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Draft Report

AN EVALUATION OF THE NUCLEAR SAFETY-RELATED MANAGEMENT PERFORMANCE OF NRC OPERATING REACTOR LICENSEES DURING 1976

(Licensee Management Performance Indicators)

February 1977

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INDIVIDUAL SITE RATINGS

From The

IE EMPLOYEE SURVEY ON EVALUATION OF LICENSEES

Background

This report documents the "Individual Site Rating" portion of the "IE Employee Survey on Evaluation of Licensees" that was conducted in the fall of 1977. The purpose of this survey was to solicit the views of employees of the Office of Inspection and Enforcement (IE) on a variety of subjects related to Licensee Performance Evaluation (LPE). For several years, IE has been attempting to develop a method of identifying those licensees whose level of performance (as measured principally, but not solely, by compliance) requires improvement.

A persistent IE staff criticism of early in-house efforts to develop an LPE methodology was that proposed quantitative rating schemes did not capture the subjective judgments of those Regional employees familiar with the specific licensed activities. This questionnaire was developed as one way of responding to that valid criticism. In addition to asking a number of questions on the advisability and mechanics of conducting evaluations of licensees, the questionnaire also asked each Regional respondent to evaluate each of the sites he was familiar with in terms of its overall safety and a number of other factors. This report summarizes the results of those ratings.

A survey instrument was prepared and statistical calculations were performed by Hay Associates under NRC Purchase Orders DR-77-1322 and DR-77-2631. After the questionnaire was developed with significant input from the IE staff, it was distributed by IE to all appropriate staff members directly associated with the inspection of operating power reactors.

including both Headquarters and Regional employees. To encourage candor and to comply with the Privacy Act, respondents were asked not to sign their names to the questionnaire and all responses were mailed directly to and complied by Hay Associates.

Use of Site Rating Information

The views solicited in this questionnaire constitute predecisional opinions that are intended primarily to contribute to the development of a methodology for evaluating NRC licensees. For this and several other reasons, the site rating information may not be appropriate for release to the public. Although the information is untested, unvalidated, not directly related to licensee compliance with NRC requirements, and unreviewed by licensees, it may be of some use to IE management in gaining insights into the perceived safe., at the 45 operating power reactor sites licensed by NRC. Some of the information may provide additional insights that will help identify inspection program improvements or form the basis for management conferences with licensees. For these latter purposes, the information should be used with some discretion and with an awareness of its limitations noted above.

The results of the site rating information are presented in summary form to adhere to the requirements of the Privacy Act by preventing the specific responses of any single individuals to be identified.

Survey Procedures

The questionnaire was distributed to all employees of IE associated with the inspection of operating power reactors. In rating specific sites, Regional respondents were asked to "rate sites you feel you know enough about to evaluate. Some of your knowledge of that site should have been gathered since January 1976."

Respondents were asked to rate each site they were familiar with by filling out a two-page section of questions (see Figures 1a and 1b on the following pages). The first eleven questions for each site asked the respondent to assess the safety of the site in terms of its overall safety (question 1) and in terms of ten additional factors (questions 2 - 11). For each of these eleven ratings, the respondents were asked to "draw a line indicating how safe you think this site is." A scale labeled "SAFETY" was provided for this purpose. The endpoints of this safety scale were labeled "ACCEPTABLE" and "EXCEPTIONAL." The following definitions were provided:

1. Safety - the degree to which the licensee protects the public against exposure to radiation resulting from the licensee's use of nuclear materials.

2. Acceptable - barely safe enough to be permitted to continue operating.

3. Exceptional - having a virtual absence of risk.

The "acceptable" endpoint was so labeled because all plants currently permitted to operate by NRC were presumed to be at least marginally satisfactory. In the event a respondent considered a plant less than "acceptable," a space for narrative comments about the safety of each site was provided (question 18).

Respondents were asked to describe their own level of knowledge of the site, identify whether they were the Principal Inspector for the site, and indicate how recently they had inspected the site (questions 12 - 14). Another question (15) asked for a comparison of the site's requirements

Figure 1a: Sample Rating Page 1

OPERATING SITE: NAME: _____

DOCKET NO.: _____

Considering all you know about this site, what overall general safety rating would you give to it? Draw a line indicating how safe you think this site is.

SAFETY

ACCEPTABLE EXCEPTIONAL

1. Overall safety |. . . . . .|

Draw a line indicating how safe you feel this site is in terms of the following factors:

SAFETY

ACCEPTABLE EXCEPTIONAL

General attitude of plant personnel toward:

2. Maintenance of safety |. . . . . .|
3. Cooperation with NRC |. . . . . .|
4. Technical competence of plant personnel |. . . . . .|
5. Quality of design, construction, components |. . . . . .|
6. Administrative controls |. . . . . .|
7. Operations |. . . . . .|
8. Emergency planning |. . . . . .|
9. Radiation protection and control |. . . . . .|
10. Safeguards |. . . . . .|
11. Quality assurance |. . . . . .|

Figure 1b: Sample Rating Page 2

12. How well do you know this site and its safety characteristics:

HARDLY AT ALL						EXTREMELY WELL
1	2	3	4	5	6	7

13. Are you the Principal Inspector for a reactor on this site?

Yes ☐
No ☐

14. About how many months ago did you last inspect this site? _____ months ago.

15. The NRC requirements that this site must follow are:

MUCH LESS DEMANDING THAN THOSE OF OTHER SITES						MUCH MORE DEMANDING THAN THOSE OF OTHER SITES
1	2	3	4	5	6	7

16. Have there been any changes in the overall safety of this site since January 1977, that have caused its safety level to change? (Check one)

1. _____ No change in safety at site
2. _____ Safety slightly improved
3. _____ Safety substantially improved
4. _____ Safety slightly worse
5. _____ Safety substantially worse
6. _____ Don't know

17. If a change in safety level occurred, please describe it briefly.

_____

_____

_____

_____

18. Are there other things we should consider about the safety of this site?

Yes ☐
No ☐

If yes, please explain: _____

_____

_____

_____

If this is the last site you are rating, please turn to page 54 and complete the questionnaire.

with those of other sites in terms of being more of less demanding. Finally, respondents were asked to indicate whether site safety had changed since January 1977, to describe how it had changed, and to add any other comments relevant to the safety of the site (questions 16 - 18).

In addition to rating each site they were familiar with, all respondents were asked to assess the safety of a fictitious site that was defined as the average of the 45 operating nuclear reactor sites in the U.S. This section was included to provide a means of calibrating the responses of employees from different Regional Offices.

Computational Procedures

All site safety ratings were converted to digital scores by manual measurement and recording of the responses to the "draw a line" questions. The ratings of the "typical site" were similarly reduced to digital form. Mean rating scores for each site were then calculated. Comparability was a major concern in comparing ratings of sites in various Regions, because people in one Region were generally unfamiliar with and did not rate sites in Regions other than their own. To compensate for potential differences in ratings between Regions, each person's rating of each site was raised or lowered based upon how his rating of the "typical site" compared to the average of all respondents' rating of the "typical site." This linear "rubber band" transform makes the ratings of site safety comparable across all raters and Regions. These adjusted site ratings were reconverted to a graphical format for display.

Averages for the numerical responses to other site rating questions were also calculated, and responses to the narrative site rating questions were paraphrased.

Results

Ratings of the "typical site," shown in Figure 2, illustrate the format used to present site ratings. The top of the rating sheet depicts the safety ratings of the site in terms of overall safety and the other ten safety factors, all shown on a scale of "acceptable" to "exceptional." The squares shown on the scale for each factor represent the mean rating, and the two circles on each scale represent the high and low ratings for each factor. As shown in Figure 2, the typical site is rated somewhat more than halfway between acceptable and exceptional, and ratings of the ten individual safety factors are in the same range. The perceived weakest areas, by a small margin, are Quality Assurance, Emergency Planning, and Administrative Controls. For the typical plant, the range of responses covers the entire scale for almost every factor. The ratings of the typical site reflect the judgments of 94 persons.

Because the typical site is fictitious, it did not receive ratings for the "familiarity of the raters with site," the "average number of months since raters' last inspection," or the "stringency of requirements for site."

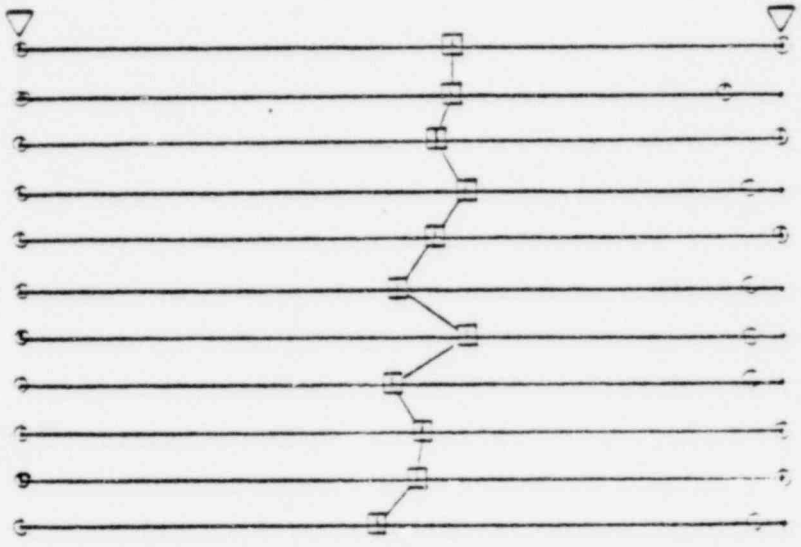
Of the 94 persons rating the average site, 72 expressed opinions on the "change in site safety since January 1977." Most people felt that site safety had either improved slightly (39) or substantially (4), while about 40 percent (28 people) felt there was no change. Only one person thought that safety at the typical site had become worse since January 1977. There were no narrative comments solicited or offered about the safety of the typical site.

The means and standard deviations of the adjusted "overall safety" ratings are shown by Region in Figure 3. The mean adjusted safety rating for each Region is indicated by the square and the arrows represent the associated standard deviations. These results confirm that there are

SITE Typical Site in U.S.

Figure 2: Rating of the Typical Site DOCKET NUMBER 50-999

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 94

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = N/A
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = N/A

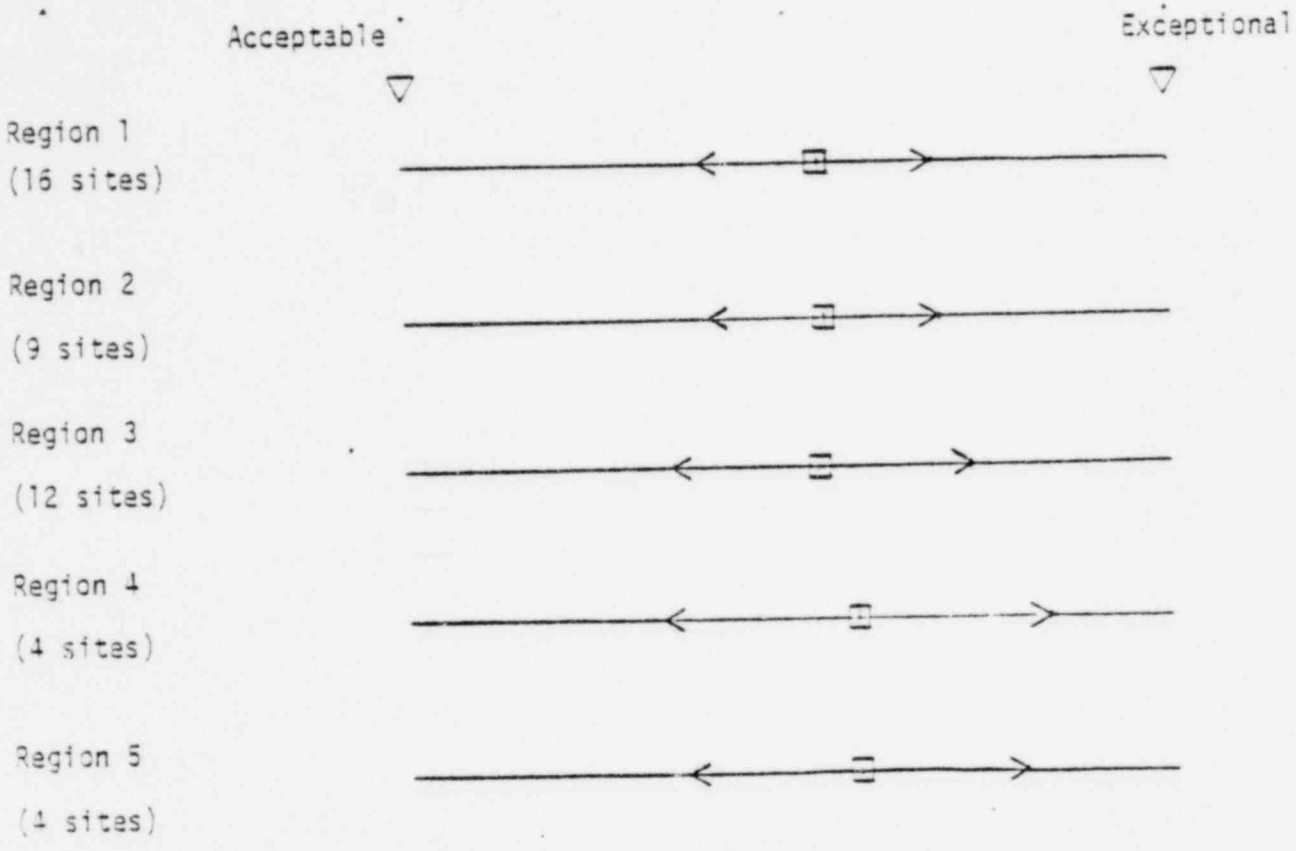
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = N/A
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 28
2 = SAFETY SLIGHTLY IMPROVED..... 39
3 = SAFETY SUBSTANTIALLY IMPROVED..... 4
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

FIGURE 3: AVERAGE SITE RATINGS BY REGION*



*Squares indicate regional means of adjusted "overall safety" ratings.

Arrows represent standard deviations.

no substantial differences in the average ratings between Regions after each individual's ratings are adjusted to account for his assessment of the typical site. The means for the three large regions (1,2, and 3) are virtually the same. Those for the smaller Regions (4 and 5) are slightly greater as are the standard deviations.

Rating information for each of the 45 sites is provided as Appendix A. A separate page is devoted to each site. As noted earlier, the squares on each safety scale indicate the mean rating, and the circles indicate the range of responses. The narrative comments represents a paraphrasing of observations from various persons which are not necessarily consistent with each other or with the quantitative rating information at the top of the form.

This information may be useful not only for developing evaluation methodology, but also for providing insights into the perceived levels of site safety, specific strengths and weaknesses at each site, overall trends toward improvement or degradation of performance, and possible improvements in inspection strategies.

