

"HAYSE" REPORT

INDIVIDUAL SITE RATINGS

From The

IE EMPLOYEE SURVEY ON EVALUATION OF LICENSEES

April 1978

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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 compiled 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 safety 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 was provided for narrative comments about the safety of each site was provided (question 13).

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 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 24 and complete the questionnaire.

with those of other sites in terms of being more or 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

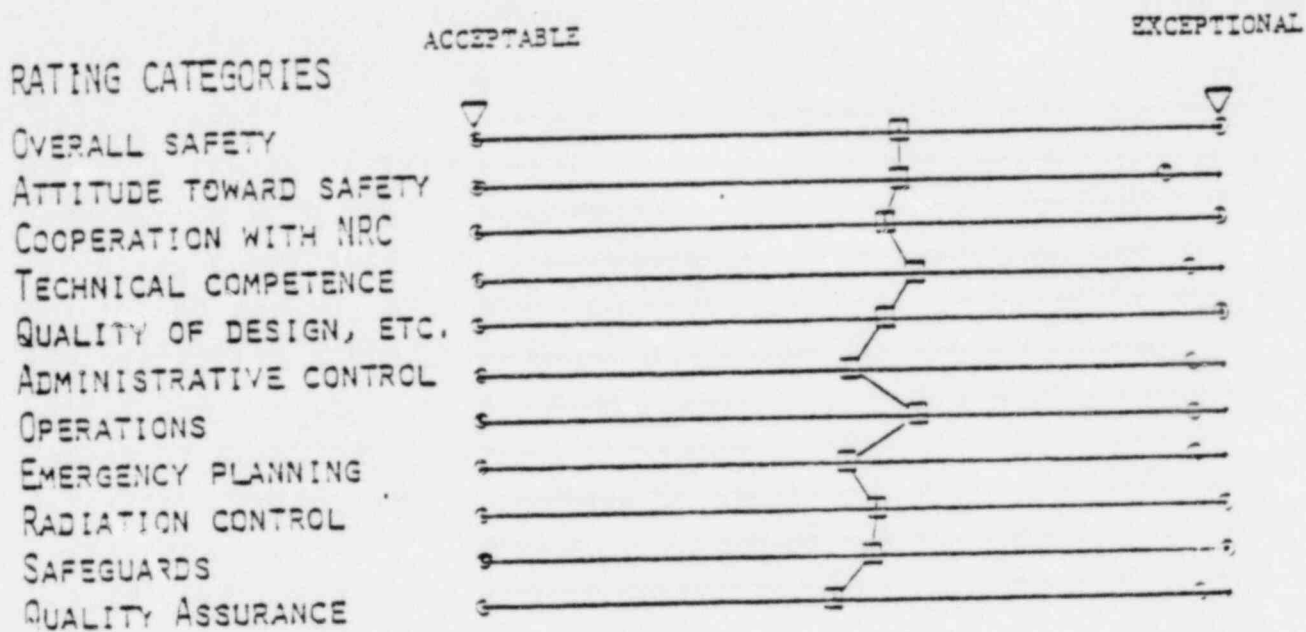
Ratings of the "typical site," shown in Figure 2, illustrate the format used to present site ratings. The top of the rating sheet depicts the safety ratings of the site in terms of overall safety and the other ten safety factors, all shown on a scale of "acceptable" to "exceptional." The squares shown 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

