

990001

7809190335



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

August 13, 1979

CHAIRMAN

The Honorable William G. Milliken Governor of Michigan Lansing, Michigan 48933

Dear Governor Milliken:

This letter is in response to your letter of May 9, 1979 in which you requested information on Nuclear Regulatory Commission studies of the performance of operating nuclear power plants in the State of Michigan. These studies appear to have been used as a basis for characterizing plants in Michigan as "below average." The article, "Safety Woes at State's A-Plants," The Detroit Free Press, April 29, 1979, which you cited is one such characterization. I will describe below the NRC efforts to evaluate the performance of nuclear power plant licensees. Answers to the specific questions which you asked are enclosed.

The enclosed Policy Session Item, SECY-78-554 dated October 25, 1978, entitled "Licensee Regulatory Performance Evaluation," describes historical development, current status and future plans for work in performance evaluation. It should be noted that the three studies conducted over the 1976 and 1977 time frame were developmental in nature. Because each evaluation methodology exhibited both strengths and weaknesses, no one method was adopted by the Commission as an acceptable measure of licensee performance. Therefore, the information in the studies was not endorsed by the Commission. Instead, the Commission authorized further development of the evaluation methodology and has reserved approval thereof before program implementation.

Peports of each study and related documents are enclosed for you information. They were placed in the public domain in November 1978 following a request under the Freedom of Information Act. Prior to that time, the studies had not been released because they were considered to be predecisional material.

The results of these studies, including the ranking of plants, were qualified to reflect the need for further refinements in the evaluation methodology. Nevertheless, qualifications as to the validity of the study results may have been overlooked in recent media accounts of nuclear power plant performance.

I've attempted to respond to your questions to the degree permitted by the current developmental status of Licensee Regulatory Performance Evaluation. The NRC does not yet have all the answers to performance evaluation. Based on current literature in the field of organizational effectiveness, some of the answers we're seeking in the narrow facet of regulatory performance may not exist. If you have further questions

Honorable William G. Millikan

..

.1

in this matter, please do not hesitate to contact me. I've also been assured that James G. Keppler, Director, NRC Region III and his staff would be happy to meet with Michigan State Officials to discuss this or any other problem regarding nuclear facilities in Michigan.

Sincerely, endue

Joseph M. Hendrie

Encl	osures :
1.	Answers to Specific Questions
2.	IE Bulletins 79-05, 79-05A, 79-05B, 79-06, 79-06A, 79-06B, and 79-08
3.	Regulatory Guide 1.16 and copies of significant LERs
4.	Transmittal letter for SECY-78-554
5.	Commission Paper - SECY-78-554
6.	NUREG/OR-0110 - Licensee Performance Evaluation
7.	Draft Study - Individual Site Ratings from IE Employee Survey, dtd April 1978
8.	Memo fm E. M. Howard to Ernst Volgenau dated September 26, 1977
9.	Draft Report - An Evaluation of the Nuclear Safety- Related Management Performance of NRC Operating Reactor Licensees During 1976.
10.	dtd February 1977 Memo E. M. Howard to Ernst Volgenau dated October 26, 1977

cc w/Enclosure 1: J. G. Keppler, NRC:RIII

990002

Enclosure 1

. .

ANSWERS TO SPECIFIC QUESTIONS OF GOVERNOR MILLIKEN

 What standards or criteria are used to rate the safety of plants in these comparative evaluations?

The safety of plants was not rated in the comparative evaluations. Standards and criteria for safety in the "go/no go" or pass/fail sense are applied in the licensing, inspection and enforcement processes associated with NRC license issuance and subsequent nuclear plant operation. These standards and criteria were not used in the comparative evaluations. The comparative evaluations were based instead on a series of measures; some quantifiable such as numbers of noncompliances with NRC regulations, and some subjective such as inspector opinions in the inspector survey. The trial ranking was an attempt to place in relative positions the levels of attainment of each licensee in the measures selected. The majority +, majority or majority - category does not infer that any licensed plant poses undue risk to the public health and safety.

 Are Michigan nuclear plant operators rated below average in their training and capability? If so, what am I to conclude from this evaluation?

We have not made comparative ratings between operators of one facility and operators of another facility. We require all operators to participate in NRC approved training and retraining programs. These programs are essentially identical among facilities. In addition, those operators who manipulate controls that affect reactivity and their immediate supervisors are examined and licensed by NRC. The examinations are facility oriented and are not directly comparable. However, they are similar in scope. To date, we have been satisfied with the knowledge and understanding exhibited by the operators licensed at nuclear power plants in Michigan.

3. Is it logical to assume that continued licensed operation is an indication of NRC satisfaction with the safety of these plants? Does the "below average" rating contribute to any increased risk to the citizens of Michigan?

The licensing, inspection and enforcement processes form the bases for continued NRC satisfaction with the safety of operating nuclear power plants. The study results have not been correlated with risk, which in itself has not been adequately quantified in absolute terms. The divergence in results among the three evaluation methods studied, raises questions as to whether the performance measures or ratings reflect on risk. The relative ranking of licensees on the measures selected was generated without conclusion as to its impact on risk.