APPENDIX A

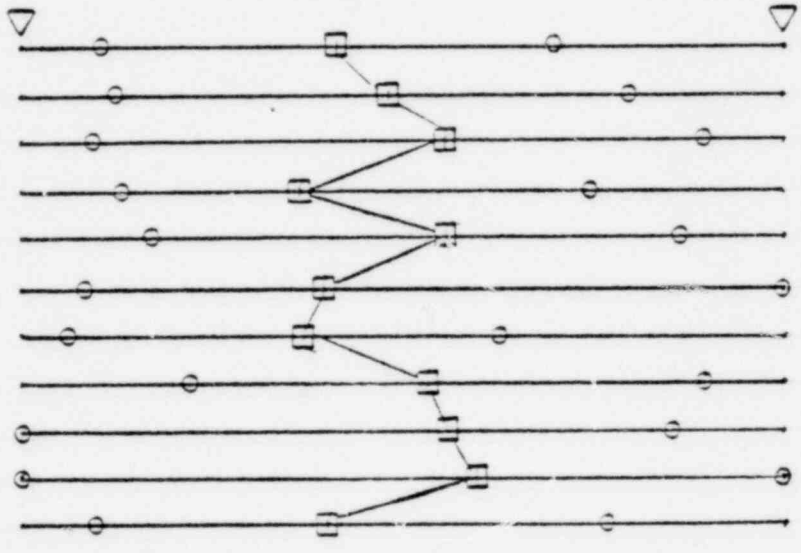
INDIVIDUAL SITE RATINGS

SITE Beaver Valley

DOCKET NUMBER 50-334

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 13.

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 5.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 6
3 = SAFETY SUBSTANTIALLY IMPROVED..... 1
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

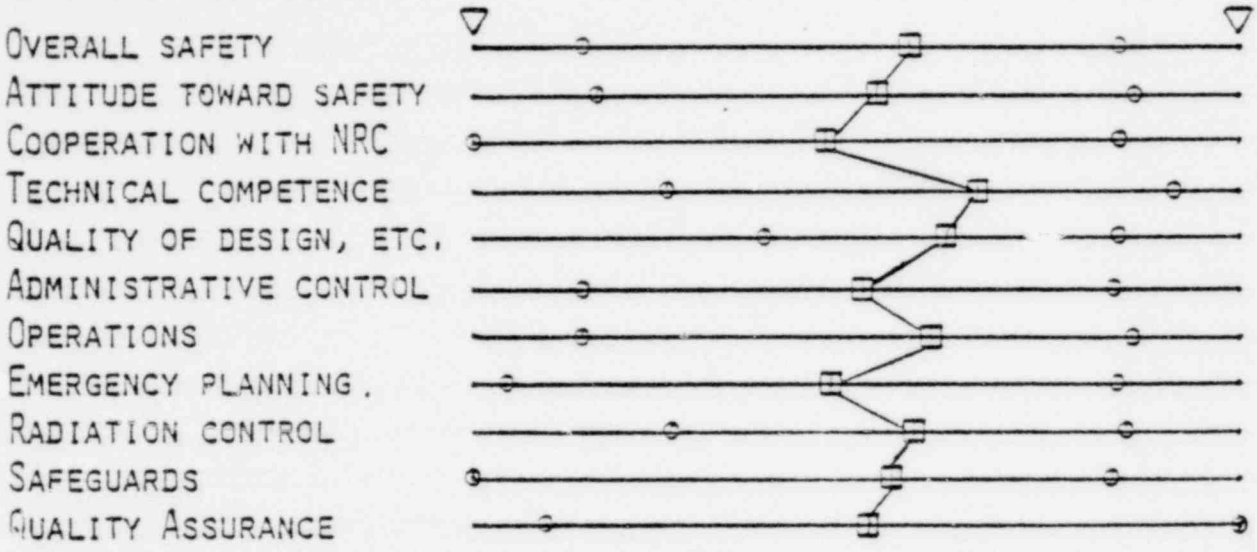
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Staff is experienced. QA controls improved. Staff is improving. Bugs are being worked out of equipment and administrative controls. Plant management has improved. Security has improved with increased requirements. Staff still learning.

SITE Calvert Cliffs

DOCKET NUMBER 50-317

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 15

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.9
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 5.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 6
2 = SAFETY SLIGHTLY IMPROVED..... 6
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

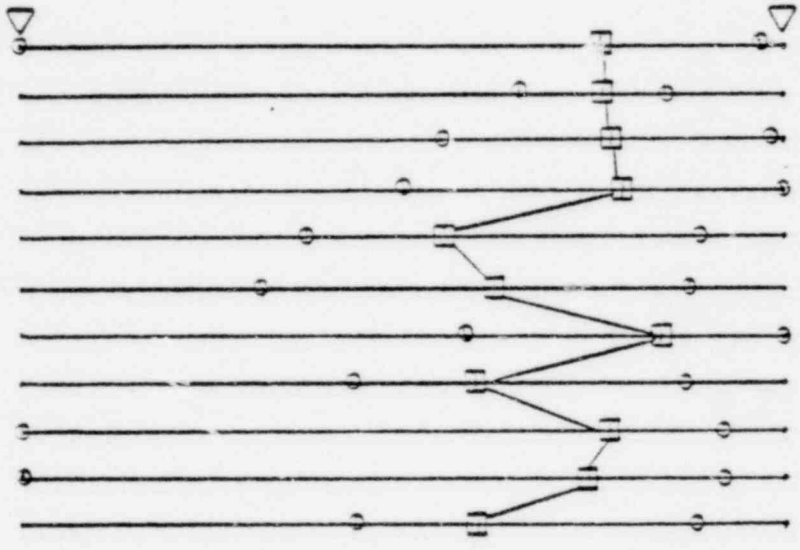
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Management more attentive as a result of enforcement conference. An important staff member is anti-NRC and anti-QA. Security is improved. This site doesn't do more for safety than meet minimum requirements. Emphasis is upon commercial operation; attitude toward safety is that meeting NRC requirements literally is sufficient.

SITE Connecticut Yankee

DOCKET NUMBER 50-213

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 9

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 7.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.7
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 7
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

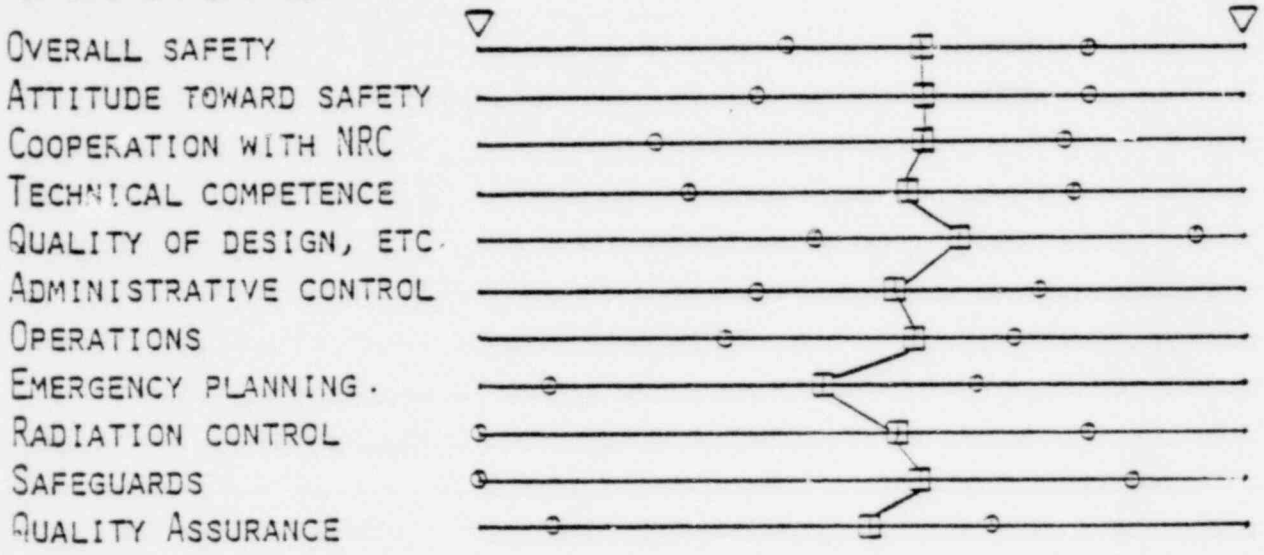
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Overall safety should be improved at the completion of ongoing design requirement and license condition upgrading.

SITE Fitzpatrick

DOCKET NUMBER 50-333

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 11

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 5.5

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 6
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

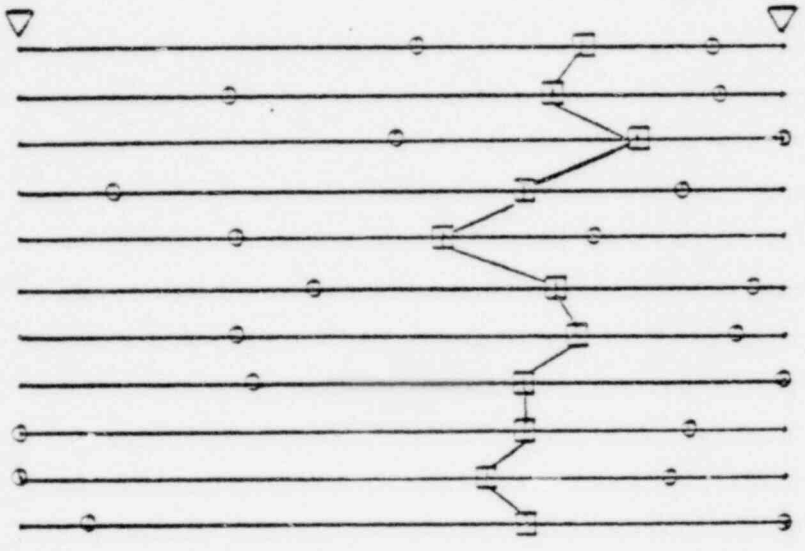
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Plant has a new operator (PASNY) that appears to have made improvements. Is increased management attention to operations. New security procedures are in effect. New management has improved technical competence and management and administrative controls. Design has been modified to add safety systems. Excellent fire protection and security systems. Management improvements noted.

SITE Ginna

DOCKET NUMBER 50-244

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 11

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.4
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 8.5

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.4
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 9
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

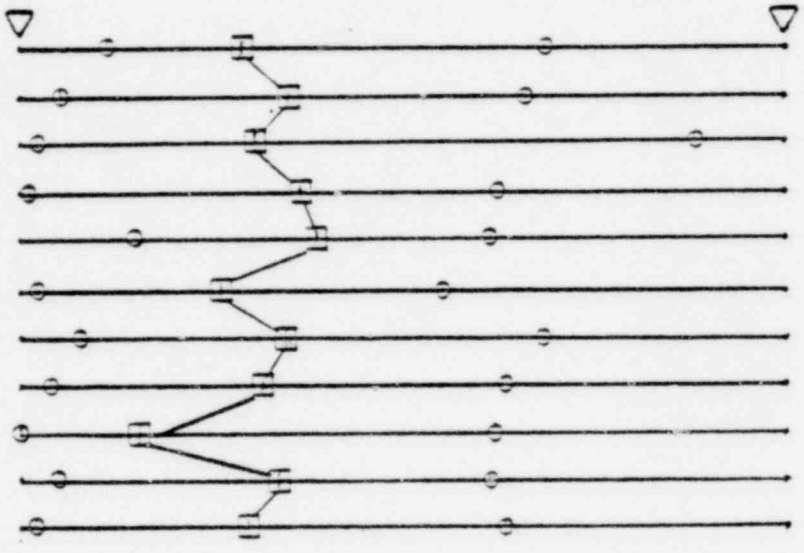
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

The plant is old, small, and run safely.

SITE Indian Point

DOCKET NUMBER 50-003

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 13

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.5
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 5.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 4
3 = SAFETY SUBSTANTIALLY IMPROVED..... 3
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

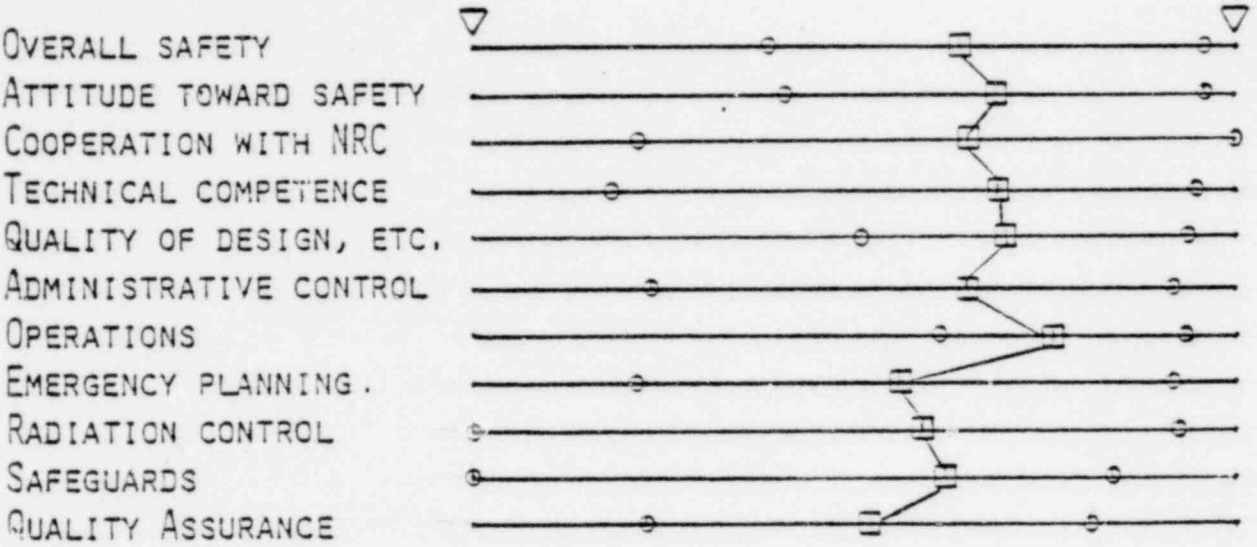
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Indian Point Unit 3 is superior in all respects to Unit 2, primarily because of its management controls and personnel. Considerable recent attention to HP, safeguards, and other areas of Unit 2 operations has resulted in considerable upgrading. Radiation health controls have improved. Recent problem with instrumentation. Does not have a QA plan meeting current requirements. Unit 3 rated higher than Unit 2 because PASNY management better than that of Con. Ed. Significant recent improvements in management control. Corporate management attitude continues to limit effectiveness of site management. Need to continue more frequent inspections by our best inspectors.

SITE Maine Yankee

DOCKET NUMBER 50-309

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.5
(1 = HARDLY AT ALL, = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 8
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

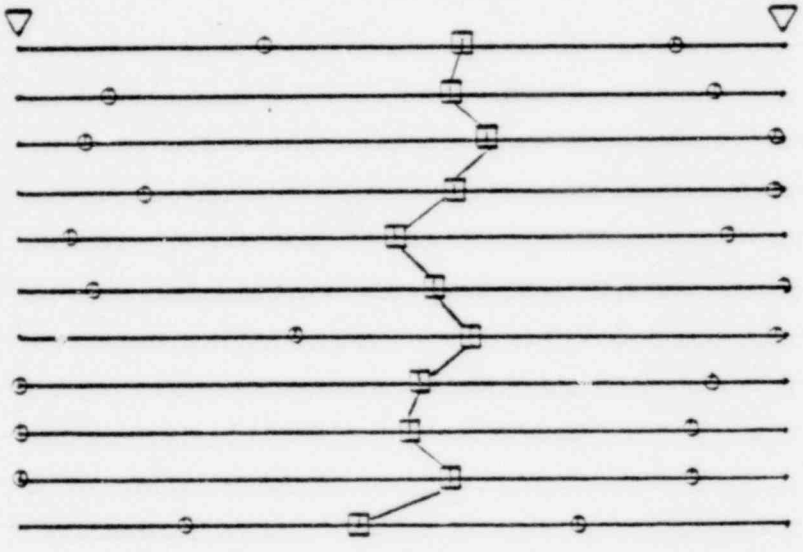
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

The cleanliness of this plant reflects a pride of ownership and indicates happy people working at a good plant. QA plan was recently upgraded.