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



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

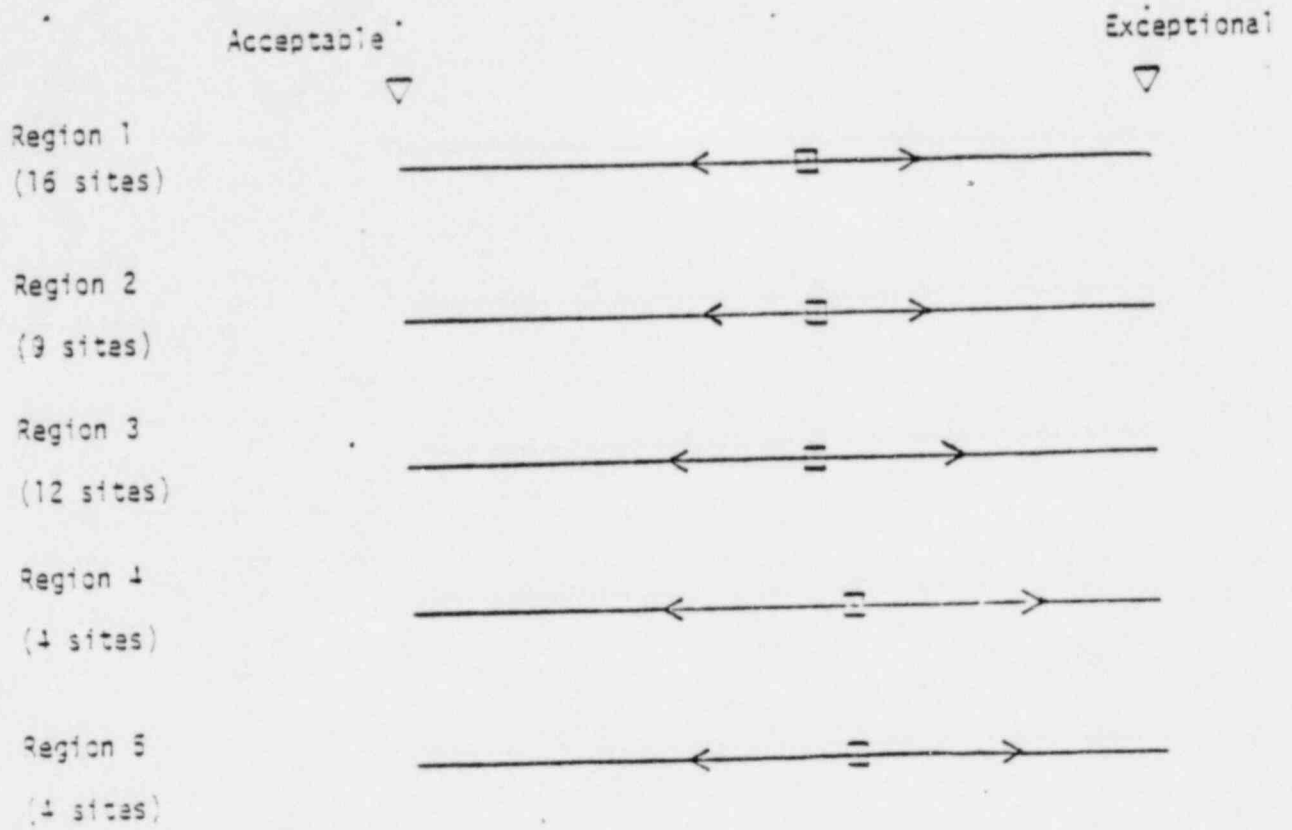
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = N/A
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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.