4. Has your agency chosen to upgrade performance of the plant operators and if so, when?



Upgrading the performance of both the licensee organization and individual operators is a continuing process that is deeply rooted in the NRC inspection and enforcement programs. On a case basis, performance is upgraded when corrective action is taken by a licensee in response to identified noncompliance or enforcement action. On a generic basis, performance has been upgraded by all licensees in response to Inspection and Enforcement Bulletins which specify action of licensees and require a report upon completion thereof. A recent Example is the series of Bulletins that were issued shortly after the Three Mile Island Unit 2 accident (copies enclosed). Additional operator training on actions during emergencies was prescribed. NRC inspectors have verified by onsite inspection that the upgraded training has been implemented.

5. Are the utilities involved cooperating with the NRC in any needed upgrading of their performance? Is there an opportunity for the state to work with these utilities toward a better operational result?

Both Indiana and Michigan Electric Company and Consumers Power Company have been cooperative and generally responsive in their dealings with the Nuclear Regulatory Commission. The regulator performance of the three operating nuclear stations in Michigan continues to be acceptable from the public health and safety standpoint. However, the NRC staff lieves the licensee performance can and should be improved at the lalisades and D.C. Cook facilities.

The principal areas of concern at Palisades and Cook include the number of items of noncompliance with NRC requirements, the number of personnel errors, and the number of reportable events -- many of which we believe could have been avoided. In 1978, NRC inspectors at Palisades and Cook identified more items of noncompliance with NRC requirements than at any other site in the eight states covered by Region III. Palisades had 34 items of noncompliance, and Cook had 33. Big Rock Point's record for 1978 was 11 items of noncompliance. The range of noncompliance at nuclear power plants in Region III, during 1978, was from 9 to 34. However, the conditions represented by these items of noncompliance did not constitute an immediate threat to the bealth and safety of the public. The basic NRC concern is that this large number of items of noncompliance could be an indication of problems in the licensee management control system.

The NRC has a spectrum of enforcement sanctions which it uses in dealing with noncompliance. These range from Notices of Violation to Civil Monetary Penalties to Orders which would suspend, modify, or revoke the Operating License. Indiana and Michigan Electric Company was fined \$10,000 in 1978 for supplying incorrect information to the NRC as part of its application for the Unit 2 Operating License. The incorrect information involved the environmental qualification of safetyrelated electrical components. All other items of noncompliance at the three stations were covered by Notices of Violation, which noncompliance and to prevent a recurrence.

ORIGIN



. .

Region III management met earlier this year with top corporate officials from each of the two utilities to discuss their regulatory performance and the importance of reducing the number of noncompliance items and Licensee Event Reports. Both utilities share the NRC's concerns and are developing positive measures to improve their regulatory performance.

Licensee regulatory performance at the three sites is monitored by the inspection program conducted by the NRC's Office of Inspection and Enforcement. Palisades and Cook were part of a pilot program begun in 1974 to evaluate the effectiveness of a Resident Inspection Program. The Resident Inspection Program has continued at Cook and a resident inspector has recently been assigned to the Palisades Plant. As manpower availability permits, a resident inspector will be assigned to the Big Rock Point Plant within the next two years. It should be recognized that the use of resident inspectors is an augmentation, rather than a replacement, of our regional based inspection program. Regional based inspectors will continue to inspect these facilities in specialized technical areas.

The NRC recognizes the important role played by the Michigan Pu_.ic Service Commission (PSC) in regulating the economic factors associated with the operations of these utilities. In this regard, Region III has been providing the PSC copies of all correspondence generated by the utilities and the Regional Office regarding regulatory operation of the nuclear plants in Michigan. Mr. James G. Keppler, the NRC Region III Director, met with the Michigan PSC in late 1974 to discuss the NRC's regulatory program. He would be pleased to meet with the PSC again to discuss, in greater detail, the regulatory performance of Michigan's nuclear facilities.

6. Will you please provide a copy of the document referenced in the attached news article? How does the NRC determine safety related occurrences? How many such events have occurred in Michigan, and which ones are significant from a safety viewpoint.

A copy of the studies of licensee regulatory performance, which were referenced in the Detroit Free Press article, is enclosed.

The NRC has extensive reporting requirements for nuclear power stations. These requirements, which are specified in each plant's license, cover a wide range of occurrences at a nuclear plant. NRC Regulatory Guide 1.16 summarizes these reporting requirements. (A copy is enclosed.)

These Licensee Event Reports are one source of information about nuclear plant operations. Each report is evaluated by the NRC staff to determine its significance and whether it may have application to other nuclear facilities.

On-site inspections by NRC personnel are another source of information about the nuclear plants. These inspections, whether conducted by resident inspectors or by personnel from the Regional Office, follow an



established inspection program. This inspection program, during the course of a year, is designed to sample all safety-related aspects of nuclear plant operations.

The number of events, reported to the NRC for each of the Michigan reactors, is summarized below:

	1977	1978	1979 (Thru April 30)
Big Rock Point	51	49	19
Palisades	53	44	19
D. C. Cook 1	42	69	32
D. C. Cook 2	*	101	218

* Unit 2 was not in operation in 1977.

. .

...

Of these reports, several have been evaluated by the NRC staff as being or particular significance. Copies of the Licensee Event Reports for each of these events are enclosed.