SITE Millstone

DOCKET NUMBER 50-245

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 20

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 9
2 = SAFETY SLIGHTLY IMPROVED..... 5
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

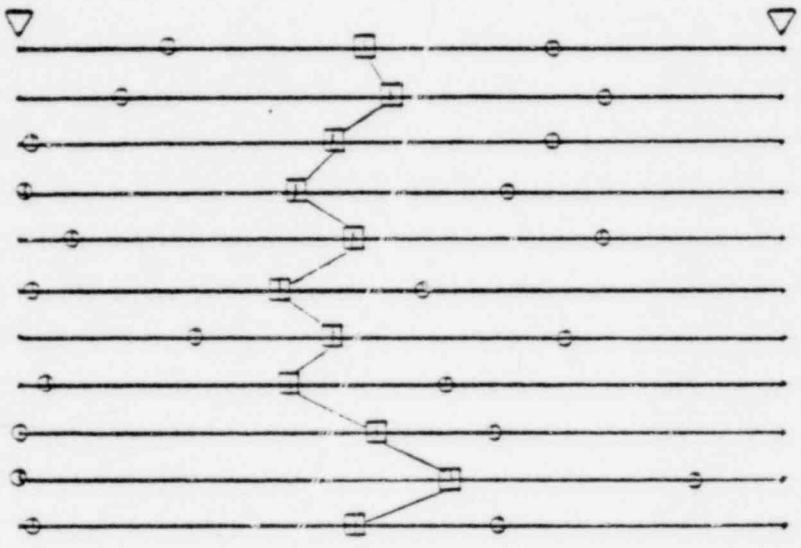
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Unit 1, an old BWR, is rated lower than Unit 2. Awareness of safety has increased. The different units operate relatively independently, and each has a different vendor. Improved security arrangements. Plant lacks full separation and fire protection systems. Rdd waste system undersized. New QA organization seems slightly better.

SITE Nine Mile Point

DOCKET NUMBER 50-220

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 13

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.5
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.0

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 11
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

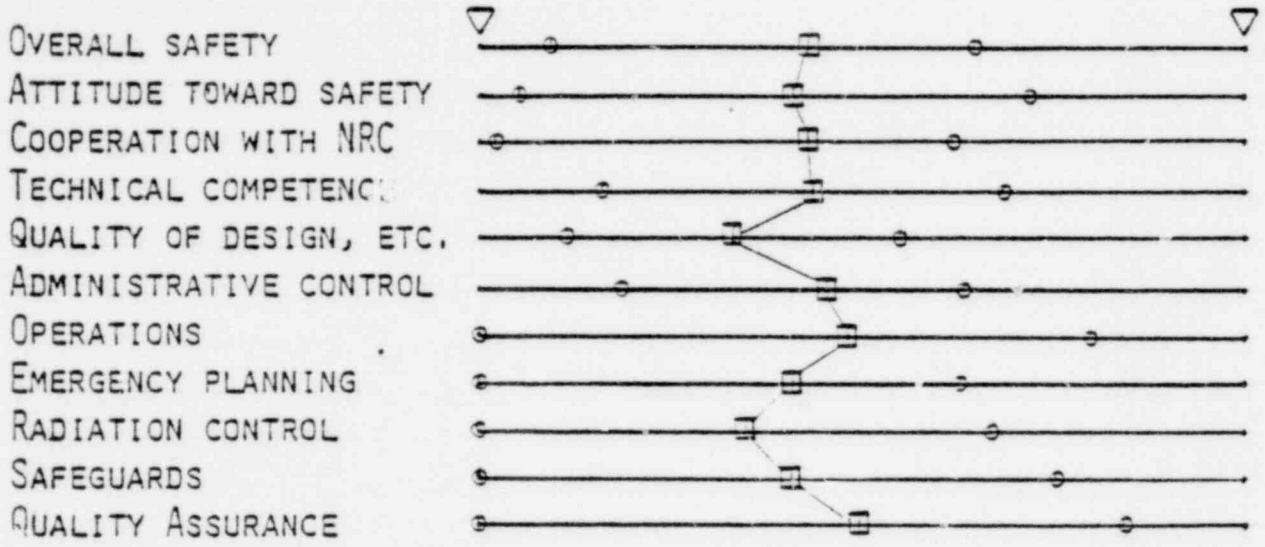
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Plant was operated by former fossil plant people: they have not yet become nuclear people. This is an old plant, but its engineering, layout, and construction are good. Do not have enough on-site plant support except in operations. Security program excellent. Plant deficient in system separation and high pressure inspection systems. Conservative approach to operations. Plant staff has been stable. Plant has experienced BWR operators.

SITE Oyster Creek

DOCKET NUMBER 50-219

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 14

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.5
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.0

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 6
2 = SAFETY SLIGHTLY IMPROVED..... 5
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

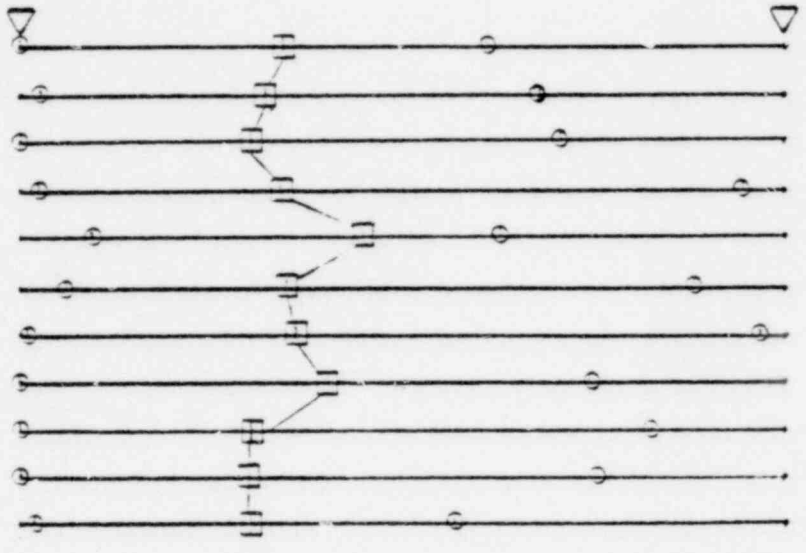
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Security should be upgraded (guard force and surveillance). New operating procedures and maintenance systems have improved safety. QA program has been more fully implemented. As an early BWR, plant has inherently different safety characteristics. Facility management has not endorsed in principle a comprehensive management control system. They tend to just meet the minimum requirements. Design review of this plant was deficient. Plant was built at minimum cost. Rad waste, fire protection, and system separation are inadequate. Corporate management has firsthand knowledge of plant.

SITE Peach Bottom

DOCKET NUMBER 50-277

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 19

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 5.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.3
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 8
2 = SAFETY SLIGHTLY IMPROVED..... 3
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 3
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

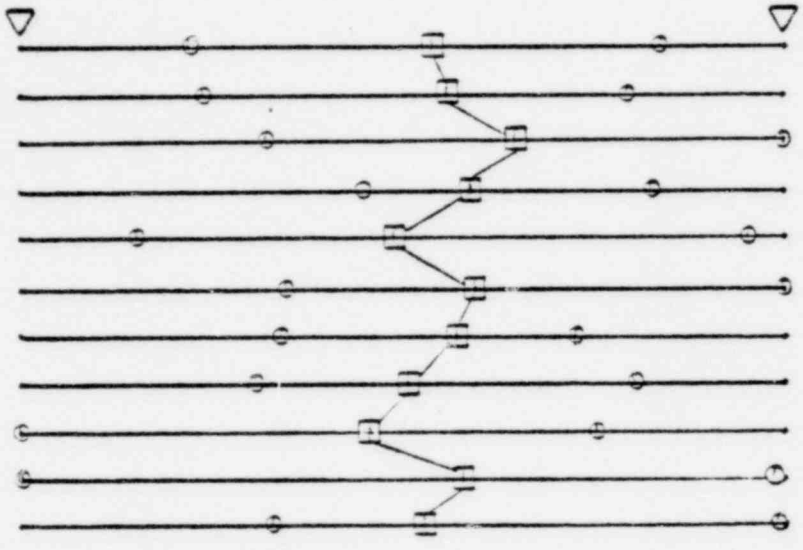
This is the least safe site in Region I and has the poorest management. QA and secur are not upgraded to current standards. Many repeat items of noncompliance. Plant staff has appeared incapable of correcting increased plant radiation levels. Management is slow responding to problems. A greater inspection frequency is partially attributable to proximity to regional office. Expect improvements as a result of management meeting with company president. Operating staff presently error-prone due to back-to-back overhaul periods for Units 2 and 3. General attitude of plant appears to be compliance only as required. Careless operations and poor maintenance.

Over

SITE Pilgrim

DOCKET NUMBER 50-293

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 13

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 8.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.2
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 7
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 1

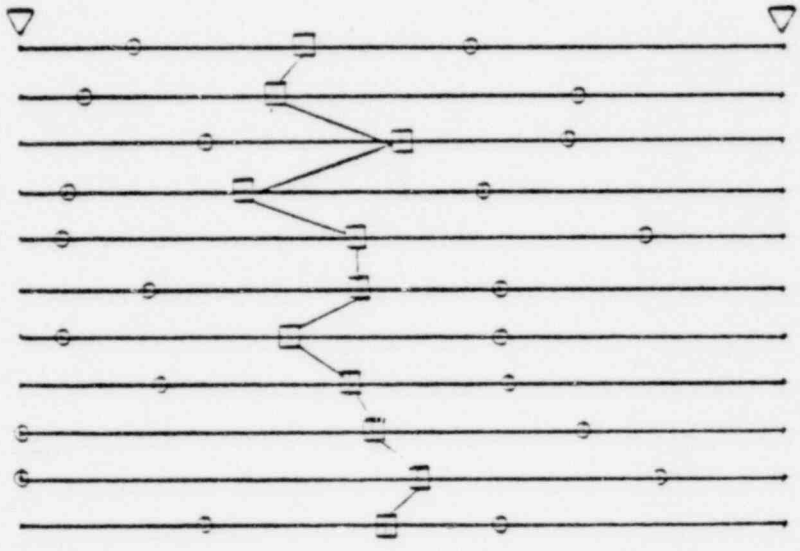
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

The generation of its design may be an overriding factor for this early BWR. Corporate management improved. Radiation management improved. Frequent station manager changes. Significant reductions in effluents and worker exposures expected. Plant management has not been stable. This is the cleanest BWR in the country.

SITE Salem

DOCKET NUMBER 50-272

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 4.9

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.3
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 6
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 1
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

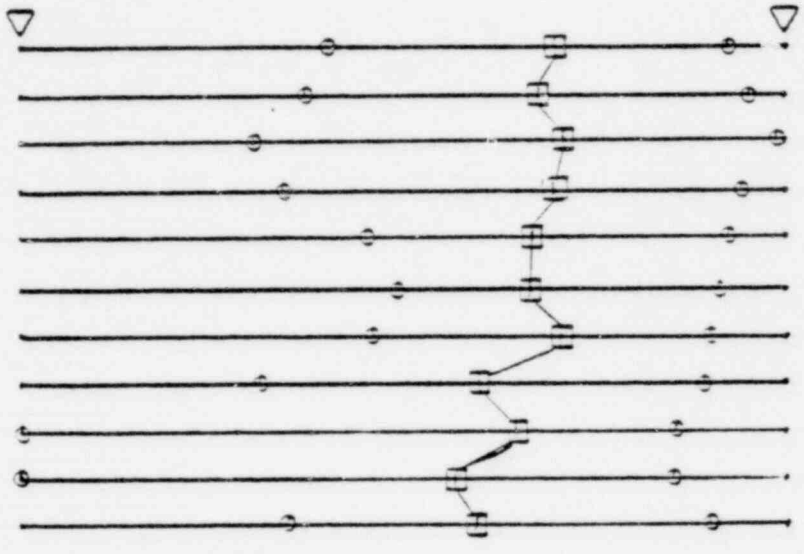
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

The plant control room is very poorly designed. This is a relatively new plant with growing pains. It needs close inspection attention to assure that appropriate improvements are made. Have had a number of problems in startup phase, which were corrected by management. Problems with operator controls.

SITE Three Mile Island

DOCKET NUMBER 50-289

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 14

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.7
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 9
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

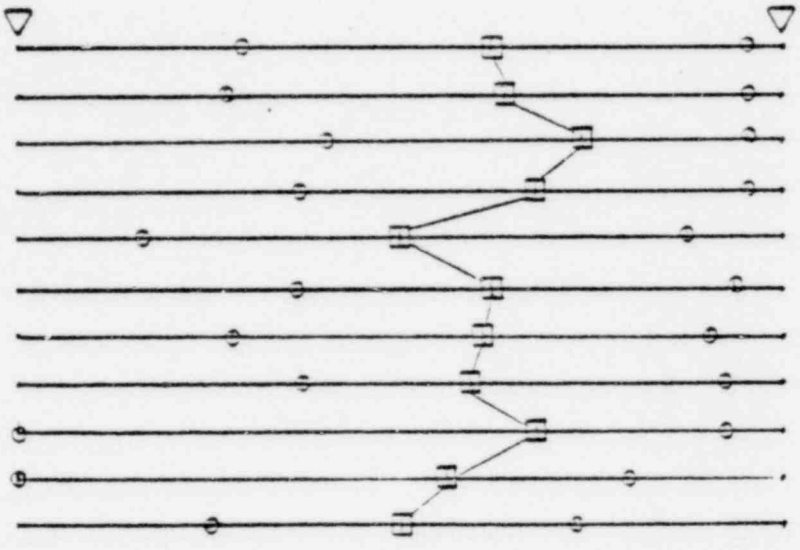
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Station and unit superintendents are new. Security has improved. This is first B&W plant of current generation. Management control during construction was deficient. Management control in operations is strong. Overall site safety may decrease because staff has become diluted with the licensing of Unit 2.

SITE Vermont Yankee

DOCKET NUMBER 50-271

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 12

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.2

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 9
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

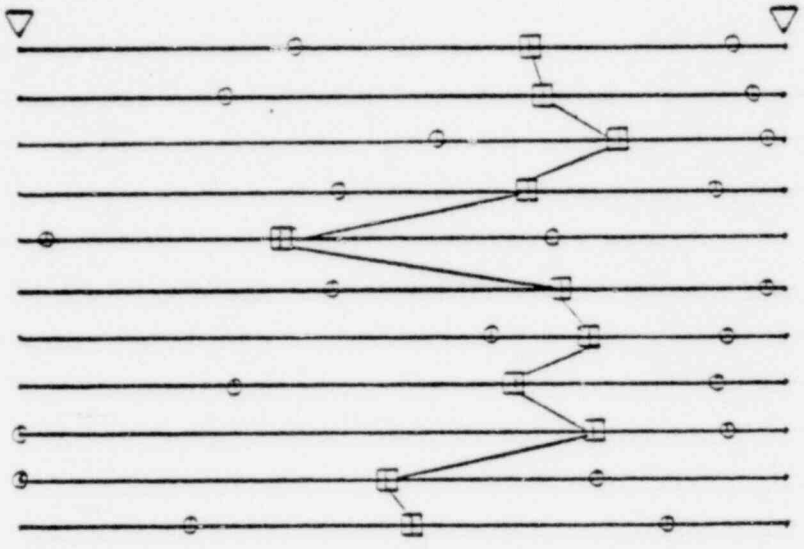
QA plan has been upgraded. Management controls somewnat degraded by frequent changes in plant superintendent. Very clean plant. Management experience and depth is increasing.