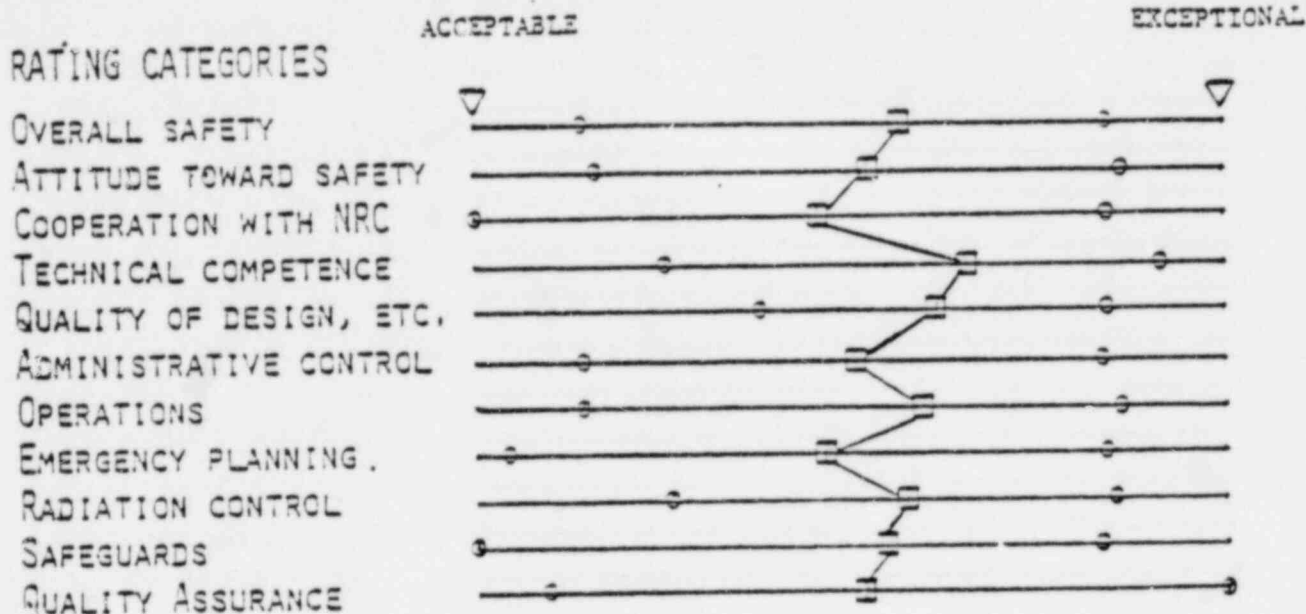
This information may be useful not only for developing evaluation methodology, but also for providing insights into the perceived levels of site safety, specific strengths and weaknesses at each site, overall trends toward improvement or degradation of performance, and possible improvements in inspection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

APPENDIX A

INDIVIDUAL SITE RATINGS

SITE Calvert Cliffs

DOCKET NUMBER 50-317



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

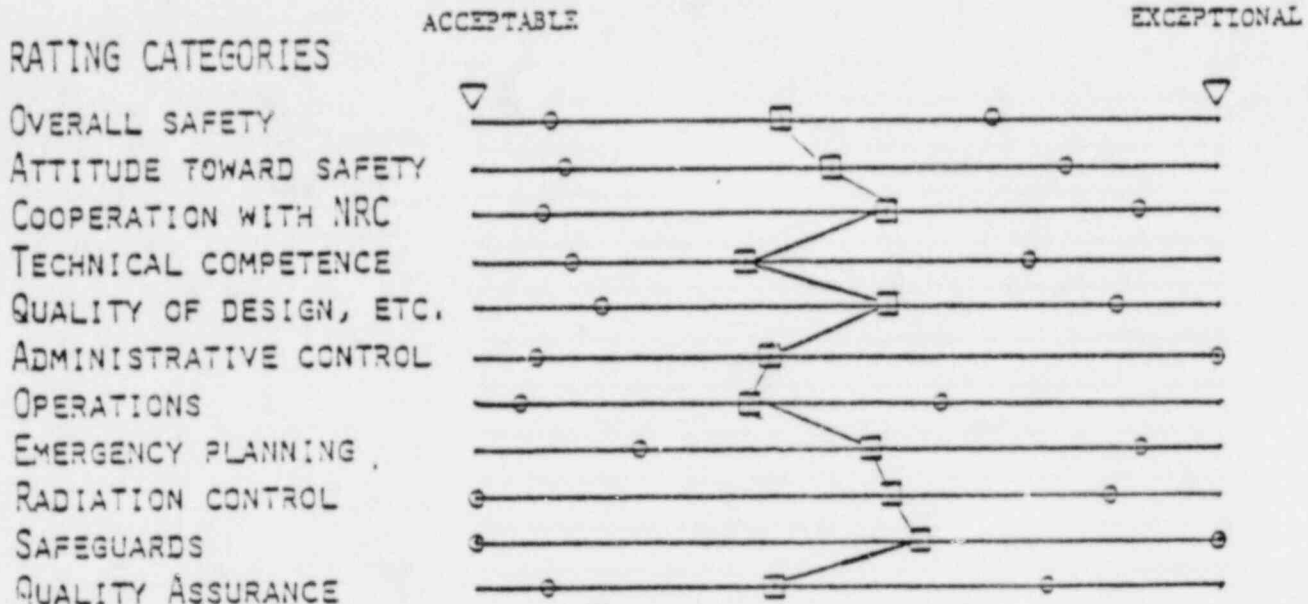
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 5.8
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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.



