



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 19, 1997

MEETING BETWEEN U.S. NUCLEAR REGULATORY COMMISSION (NRC) AND NUCLEAR ENERGY INSTITUTE (NEI)

SUBJECT: SUMMARY OF JUNE 19, 1997, MEETING CONCERNING ELECTRICAL GRID RELIABILITY ISSUES

On June 19, 1997, a public meeting was held between NRR and NEI staff in Rockville, Maryland to discuss emerging issues concerning the reliability of electric grids in the United States. Enclosure 1 is a list of those who attended the meeting and Enclosure 2 is the agenda that was followed. The following is a summary of the highlights of the discussions.

The staff highlighted the fact that the Commission has expressed interest in how the impending deregulation of the electrical distribution system in this country will affect the reliability and stability of offsite power sources being provided to operating nuclear power plants. Further, there is interest to determine how nuclear licensees will be able to maintain their design basis for the remaining life of each plant for this preferred power source for safety systems in the plant, which are needed to shut down the plant and maintain it in a safe condition following a design-basis accident. It was emphasized that the Commission has a desire to get involved with grid reliability issues ahead of the curve so the agency is not forced to produce regulatory changes to address issues in the 11th hour.

To that end, the staff has been active in discussing concerns with industry representatives and has provided detailed briefings to the Commission as recently as April of this year. In addition, the staff has conducted information gathering meetings with staff in the Department of Energy, the Federal Energy Regulatory Commission (FERC), the North American Energy Reliability Council (NERC), and specific grid organizations to gain some insight on the way power supplies are being managed currently under routine and during projected shortage periods and how the deregulation aspect will be factored into decisions on allocation stability and reliability.

The staff also mentioned that it had prepared some independent assessments of the midwest and northeast grid conditions based on the number of nuclear plants that had become unavailable due to extended shutdowns. The areas for concern for grid instability during periods of excess demand are both frequency changes and voltage reductions. It appears that although both the northeast and midwest may face serious challenges during this summer season, the midwest is in a worse situation because of its limited reserve and reliance on imported power to maintain voltage control.

The staff also discussed that a staff requirements memorandum was issued on May 27, 1996. In that document, the staff was assigned several tasks. They included establishing in each regional office technical contacts to interface with the regional reliability councils and power pools to better understand



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how these organizations function and to establish communication links that will be useful during abnormal grid disturbances and conditions, which could affect offsite power supplies to the nuclear sites. Also, the staff has been requested to assess the member requirements and enforcement policies and practices for NERC.

The staff plans to continue to monitor the effects of deregulation on operation of nuclear units and is working with support from Oak Ridge National Laboratory to assess the risk significance of deregulation. Further, the staff is developing a generic communication to ensure that the design basis for offsite power is maintained to be reliable and stable in accordance with the original assumptions in the design basis and that each licensee has a process to monitor the grid over time. Another activity will be for the staff to reevaluate if changes in grid reliability can affect risk reductions that have been achieved by the Station Blackout Rule. If it turns out that some plants will not be able to maintain their desired level of reliable offsite power, then other onsite options may need to be considered such as adding additional diesel generators or combustion turbine, which will be very costly.

The staff indicated that it is developing a task action plan to incorporate planned staff activities related to grid stability and indicated that when it is approved it can be discussed in detail.

The NEI representative, Richard Myers, discussed actions by his organization relative to the need for controlling and maintaining grid reliability and stability. Specifically, based on actual grid problems over the past year NEI established its Chief Executive Officer Level Task Force and supported industry applied pressure on NERC to develop and implement programs to minimize grid failures. He discussed the fact that NERC promptly responded and established substantial policy changes, mandatory requirements and security coordination controls across the country and emphasized that the industry is taking the grid reliability very seriously.

NEI specifically has established an Executive Task Force on Restructuring that includes a number of senior people from nuclear power licensees to advise NEI on NRC related restructuring issues. The task force has worked on a number of issues including decommissioning and financial qualifications. In addition NEI has some working issue groups looking at the impact of different electrical transmission arrangements on nuclear plants. There is a focus on the independent system operators (ISOs) and how they will function and there is a feeling that their role will not adversely affect nuclear power plant operation. It was stated that it will be important that the ISOs will need to understand what the nuclear plant expectations will be regarding grid stability and especially voltage and frequency control. He indicated that this may need to be put in writing in some type of policy paper by NEI. He added that during the process where the California ISO had proposed an operations plan to FERC, that Diablo Canyon and San Onofre licensees petitioned for changes to include guarantees of reliability for offsite power supplies to their units and this was adopted by FERC.

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Mr. Myers noted that NEI needs to refocus the Executive Task Force on the issues that the NRC is most interested in relative to grid reliability, highlighted in this meeting. He stated that he would discuss this at the next scheduled meeting and would propose that NEI develop its own action plan with common goals with the NRC.

The staff acknowledged that NEI also needs to be proactive in following this issue and stated that it would like to be able to develop some quantitative or qualitative types of indicators that would make the agency aware of potential problems with grids before they happen and suggested that the industry would have a similar goal.

It was agreed that NEI and the staff would continue discussions at a subsequent meeting when feedback on an NEI action plan would be provided and discussions of NRC further actions would be conducted.

Chester Poslusny, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

- Enclosures: 1. List of Attendees
2. Agenda

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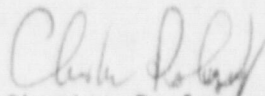
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LIST OF ATTENDEES

GRID RELIABILITY MEETING

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

JUNE 19, 1997

<u>NAME</u>	<u>ORGANIZATION</u>
B. Sheron	NRC/NRR
J. Calvo	NRC/NRR
D. Thatcher	NRC/NRR
P. Gill	NRC/NRR
M. Davis	NRC/NRR
G. Lain...	NRC/NRR
R. Jenkins	NRC/NRR
J. Vora	NRC/RES
B. Williamson	McGraw-Hill
K. Ainger	ComEd Corp. Services
R. Myers	NEI
N. Chapman	SEERCH/Bechtel
G. Sterling	Shaw Pittman
R. Holloway	Shaw Pittman
M. Neal	NUS Info Services

MEETING BETWEEN NRC AND NEI STAFF
GRID RELIABILITY ISSUES
JUNE 19, 1997

AGENDA:

1. RECENT STAFF INITIATIVES

- INFORMATION GATHERING MEETINGS WITH INDUSTRY AND GOVERNMENT AGENCIES
- BRIEFING TO COMMISSION ON ELECTRIC GRID RELIABILITY ON APRIL 23, 1997
- INDEPENDENT STAFF ASSESSMENTS OF REGIONAL GRID CONDITIONS
- STAFF REQUIREMENTS MEMORANDUM DATED MAY 27, 1997
- STAFF TASK ACTION PLAN ON GRID RELIABILITY

2. NEI INITIATIVES