SITE Yankee Rowe

DOCKET NUMBER 50-029

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.1

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.4
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 6
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

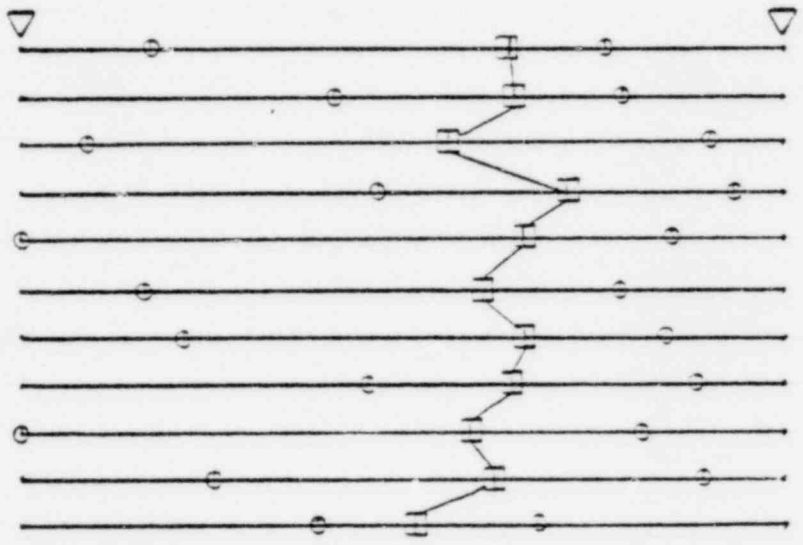
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Plant is very small and very isolated. It presents virtually no health hazard to the public. Has old Tech Spec's. Upgraded QA program in 1977.

SITE Browns Ferry

DOCKET NUMBER 50-259

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.9
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.7
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 4
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

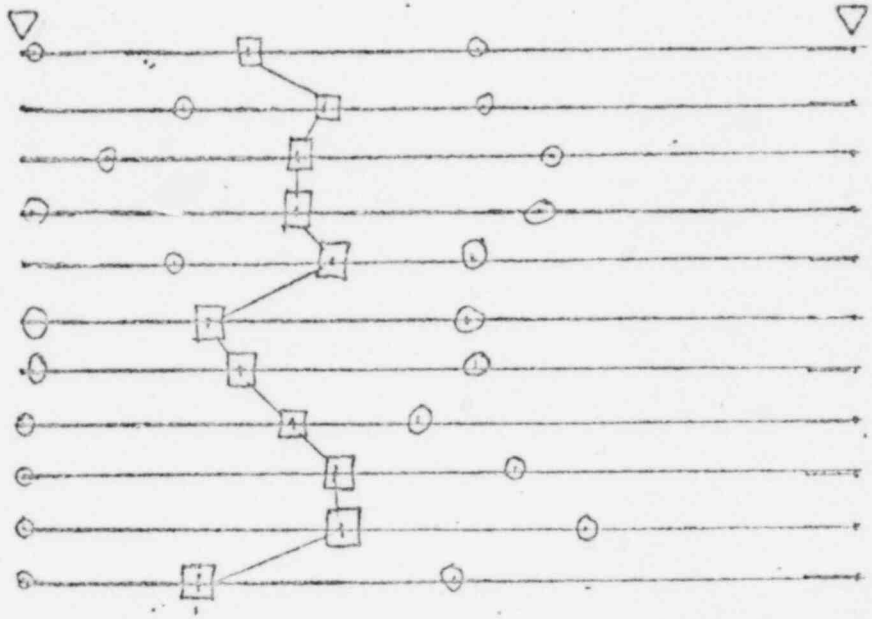
Attention to QA details has decreased slightly. Greater experience of plant personnel has contributed to improved safety and operations. More NRC inspections and plant management changes have also helped. Response to alarms has improved as a result of an enforcement meetings. Greater safety awareness. Fire protection improved.

SITE Brunswick

DOCKET NUMBER 50-325

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.7
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.0

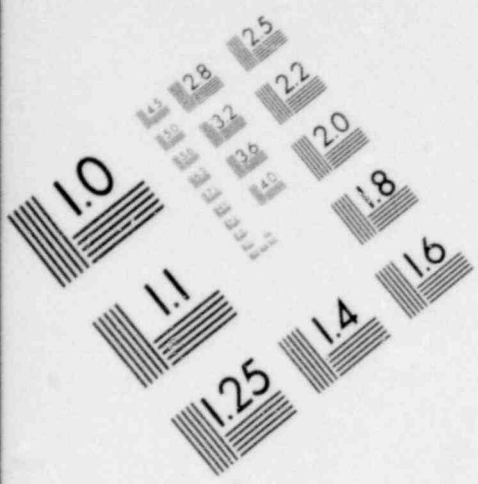
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 4
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Site has reorganized and has new people in Key positions. Some improvement in adminstrative controls. Management seems to become more aware of events at plant. None of the top site management have had SRO training in BWR's. High personnel turnover rate. Plant management seems to believe that they are "over-regulated.



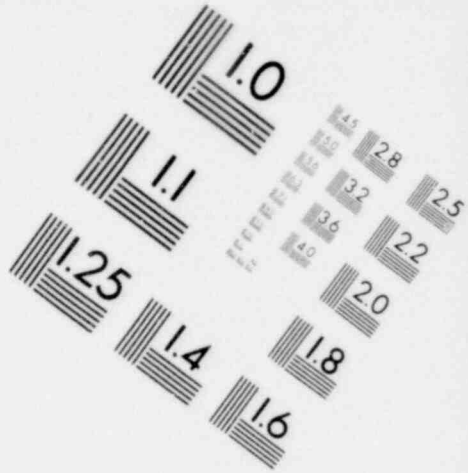
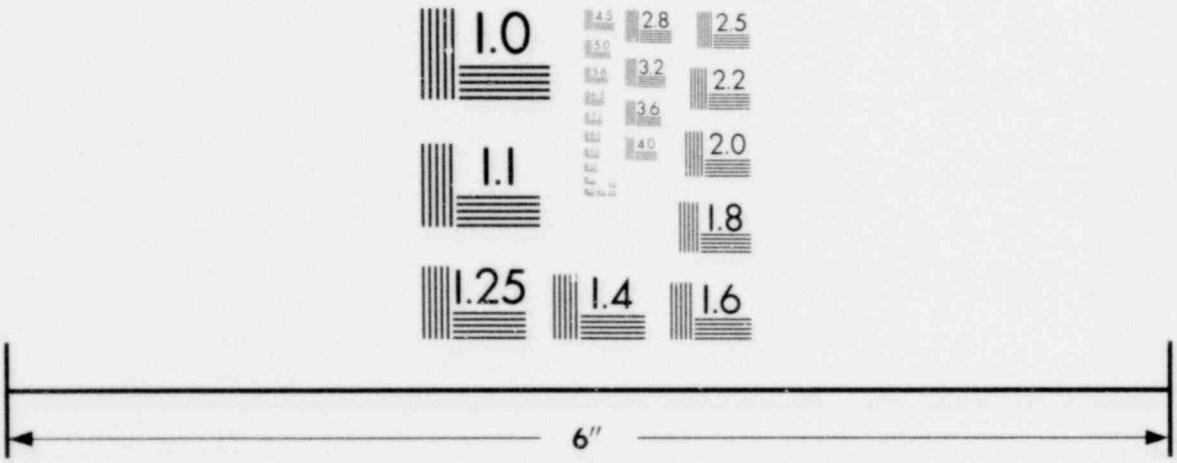
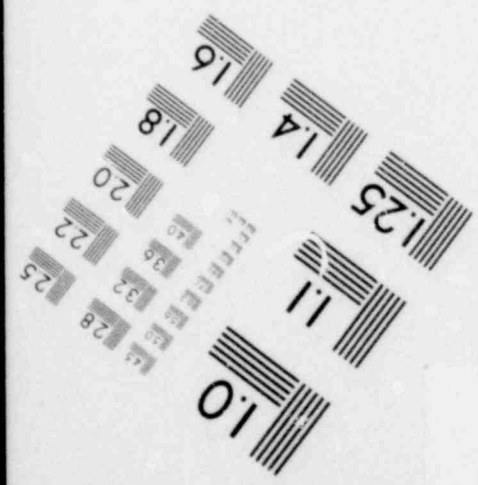
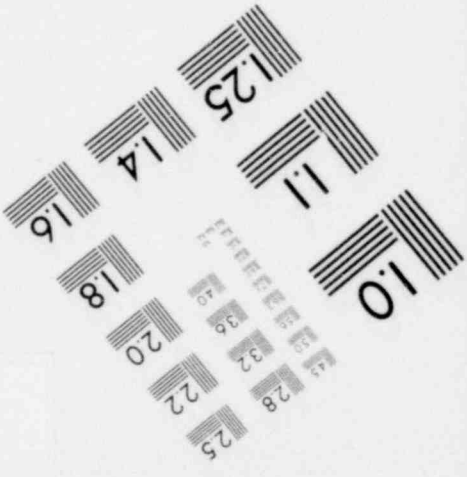


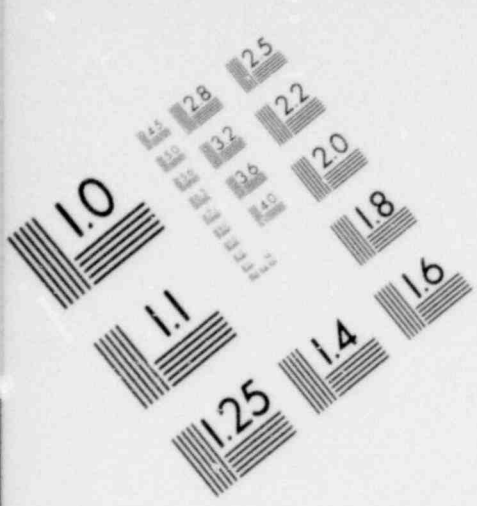
IMAGE EVALUATION TEST TARGET (MT-3)



MICROCOPY RESOLUTION TEST CHART







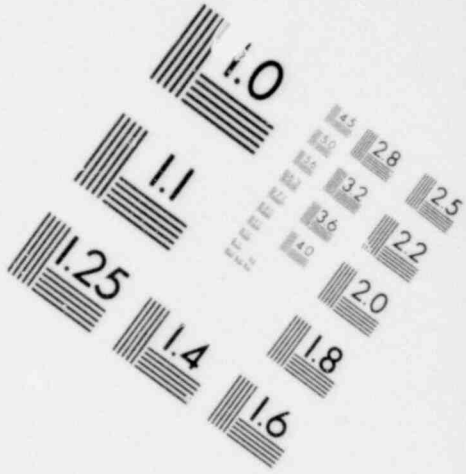
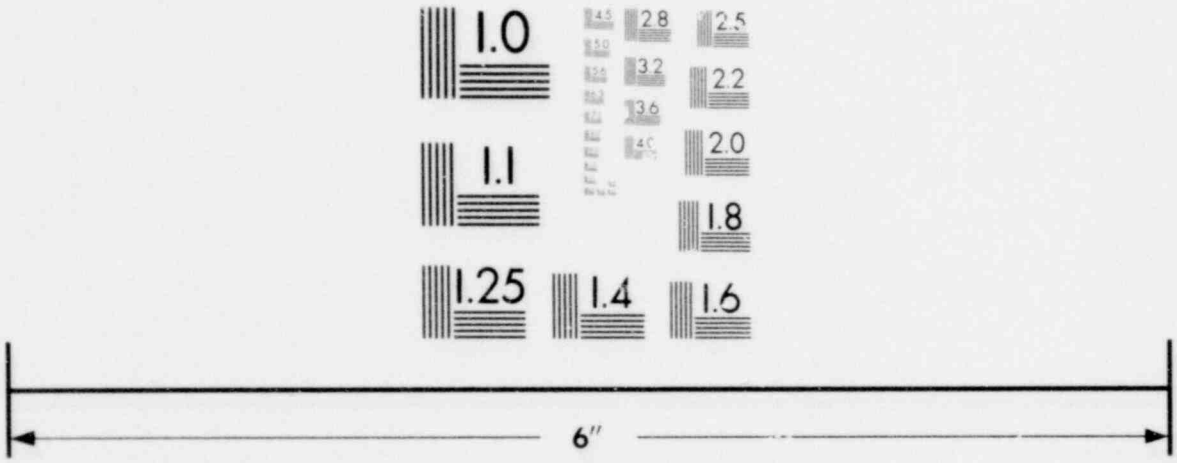
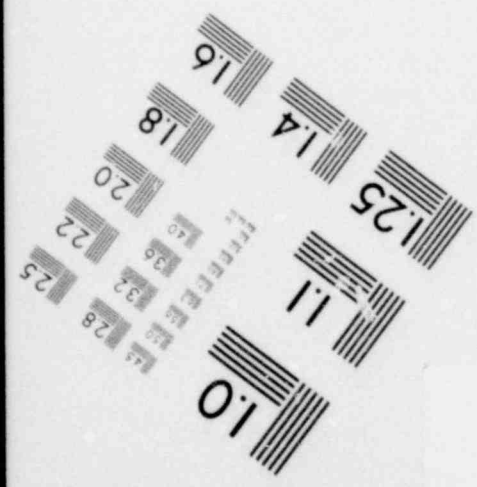
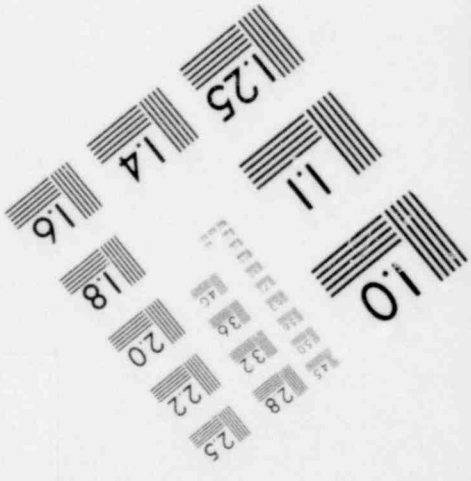


IMAGE EVALUATION
TEST TARGET (MT-3)



MICROCOPY RESOLUTION TEST CHART

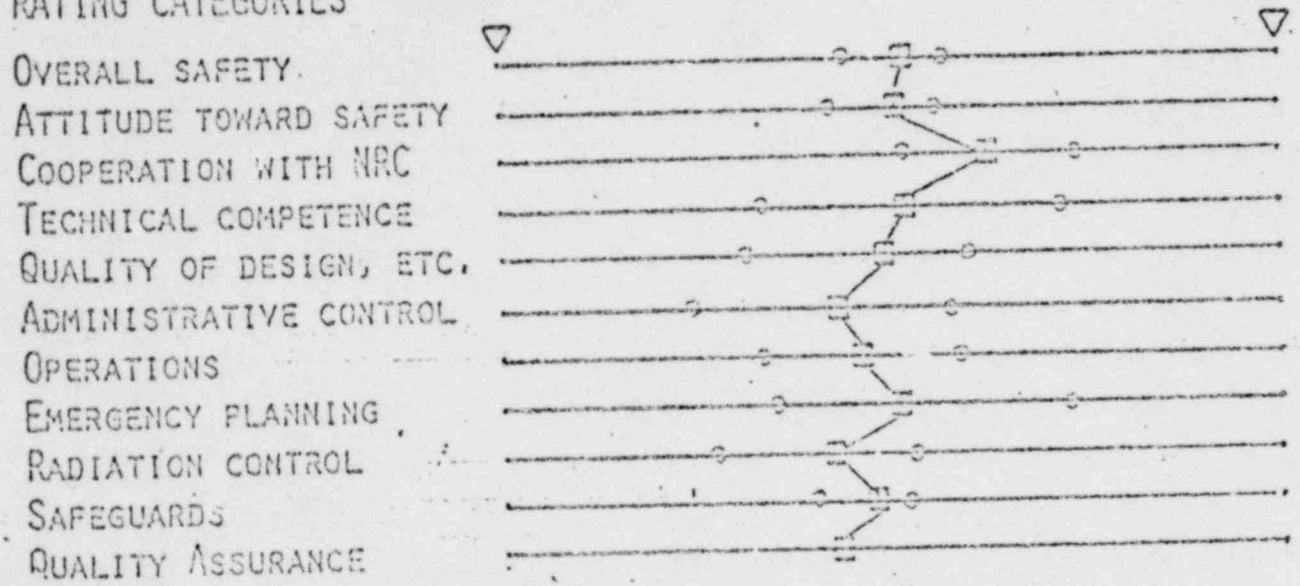




SITE Crystal River

DOCKET NUMBER 50-302

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 3

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 1
2 = SAFETY SLIGHTLY IMPROVED..... 2
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