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

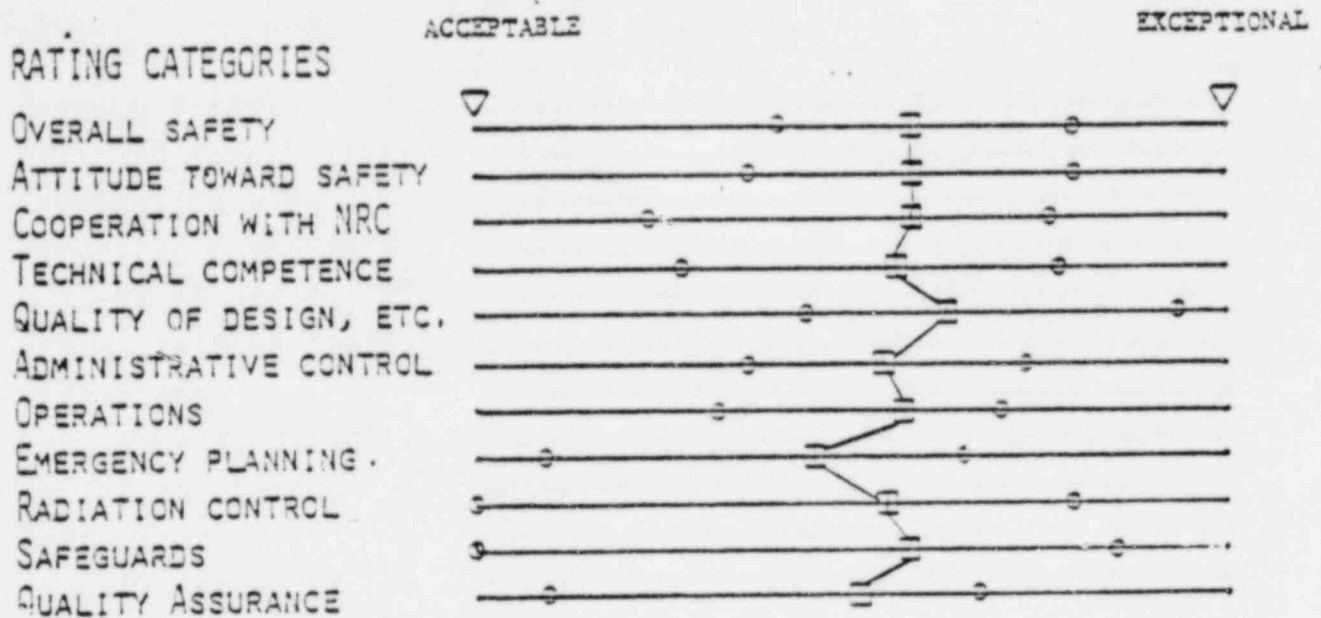
1 = NO CHANGE IN SAFETY.....	<u>2</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>5</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>1</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Fitzpatrick

