessment, and feedback program. The Commission placed a high priority on developing the capability to do systematic trends analyses. There was agreement among the Commission and the staff that this would require a separate group, and there was much discussion concerning the necessary degree of independence of that group from those

involved in day-to-day licensing and inspection activities. In July 1979, the Commission approved the creation of an agency-wide Operational Data and Analysis Group reporting directly to the EDO with responsibility for analyzing and evaluating operational safety data associated with all NRC activities, including those of NMSS. The Commission also directed that each program office have an operational data analysis and evaluation capability to allow them to make input to the agency-wide office. (This consciously established duplicate capabilities and efforts for operational data evaluation because it was perceived to be necessary at the time.) Accordingly, the Office for Analysis and Evaluation of Operational Data was created as an independent office to coordinate operational data collection, to systematically analyze and evaluate operational experience, to feed back the lessons of experience to improve the safety of licensed operations, to assess the effectiveness of the agency-wide program, and to act as a focal point for interaction with outside organizations for operational safety data analysis and evaluation.

The need for an independent organization to investigate significant operational events was also debated for many years both before and after the TMI-2 accident. The 1985 NRC Appropriations Act Amendment required the NRC to perform a feasibility study of an independent safety organization. The study was performed by Brookhaven National Laboratory (BNL). BNL concluded that NRC investigations of operational events have been conducted in a proficient and technically competent manner, but suggested a number of improvements for event investigations. These suggestions were incorporated in a new Incident Investigation Program (IIP) established by the NRC in 1985 to provide an independent, structured NRC investigative response for safety-significant operational events. The existence of the independent IIP was subsequently cited by the NRC, in response to continuing Congressional interest in establishing an independent nuclear safety oversight organization, to demonstrate that the NRC already had such a capability.

A variety of changes have occurred in NRC and industry operations, which caused the staff to reassess the AEOD organization and functions. Today, the event reporting rules and practices have been substantially enhanced. NRR and the regions are principally focused on operating reactor oversight, license maintenance, inspection, performance assessment, event response and assessment, and the communication of lessons learned. The inspection and assessment processes have improved since the TMI-2 accident with greater emphasis on operating experience and events assessment. The resident inspection program has expanded and matured with increased emphasis on events assessment. The

Senior Management Meeting process has been refined to facilitate better integration of information regarding operating nuclear reactors and materials licensees. The internal dissemination of information has improved through such mechanisms as the Preliminary Notification and Morning Report processes, periodic event review briefings between NRR and the regions, and Commissioner Assistant's briefings.

The NRC has also improved its external dissemination of information pertaining to significant events, operational experience, and technical issues through a mature generic communication process (Information Notices, Bulletins, and Generic Letters). The NRC has expanded its international activities to ensure insights regarding significant events and important technical issues are shared. The industry has also enhanced its capabilities to assess operational experience and respond to significant safety issues. For example, each of the Owners Groups now has a regulatory response group, which

can be activated to rapidly respond to significant events and technical issues having serious generic safety implications for plants of a particular design. In addition, INPO, which was created in 1979, now provides a strong, credible, and independent capability to evaluate operational experience and feed back lessons learned to licensees. As a result, the rationale for an independent AEOD of its current size is not as strong today as it was 20 years ago.