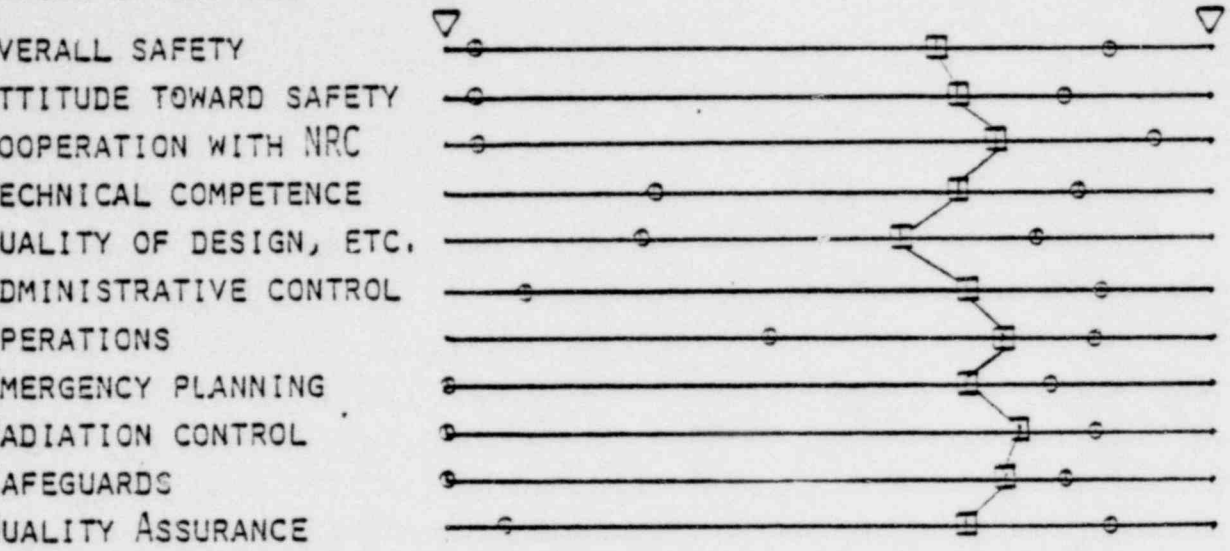
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety slightly improved because of more safety awareness. Operations and administrative controls improved.

SITE Hatch

DOCKET NUMBER 50-321

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 9

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 4.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 4
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

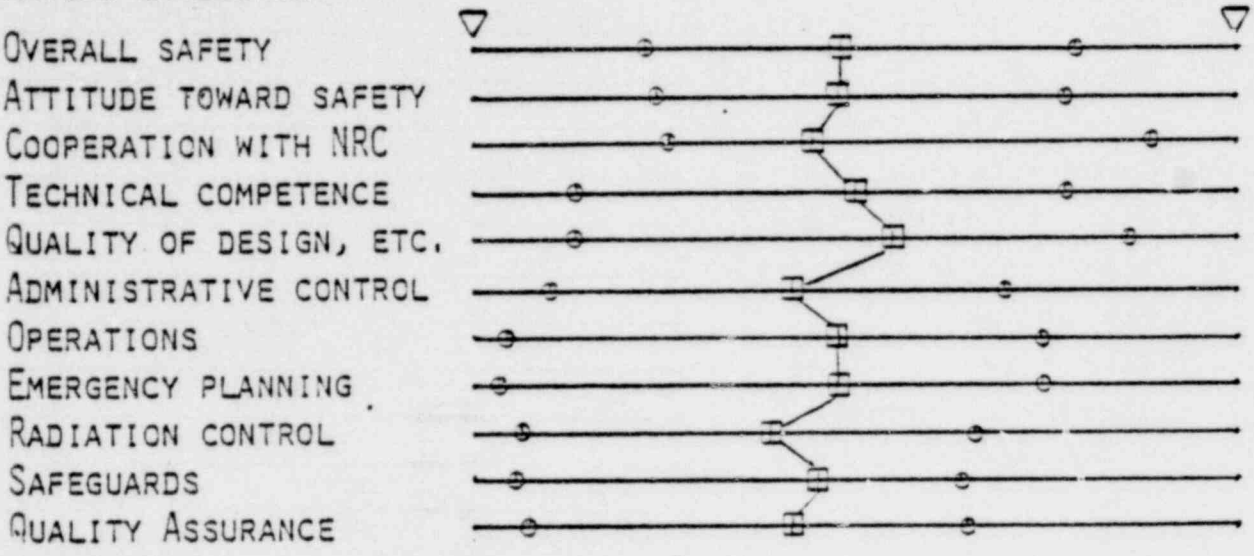
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Upgrading of administrative and QA controls is continuing.

SITE Oconee

DOCKET NUMBER 50-269

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 6

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 17.0

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

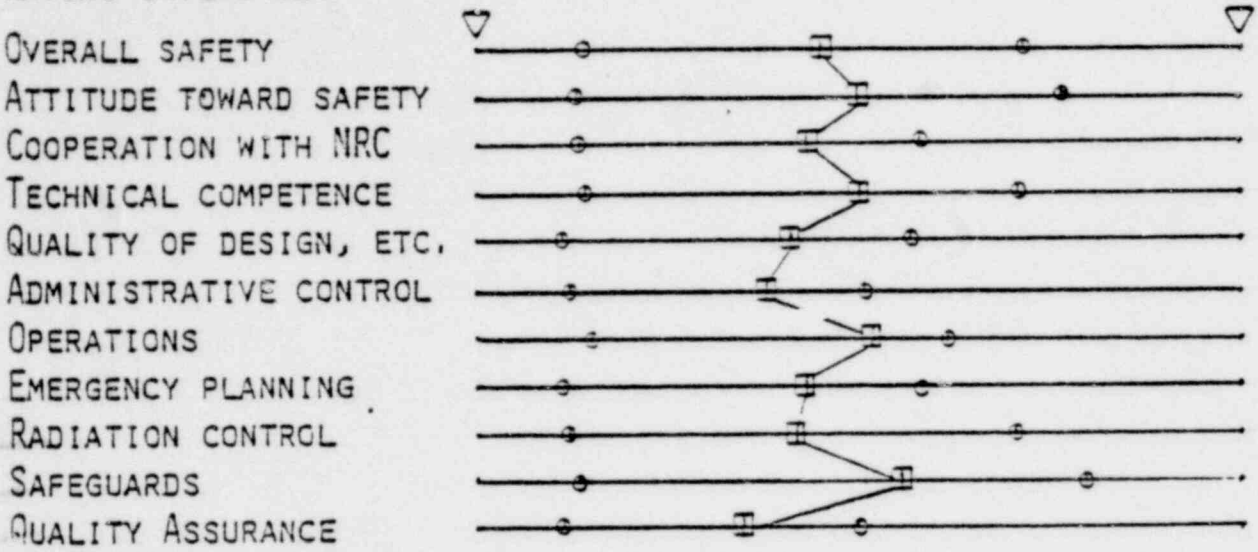
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

A change in the operating superintendent is expected to result in improvements.

SITE Robinson

DOCKET NUMBER 50-261

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.4
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.2

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.7
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 2
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

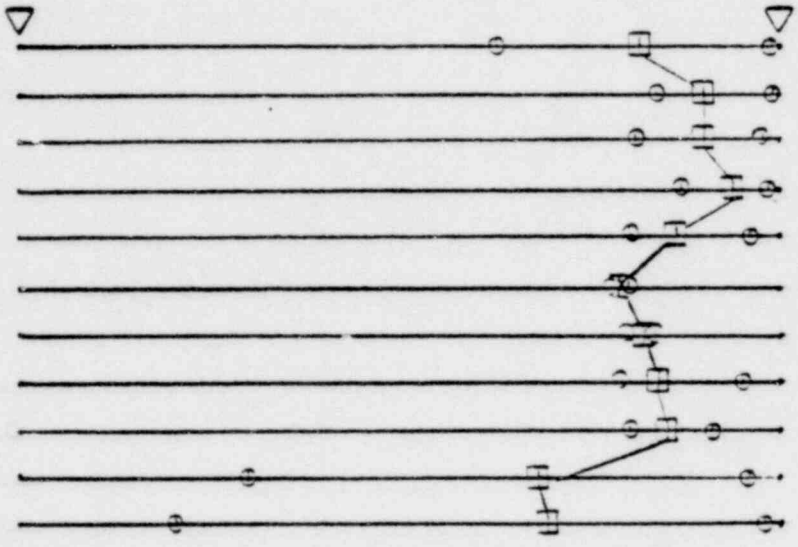
Licensee has made increased commitment to QA and QC. Licensee reports only those items that are conspicuously reportable. Licensee impedes inspector access and freedom of movement at site. No information freely given. Does only what is required.

SITE Saint Lucie

DOCKET NUMBER 50-335

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 3

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 6.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 2.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 6.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 1
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

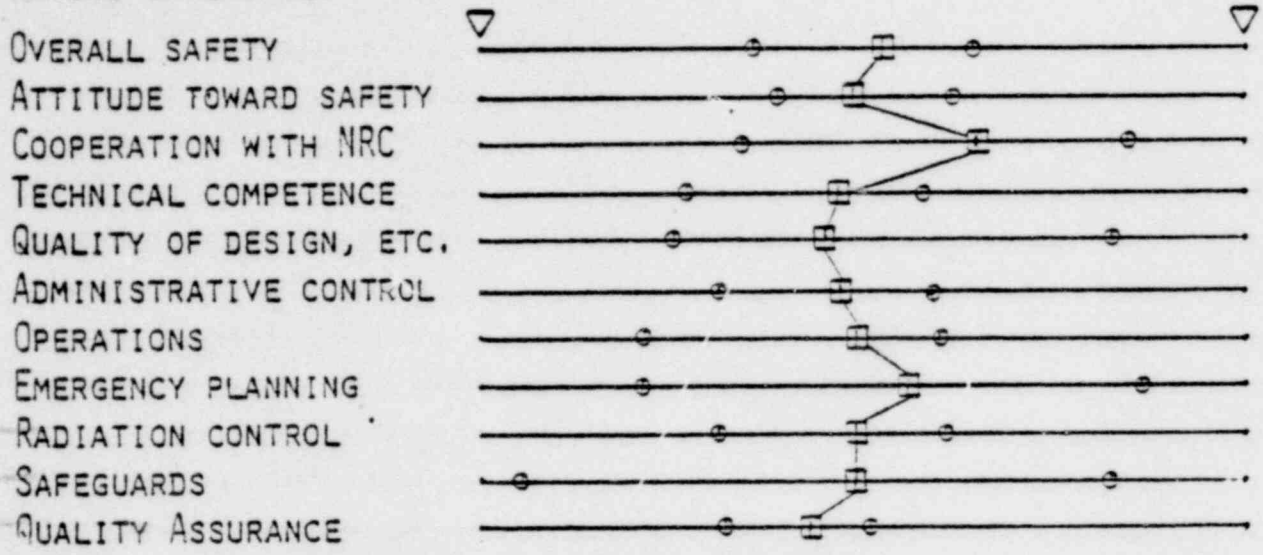
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety has improved due to increased experience of plant personnel. Plant's greater than average number of LERs is probably due to conscientiousness in reporting.

SITE Surry

DOCKET NUMBER 50-280

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 6

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.2
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 14.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

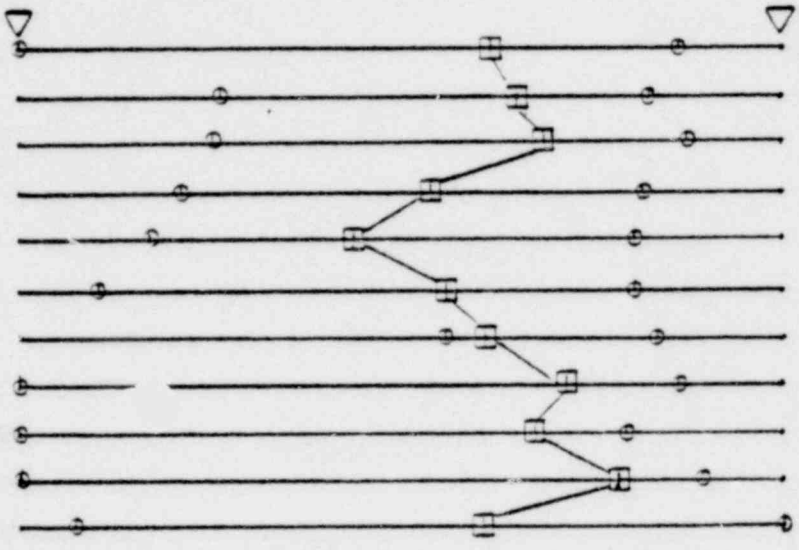
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety slightly worse due to degradation of steam generator.

SITE Turkey Point

DOCKET NUMBER 50-250

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 5

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.8
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.0

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

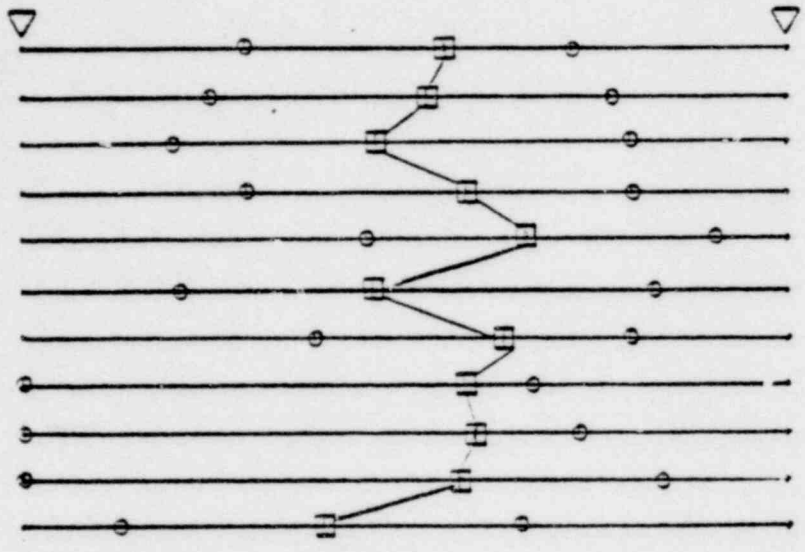
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety may be slightly worse due to steam generator degradation.