DOCKET NUMBER 50-333



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

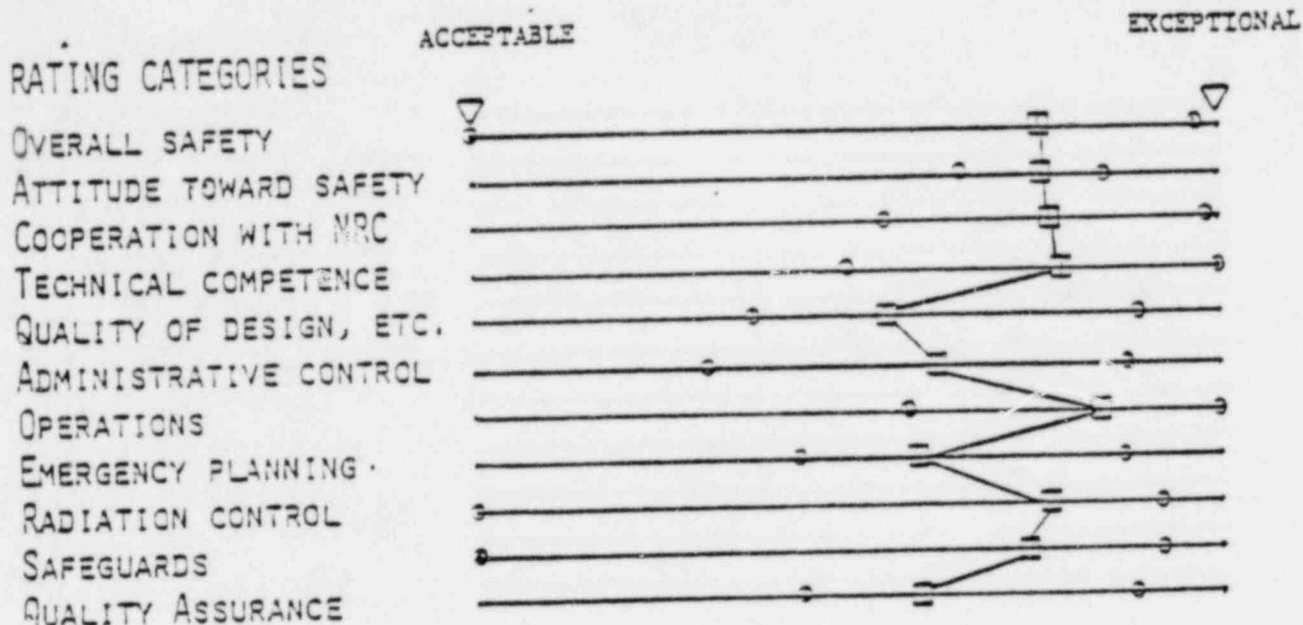
1 = NO CHANGE IN SAFETY.....	<u>1</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>6</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Connecticut Yankee

DOCKET NUMBER 50-213



NUMBER OF PEOPLE RATING SITE = 9

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 = 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.....	<u>7</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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

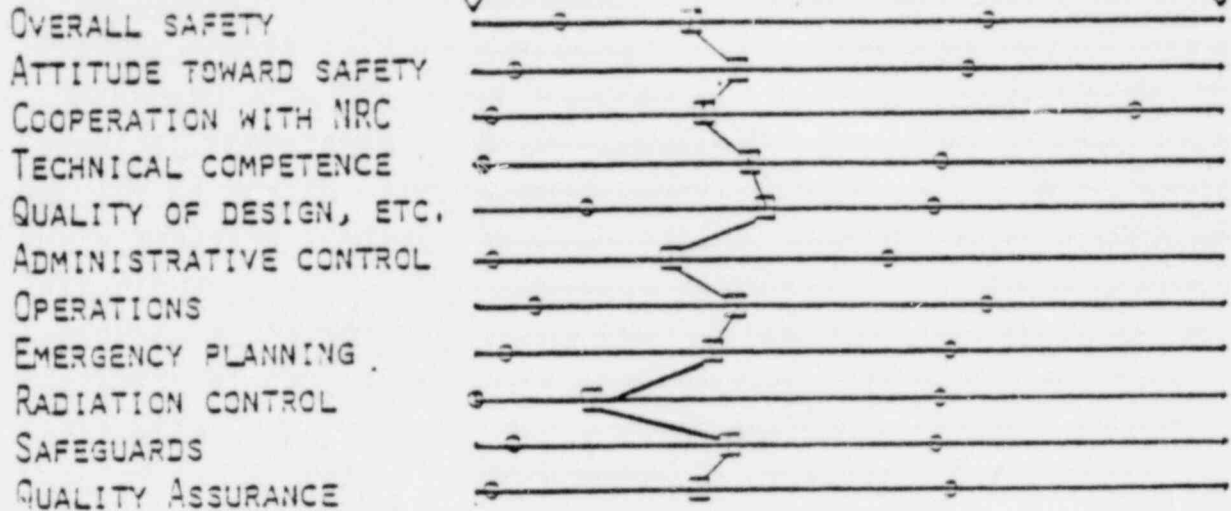
SITE Indian Point

DOCKET NUMBER 50-003

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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 = 5.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.3
(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.....	<u>4</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>4</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>3</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

