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Mr. Brian J. McDermott
Deputy Director for Incident Response
Office of Nuclear Security and Incident Response
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Emergency Response Data System and Incident Response Enhancements

Project Number: 689

Dear Mr. McDermott:

NEI would like to thank the NRC for the opportunity to interact with the staff during a public meeting held on March 26, 2008. The purpose of the meeting was to seek stakeholder input on NRC enhancements supporting NRC's mission to independently assess licensee response actions and decisions during an emergency.

The meeting focused the Emergency Response Data System (ERDS) which has been in use since 1992 and provides a real-time data link with all nuclear power plants licensed by the NRC. Proposed improvements included additional data points, simulated ERDS data for exercise support, improved communications capability and security, and on-line plant reference data.

NEI supports proceeding with a modernization upgrade using current technology, including improvements to reliability and cyber security. Before additional improvements are mandated, a cost vs. benefit justification should be performed in order to provide a basis for these improvements. We recommend that the NRC and industry pilot proposed enhancements before improvements are required through codification. The following insights should be evaluated prior to preliminary rulemaking in each of the areas under discussion:

Additional Plant Data Points

Currently, the input to ERDS includes about a 100 real time data points from each licensee. The staff believes that additional data points should be required in order to evaluate plant trends during the course of an off normal event. NEI suggests the staff review existing reports of NRC operation

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center performance during actual events, participating drills and exercises, and examples of where the current data set was not capable of supporting the mission of independently accessing licensee response actions and decisions during a simulated emergency. In addition, the staff should review NEI 99-01, Revision 5, to determine if additional data points are needed for emergency action level review.

Simulated ERDS Data for Exercise Support

The staff suggested that licensee simulators forward ERDS data to the NRC during the planned exercises. Not all simulators are capable of sending simulated ERDS data to the NRC and therefore mandating this requirement in a rule would impose a cost. Additionally, not all information is available on simulators such as meteorological data and other plant parameters. Licensees would have to bear additional costs to create availability of this information on the simulator and ERDS transmission. To support an analysis of a cost vs. benefit justification, it is suggested that the staff pilot this project on its own simulator with ERDS transmission to the headquarters Incident Response Center to determine the cost for implementation.

NEI would be willing to survey the industry to determine what utilities' simulators have the capability to send simulated ERDS data.

Improved ERDS Communications Capability/Security

Two methods were suggested for demonstrating continued ERDS system operability:

Continuous Method where all data points would be continuously sent to the NRC. For example, a plants reactor power would be available on a continuous basis in the NRC operation center. There are concerns providing critical information, such as reactor power, external to the facility. We question if the release of the electrical output of a unit is considered to be proprietary information and is not acceptable to some licensees.

Heartbeat Method where all data points would not be continuously sent to the NRC and data transmission to the NRC would be initiated by the plant. ERDS connectivity between the licensee and the NRC operation center would be demonstrated by sending test data on a periodic basis. Full data transmission capability would be tested on a periodic basis as it is now. This system requires routine full operability testing and may not be acceptable to some utilities.

The industry suggests that the system be designed so that both systems for operability testing are available and allow the utility to determine which system supports their business needs.

NEI and licensees requested NRC examine the FERC compliance rules for making generation information available to external agencies such as state agencies. Additional provisions in agreements may be required to ensure treatment of this information as proprietary to minimize the risk of unintended release of information and compromising requirements for sharing of competitive

information. FERC compliance review pertains to both methods discussed in this section since both methods still allow third party, outside the NRC, to have access to generation information.

Online Plant Reference Data

The staff is asking that certain plant records (procedures and drawings) be electronically available. NEI believes that online plant reference data (known as e-library) may be of some value to both the NRC and the licensee during an emergency if the data provided can reduce communications between the incident response center and the control room during an event.

As suggested, supplying plant reference data on a CD on a periodic basis is not a cost effective method for supplying this information since the process is an added burden on the licensee, and becomes outdated as soon as it is provided. NEI would like NRC consideration of a process similar to that described in the following paragraph as one viable method to provide reference information.

Typically plant records are maintained in a database. Each plant record has various attributes associated with it. For records requested by the staff, an attribute of "NRC" would be assigned to the record. When a record is updated at the plant that has an attribute of "NRC," the record would be automatically sent by the records management system to a secure server that is maintained by the NRC. Periodically, NRC would then upload these revised records to a server at the NRC's Incident Response Center.

NEI could send out a survey to plants to determine if they would be willing to support NRC's records request by this method. Then this system could be piloted with a number of utility volunteers to determine its validity as a method to supply the reference material to the NRC.

In conclusion, we suggest that before preliminary rulemaking for ERDS and incident response improvements proceed, that a cost benefit analysis be performed on each of the fore mentioned topical areas discussed. Improvements that are justified should then be piloted with industry volunteers in order to flush out technical and procedural concerns.

If you have any questions, please contact me at (202) 739-8110; apn@nei.org or Martin Hug at (202) 739-8129; mth@nei.org

Sincerely,

Alan P. Nelson

c: Mr. Melvyn Leach, NRC
NRC Document Control Desk