SITE Arnold

DOCKET NUMBER 50-331

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 9

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 10.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 0
2 = SAFETY SLIGHTLY IMPROVED..... 6
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

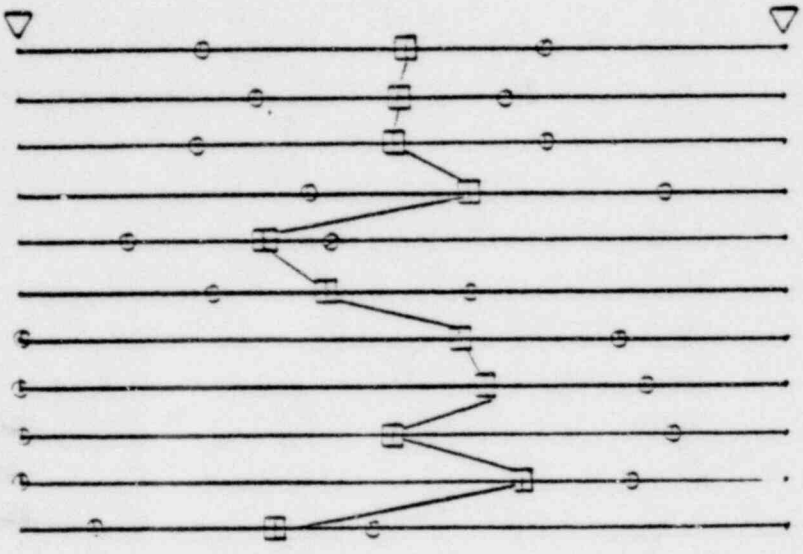
Safety slightly improved due to improvements in QA and administrative controls, new plant superintendent, enforcement action, and increased inspection effort. Staff is more aware of significance of personnel error. Steady improvements in management controls, competence of staff, and attention from corporate office.

SITE Big Rock Point

DOCKET NUMBER 50-155

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 5

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.4
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 1
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

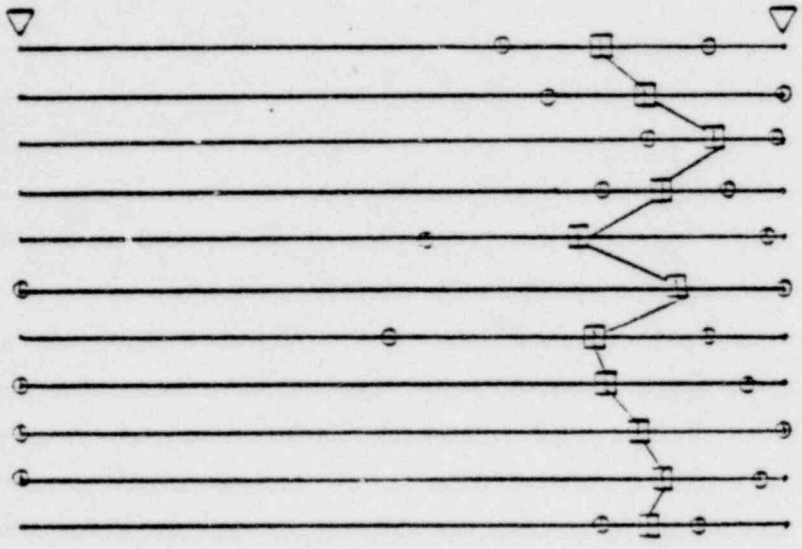
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Design and operation of this early BWR are relatively uncomplicated. Plant safety improving due to continuing implementation of QA program and improving technical capability of staff.

SITE D. C. Cook

DOCKET NUMBER 50-315

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.7
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 7.5

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.1
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 2
5 = SAFETY SUBSTANTIALLY WORSE..... 0

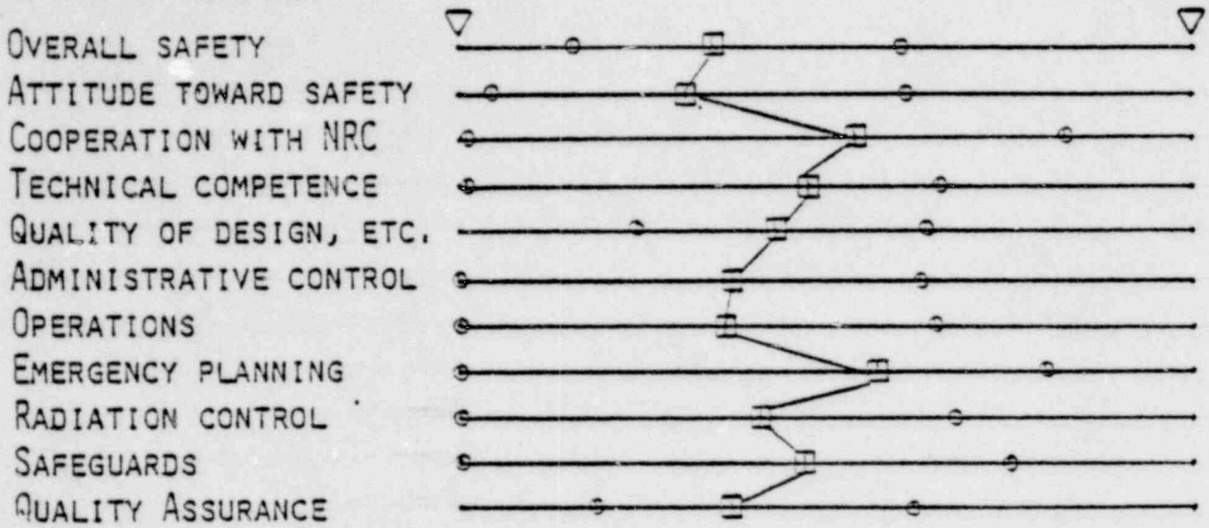
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Plant has standardized Technical Specifications. Resident inspector stationed site for some time. Plant has had increased personnel and procedural errors in 1977. Safety at Unit 1 is slightly worse because plant personnel and management have diverted attention to Unit 2 startup, fire protection, and security. Events are occurring that would not have a year ago.

SITE Dresden

DOCKET NUMBER 50-010

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.1

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 5
2 = SAFETY SLIGHTLY IMPROVED..... 3
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 1

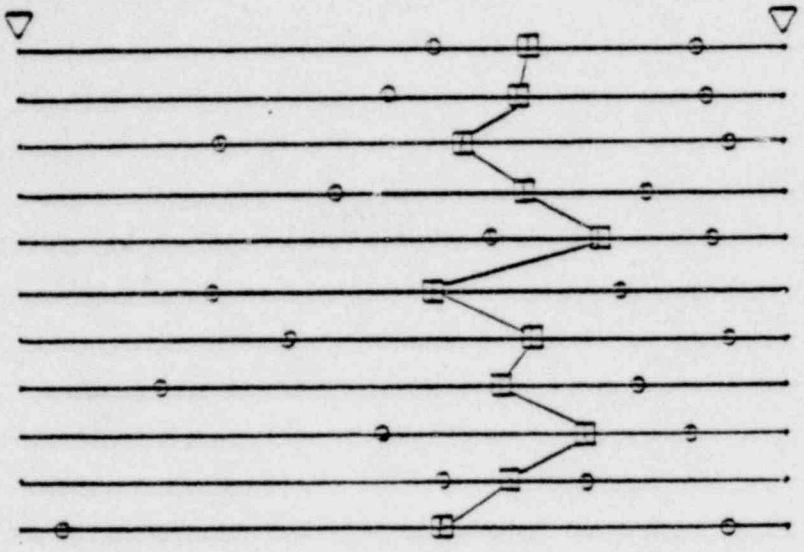
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Training and QA programs have improved. Unit 1, a smaller plant, does not receive the priority attention of Units 2 and 3. Manpower availability is a concern. Safety has improved due to better housekeeping and attention to detail. Safety is substantially worse due to poor operations and instrumentation problems.

SITE Kewaunee

DOCKET NUMBER 50-305

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 6

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.8
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.5

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.3
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 5
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

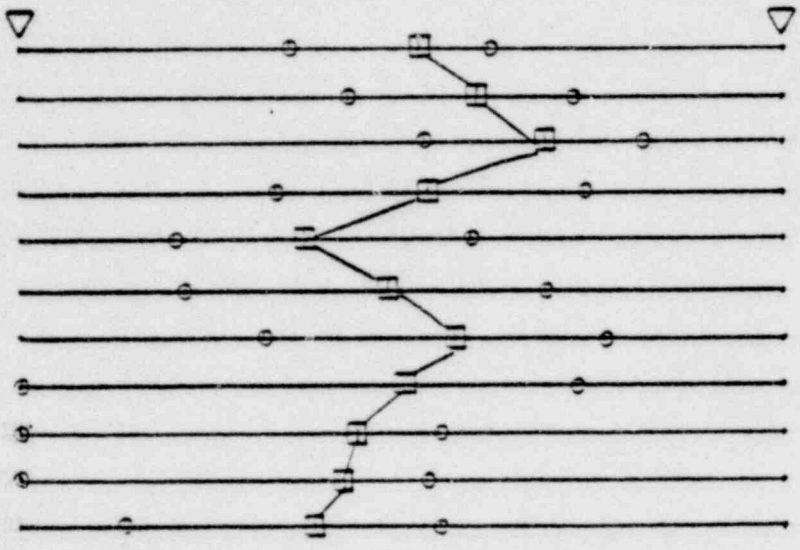
Resident inspector was assigned at this site. Plant management very stable and compent. Good attribute toward safety. Overall, the site has good operating performance.

SITE LaCrosse

DOCKET NUMBER 50-409

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 2.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 2
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

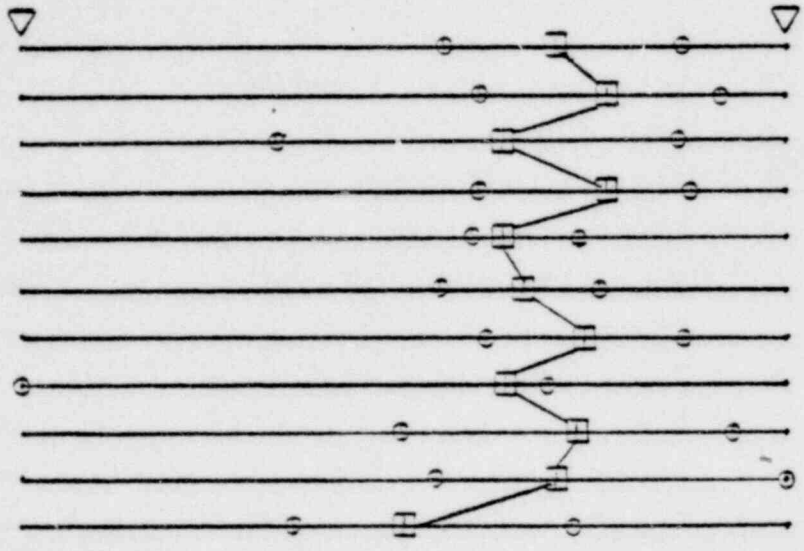
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety slightly worse because of fuel degradation. Safety slightly better because of improved QA program. This plant is an AEC Developmental Reactor with a limited technical staff and minimal corporate backup. This small utility has difficulty absorbing the costs of NRC regulation.

SITE Monticello

DOCKET NUMBER 50-263.

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.1
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

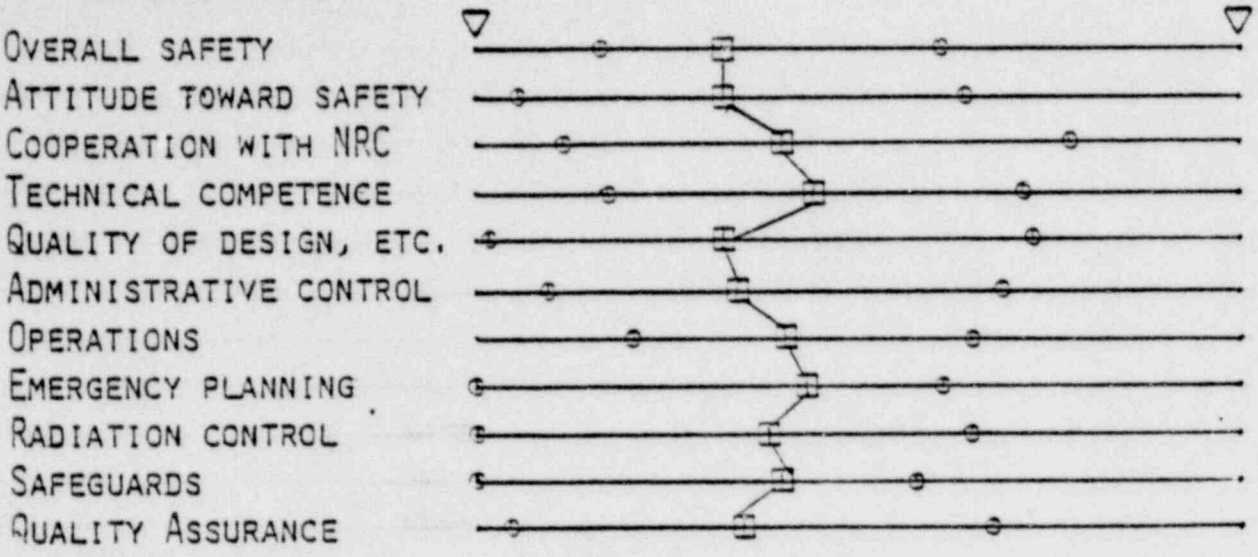
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

No narrative comments.

SITE Palisades

DOCKET NUMBER 50-255

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.8
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.4

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 3
3 = SAFETY SUBSTANTIALLY IMPROVED..... 1
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

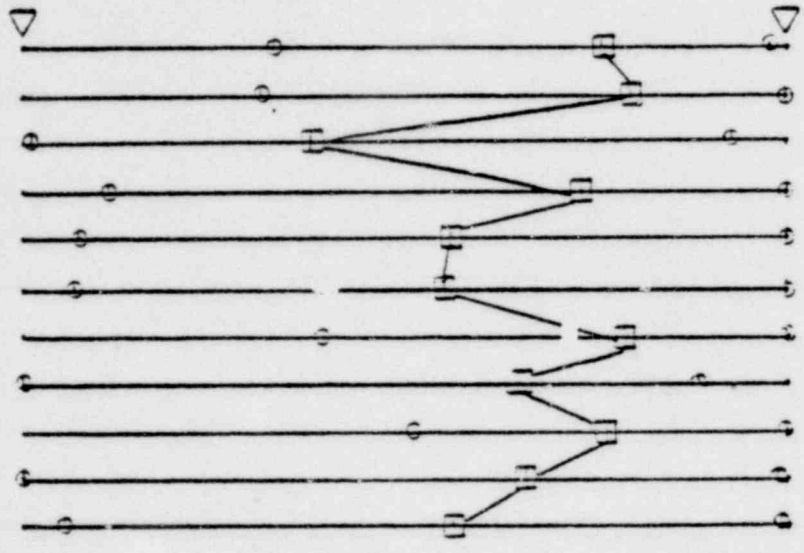
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety is improved as a result of continuing QA program implementation. Management has been more attentive to the timely correction of problems. Resident inspector was assigned to site.