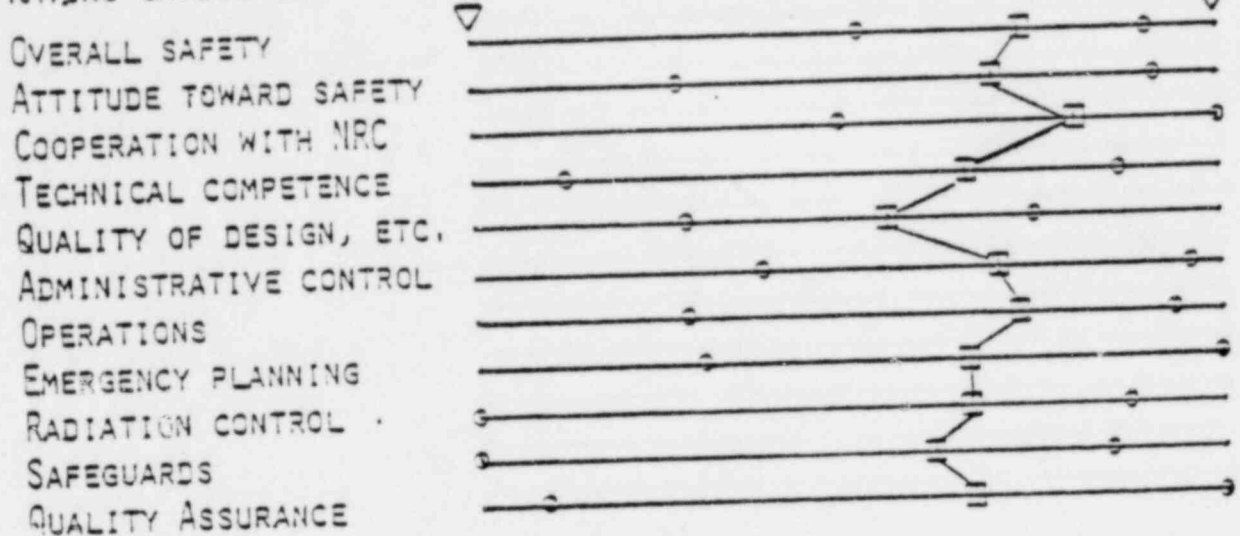
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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 PASH 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.

ACCEPTABLE

EXCEPTIONAL

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 = 3.6

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.