SITE Point Beach

DOCKET NUMBER 50-266

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 11.1

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 6
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

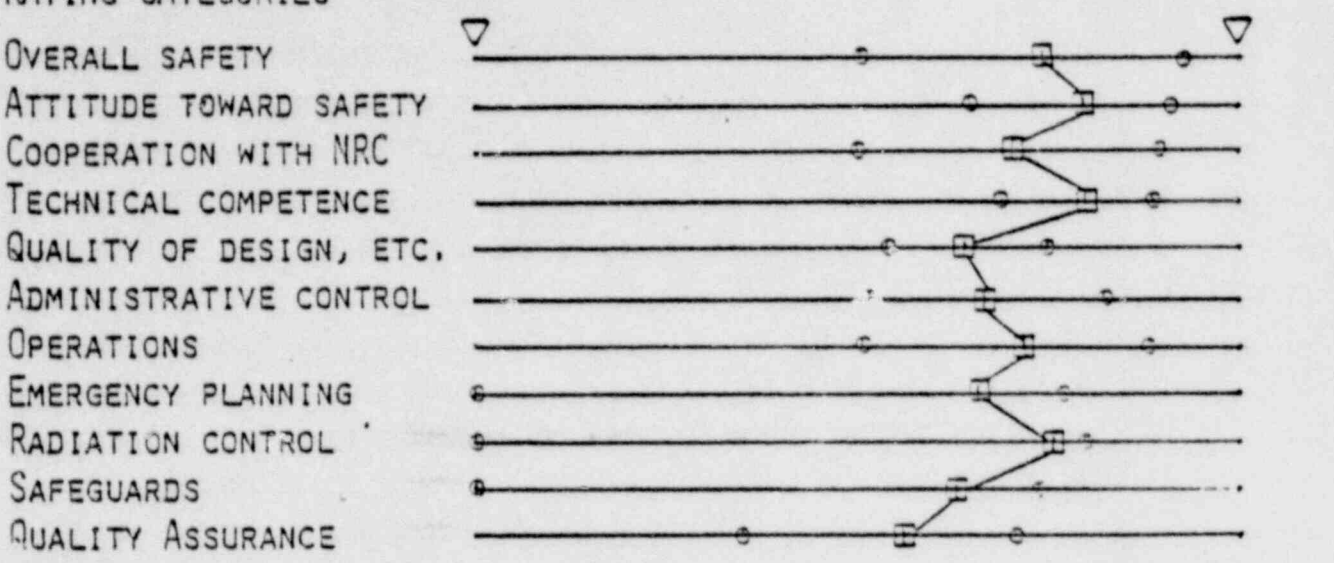
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Plant is an older design attitude of plant management is extremely good. Staff is disciplined, well motivated, and proud of work. Staff offers constructi. criticism of NRC. Plant management is strong in all areas, and has a total team effort from staff. Attitude on safety matters is excellent.

SITE Prairie Island

DOCKET NUMBER 50-282

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.8
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 8.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.3
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 5
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

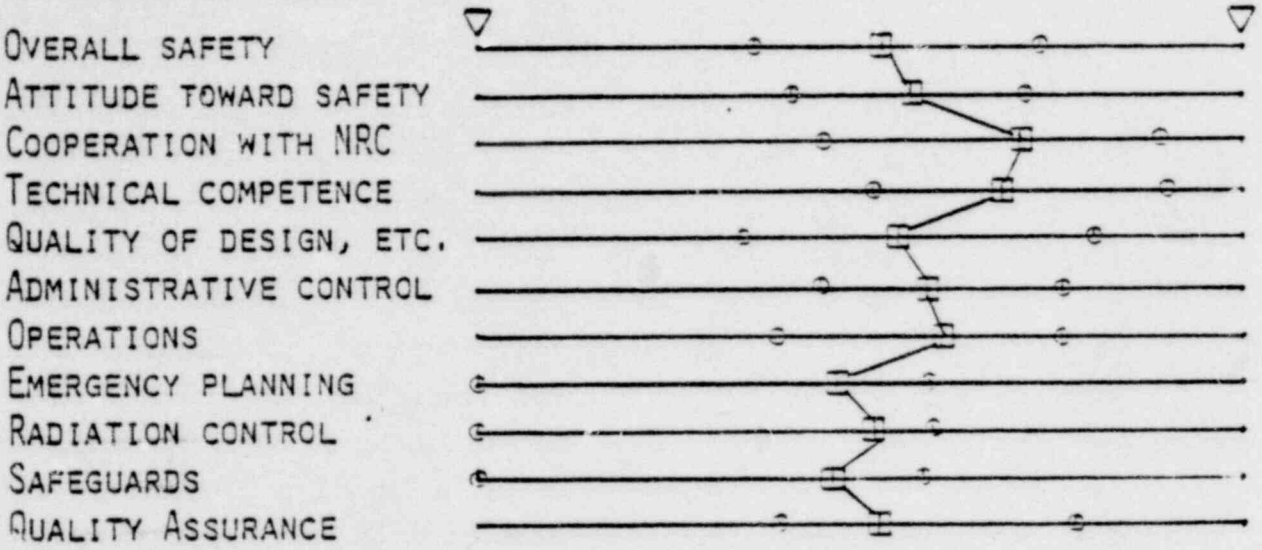
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

The technical staff is closely integrated with operations and maintenance; this helps prevent safety problems and provides good information.

SITE Quad Cities

DOCKET NUMBER 50-254

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 10

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 15.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

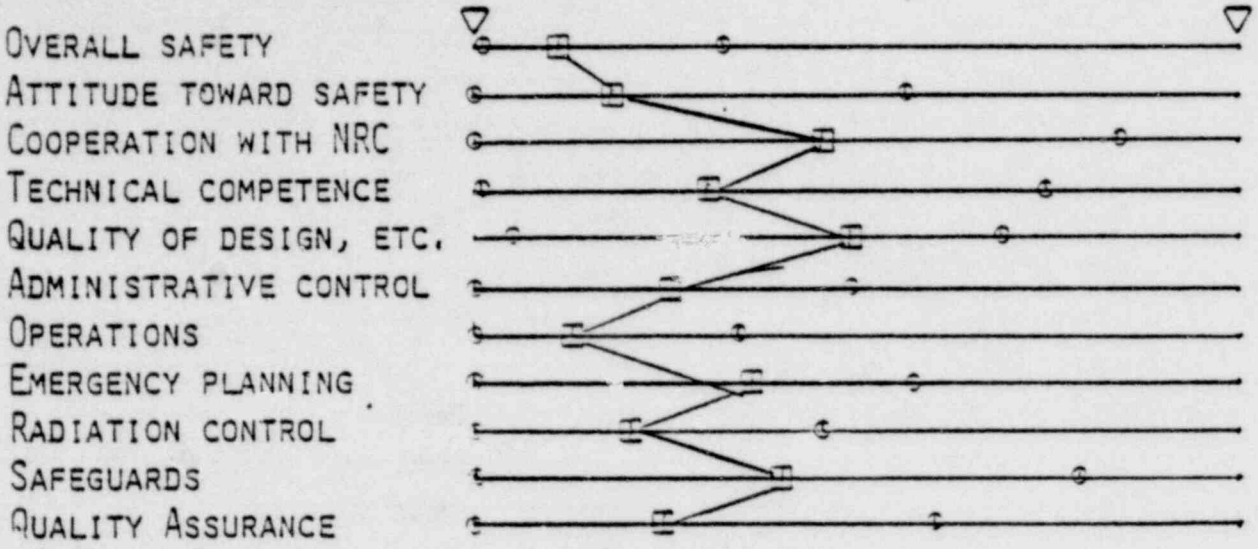
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Licensee has been "overinspected" by NRC and the state for several years. Plant not permitted by state to operate at design load; this affects operator attitudes. Safety slightly improved because of improvements in the training program, the QA program, and the radiological program.

SITE Zion

DOCKET NUMBER 50-295

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 13

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.6
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.7

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.4
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 4
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 3

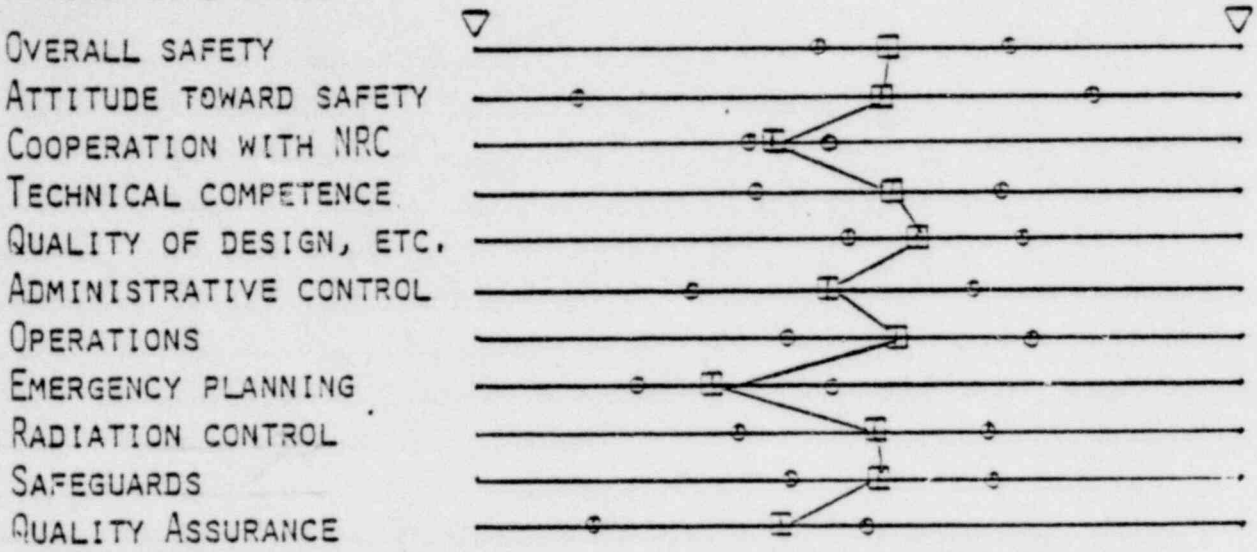
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety is substantially worse because of poor attitude and marginal management. Inadequate management controls. Management lacks ability to discipline employees for operator errors and carelessness. Personnel selection and discipline may be adversely affected by union relations. Poor management attitude and followups. Size of Commonwealth Edison creates special management problems. Stability of staff a problem. Safety is substantially worse because of failures to conform to Tech Specs and administrative, operating, emergency, and test procedures. Attitude regarding safety is poor. Some improvements in procedures and training.

SITE Arkansas

DOCKET NUMBER 50-313

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 4

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 1.7

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

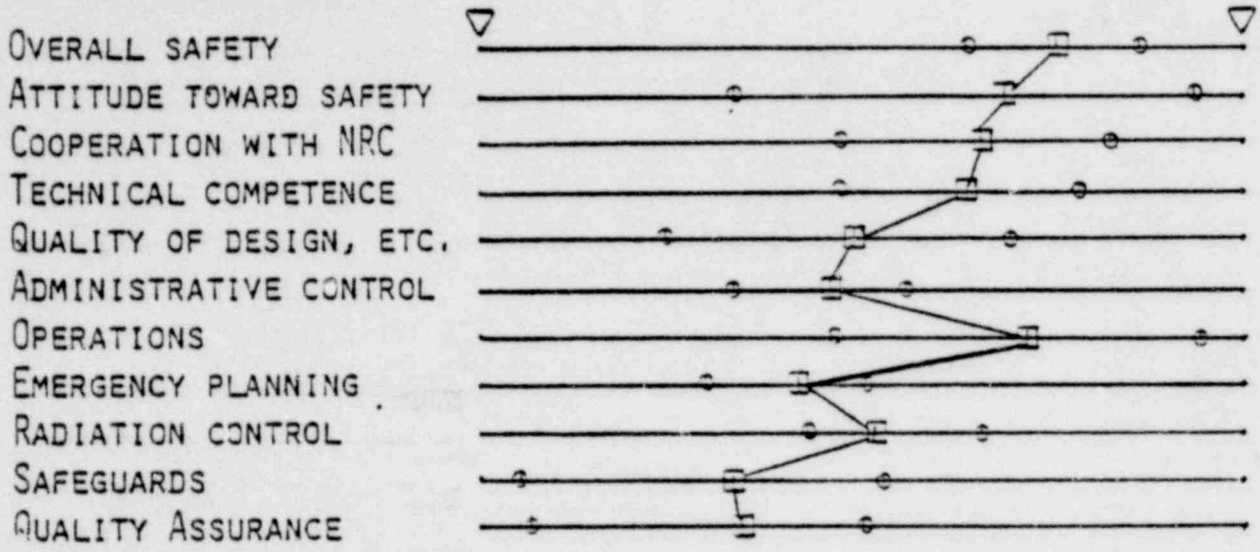
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Management control of plant may be diluted when Unit 2 becomes operational. Safety slightly improved by upgrading of cable penetration barriers, fire protection, and procedural controls. Tech Specs should be upgraded to standard levels.

SITE Cooper

DOCKET NUMBER 50-298

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 4

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.5

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 0
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 1
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

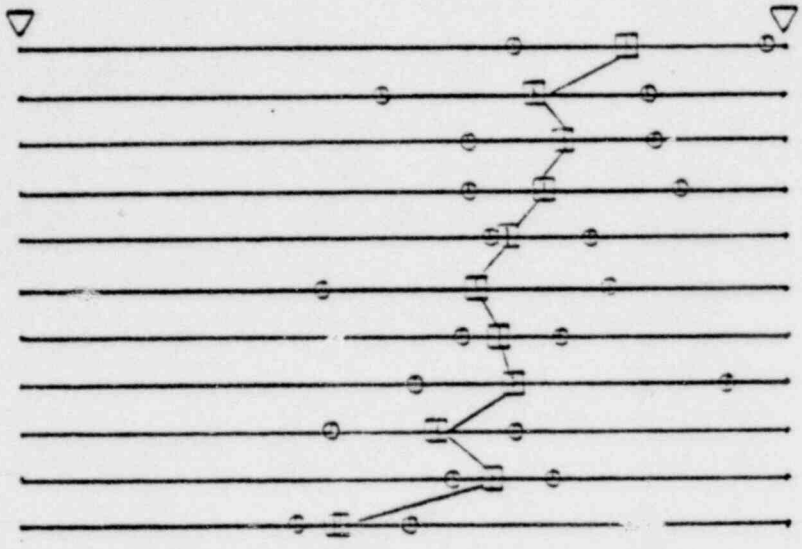
No narrative comments.

SITE Fort Calhoun

DOCKET NUMBER 50-285

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 3

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 1.0

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.7
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

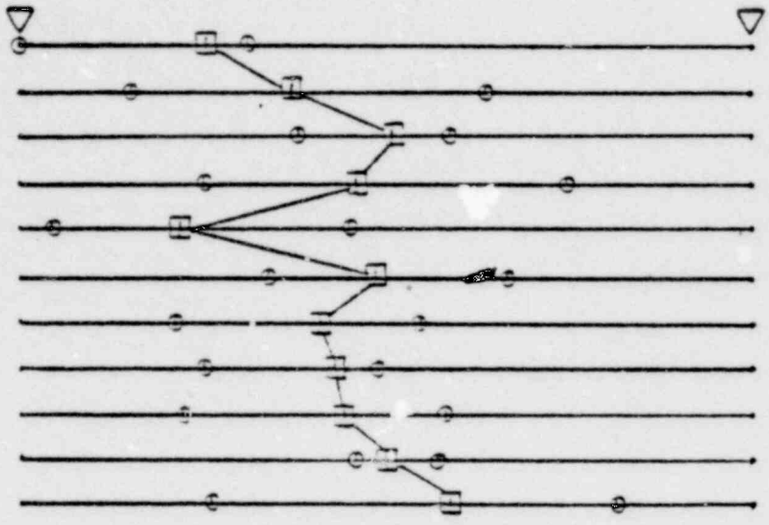
Safety at this plant is improving as management matures. Management recognizes its safety responsibilities. Employee morale could be affected by top utility attitudes about nuclear power.

SITE Fort St. Vrain

DOCKET NUMBER 50-267

ACCEPTABLE EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 5

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.2
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 4.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.0
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 1
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

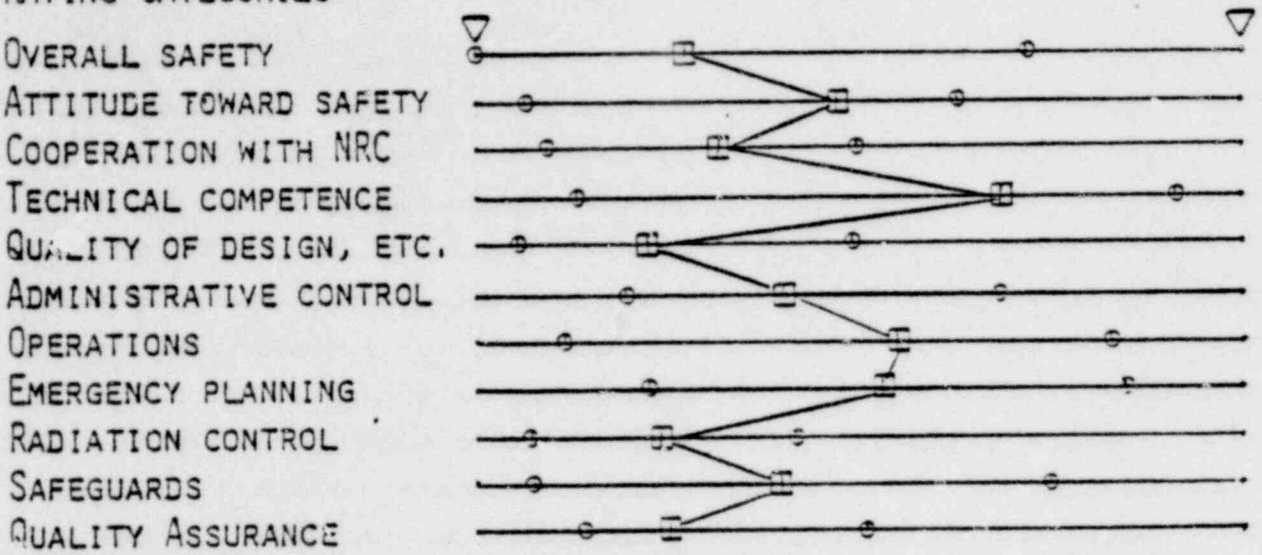
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety substantially improved due to upgrading of cable separation, fire prevention, training program, and operating experience. Have been instrumentation improvements. This HTGR could be categorized as a demonstration plant. Plant safety characteristics are unique. Existing Tech. Specs. need revision.

SITE Humboldt Bay

DOCKET NUMBER 50-133

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.9
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 9.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 3
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 3
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

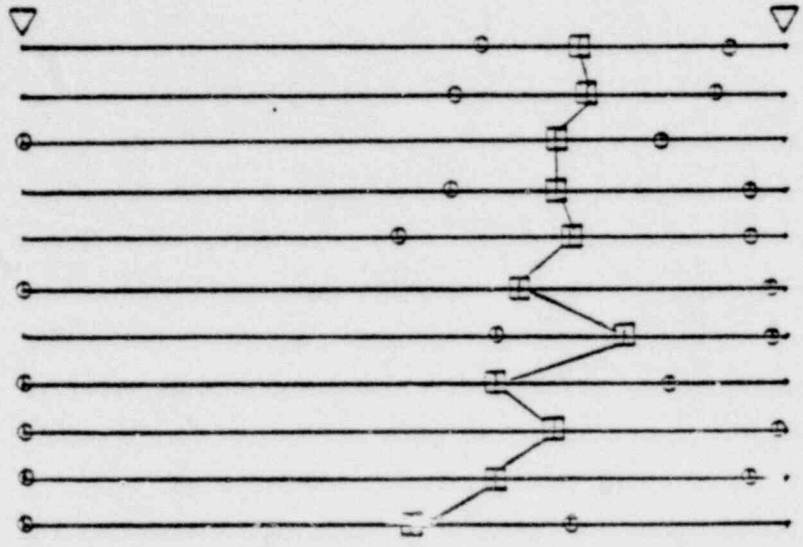
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety is substantially improved due to seismic modifications. Otner safety-relevant matters are being pursued by NRR. The plant would be hard pressed to meet current safety criteria.

SITE Rancho Seco

DOCKET NUMBER 50-312

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.1
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 2.8

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.1
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 5
2 = SAFETY SLIGHTLY IMPROVED..... 1
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

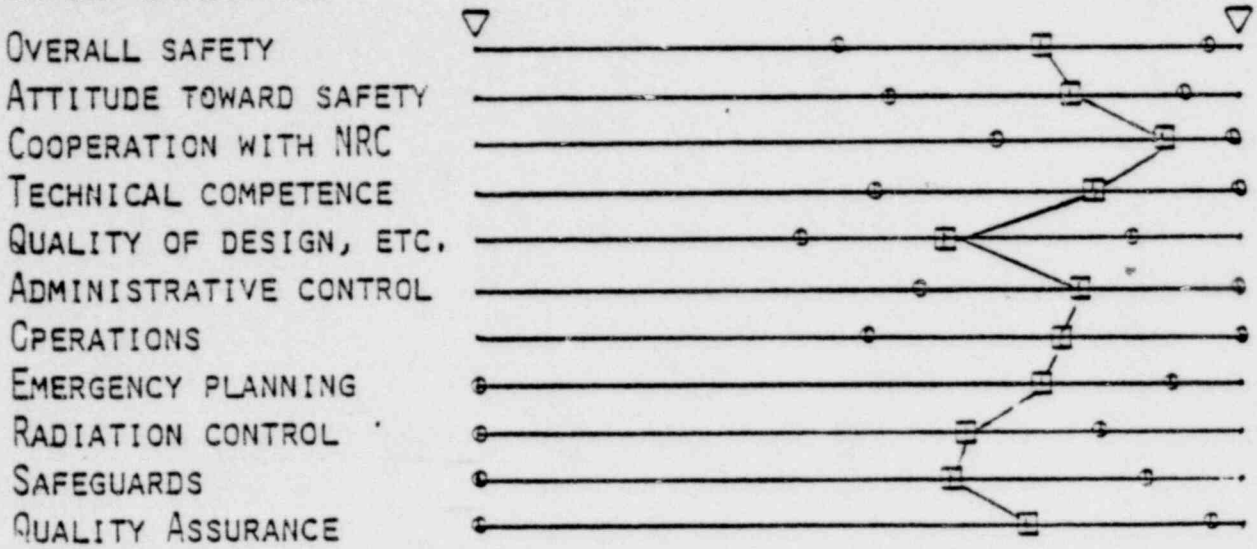
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety is slightly improved due to increasing operating experience and quality of plant management.

SITE San Onofre

DOCKET NUMBER 50-206

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.4
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 4.7

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 2
2 = SAFETY SLIGHTLY IMPROVED..... 2
3 = SAFETY SUBSTANTIALLY IMPROVED..... 3
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

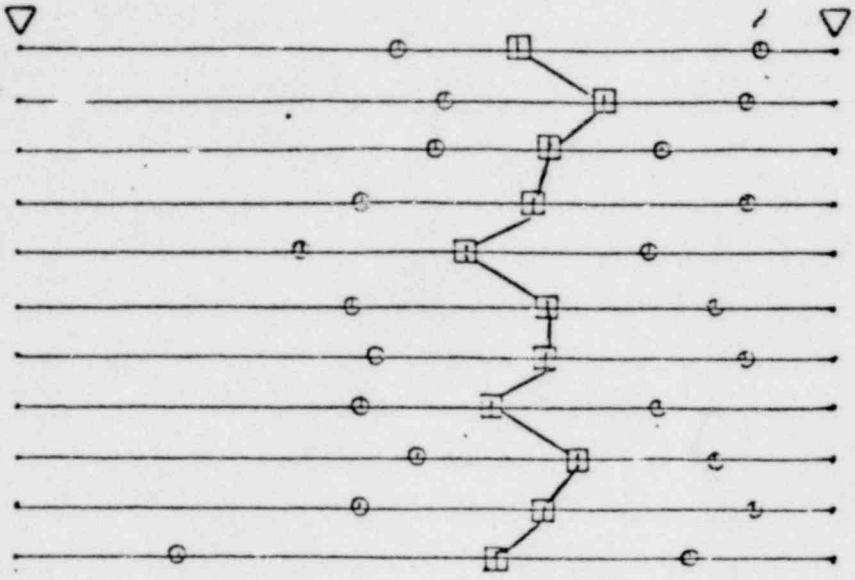
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety is slightly improved because of QA program improvements. Safety is substantially improved because of upgrading of the emergency power system. Utility management has been successful in instilling good safety attitudes and habits uniformly throughout the organ zation. Extensive ECCS and seismic modes have been completed.

SITE Trojan

DOCKET NUMBER 50-344

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 5.4
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 3.7

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY..... 1
2 = SAFETY SLIGHTLY IMPROVED..... 5
3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
4 = SAFETY SLIGHTLY WORSE..... 0
5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety slightly improved by equipment upgrading and accumulation of operating experience. Active state regulation could affect safety through conflicting requirements. On site QA program implementation has improved. Fire protection program is being implemented. Attitude toward QA and prevention of recurring problems has improved.

ADDENDUM

TO

INDIVIDUAL SITE RATINGS

FROM THE

IE EMPLOYEE SURVEY ON

EVALUATION OF LICENSEES

APRIL 1978

The narrative statements provided in connection with the sheet for each site in the preceding section of this report were based on comments made by the inspectors regarding those sites. The actual comments made by the inspectors with respect to individual sites are contained in this addendum.

Docket No.: 50-334
Site: Beaver Valley

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

Plant is just completing startup testing and staff is more experienced.

QA controls slighdly better.

Controls over explosive blow-out discs were established after identified by inspector.

Plant personnel are becoming more experienced, confident and competent. Bugs are gradually being worked out of equipment and administrative controls.

Plant management has improved.

Increased security requirements; i.e., additional guard force, increased surveillance, addition of mechanical search equipment (guard force doubled in last year).

New plant - only recently completed final testing - plant and management still learning of plant and design problems.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

New plant - recently completed full power testing.

Technical competence of management personnel.

Docket No.: 50-317
Site: Calvert Cliffs

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

Management became more cognizant of plant operations following an enforcement meeting in early 1977.

Have a smaller "Q" list to which they apply their controls.

The (blank) is anti-NRC, anti-QA.

Improvements in security.

Completion of startup testing on Unit 2.

Increased attention to procedural adherence and plant cleanliness due to escalated enforcement action by IE.

Both plants, each operating. New upgraded T/S at both plants.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

Management meeting held to impress President with our observations of the dedication of plant staff to "get the turbine on line" at the risk of not having assured that T/S requirements are met. Too early to determine the result of the meeting.

The operational philosophy of this plant is 2.5 and survive - they don't do anything above that which is required, towards plant safety.

This facility appears to place prime interest upon operating, to the extent of voluntary entrance into action statements. Its attitude toward safety appears to be that meeting literal NRC requirements is sufficient.

Docket No.: 50-213
Site: Connecticut Yankee

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

Review of inspection findings, LERs, and operating record supports this judgment.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

Age of plant.

NRR is backfitting CY in several areas. When this is completed, the design requirements and license conditions will be upgraded, and therefore, overall safety should be improved.

Docket No.: 50-333
Site: Fitzpatrick

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

Take over by PANSY appears to be an improvement.

More management attention to operations. Change in operating licensee.

New security procedures.

Change in operating license from Niagara Mohawk to PANSY increased technical level of management and administrative controls.

Design changes to install additional safety systems.

Corporate management change NM to PANSY.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

Has a new operator (PASNY) for the plant, including new plant management.

Later design provides better safety systems, such as rod sequence control system, etc., but emergency diesel generators are not reliable and radioactive waste systems are underdesigned and marginally operated. Excellent fire protection system, excellent security program.

Station management recently changed from Niagara Mohawk to PASNY. Improvements already noted - more anticipated.

Docket No.: 50-244
Site: Ginna

Answers to Questions 17 (If a change to safety level occurred, please describe it briefly):

None.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

The plant is old, small, and run safely---the small aspect is important because of the relative lack of danger to the public.

Recent change in station superintendent - no significant change noted.

Docket No.: 50-003
Site: Indian Point

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

Much recent IE and licensee management attention to IP-2 operations, health physics, safeguards, etc., has resulted in large overall licensee upgrading.

Improvements in radiation health control.

Recently completed an intensive inspection program in rad protection - organizational changes were made, new procedures provided and a significant improvement in management control.

Inspection effort has improved management attention to factors affecting plant safety.

Applied considerable inspection effort and "talent" and convinced corporate management that they had to expand corporate resources.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

The ratings indicated are for Indian Point 2 in that Indian Point 3 is highly superior in all aspects as related to Unit 2 due primarily to management controls and personnel.

Facility operation is full power with question on calibration of nuclear instruments and resolution of read-out available to operators. Management is aware of problem and IE is following.

Do not have accepted QA plan meeting current requirements. Should be approved soon. Unit 3 would be better rated because PASNY does better than Con Ed.

Upper Management (corporate) attitudes continue to limit effectiveness of site management.

Continue to inspect and observe with highly competent and experienced inspectors. The trend toward more inspections with less competent inspectors is dangerous. Also, continue design reviews by highly competent NRR personnel - also tighten standards and codes, and operator license examinations.

Docket No.: 50-309
Site: Maine Yankee

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

None.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

The plant is very clean - it shows pride in ownership and is indicative of happy people working at a good plant.

Have recently approved QA plan - upgraded to current standards. Becomes effective 8/16/77.

Recent change in station superintendent - no significant changes in safety expected.

Docket No.: 50-245
Site: Millstone

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

More safety awareness.

New security fence and procedures.

Re-evaluations have been made and design changes implemented in plant power distribution and emergency power systems.

Review of inspection findings, LERs and operating record would support this judgment.

New QA organization seems to be slightly more effective.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

Large public interest in events taking place at this facility. Have a new plant superintendent.

Unit 1 is a BWR which is old - these items combine to cause a lower rating for Unit 1 than Unit 2.

Millstone site has three reactors, operating BWR, operating PWR, under construction PWR - all are by different vendors - all of different "era" - the operating reactors are, relatively, independent (as compared to a multiple unit site with the same generation of reactor from the same vendor) in their inherent safety characteristics.

Reliability of emergency has turbine, acceptance of the feedwater injection system as a high pressure ECCS system. Plant lacks a lot of separation and fire protection systems. Radwaste system undersized.

See answer to Question 28.

See p. 23.

Inter-relationship between diverse units at single site.

Docket No.: 50-224
Site: Nine Mile Point

Answers to Question 17 (If a change to safety level occurred, please describe it briefly):

None.

Answers to Question 18 (Are there other things we should consider about the safety of this plant?):

There were some old fossil people managing and operating this plant - they don't have the nuclear ethic yet.

See question 69.

This is a plant of older design but the early engineering was of a high quality and excellent plant layout and construction. Onsite plant support (other than operations) lacking in numbers of people. Plant lacks system separation and a real high pressure injection system. Excellent security program.

Approach to operations of plant have been conservative. Plant staff has been stable.

Nine Mile also considerable operating experience, and a reservoir of experienced BWR operators (from Fitzpatrick which has until recently been operated by the Nine Mile licensee and which "leases" its operators from Niagara Mohawk until it trains its own).

Corporate engineering role in maintenance activities.