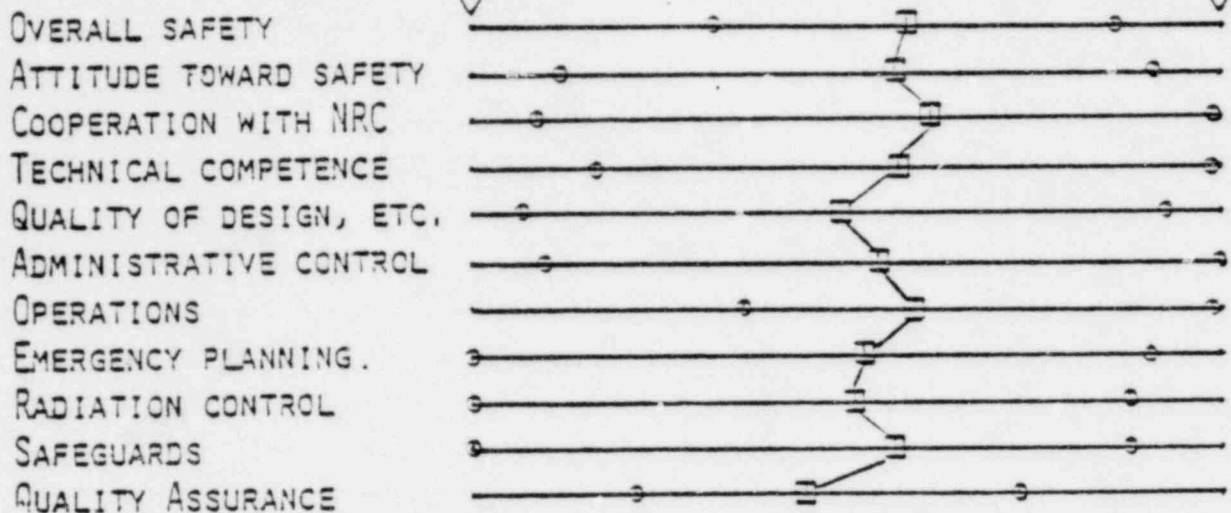
SITE Millstone

DOCKET NUMBER 50-245

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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) = 3.3
(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

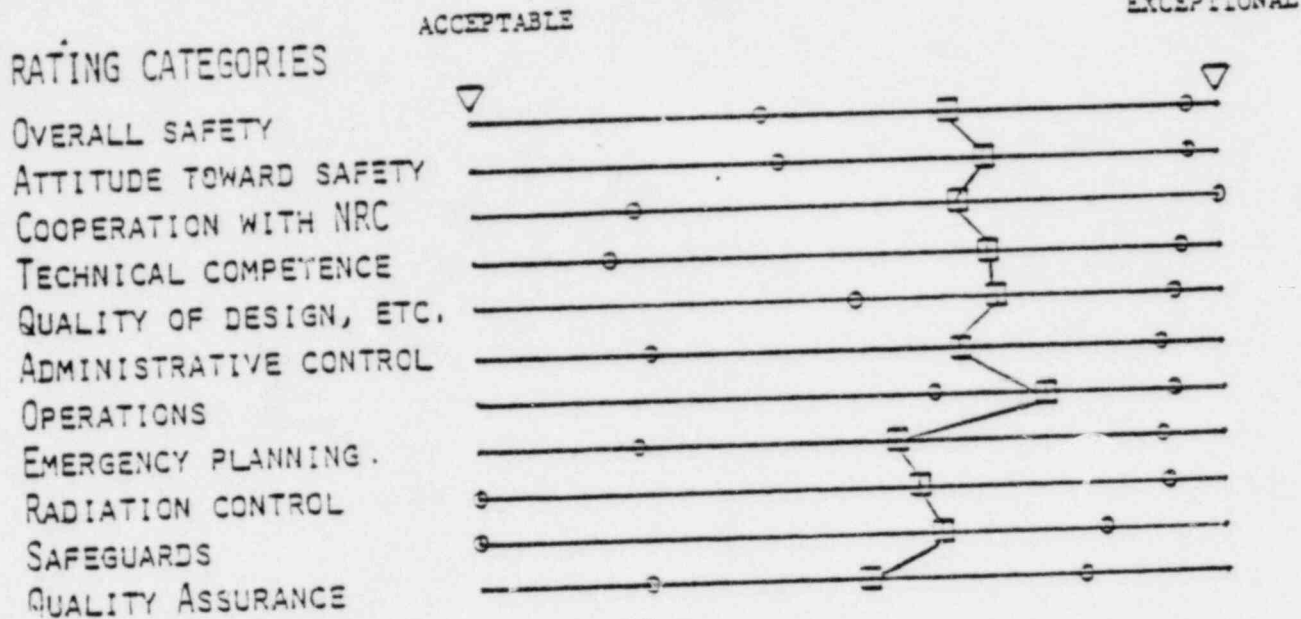
1 = NO CHANGE IN SAFETY.....	<u>9</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>5</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Maine Yankee

DOCKET NUMBER 50-309



NUMBER OF PEOPLE RATING SITE = 10

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 = 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)

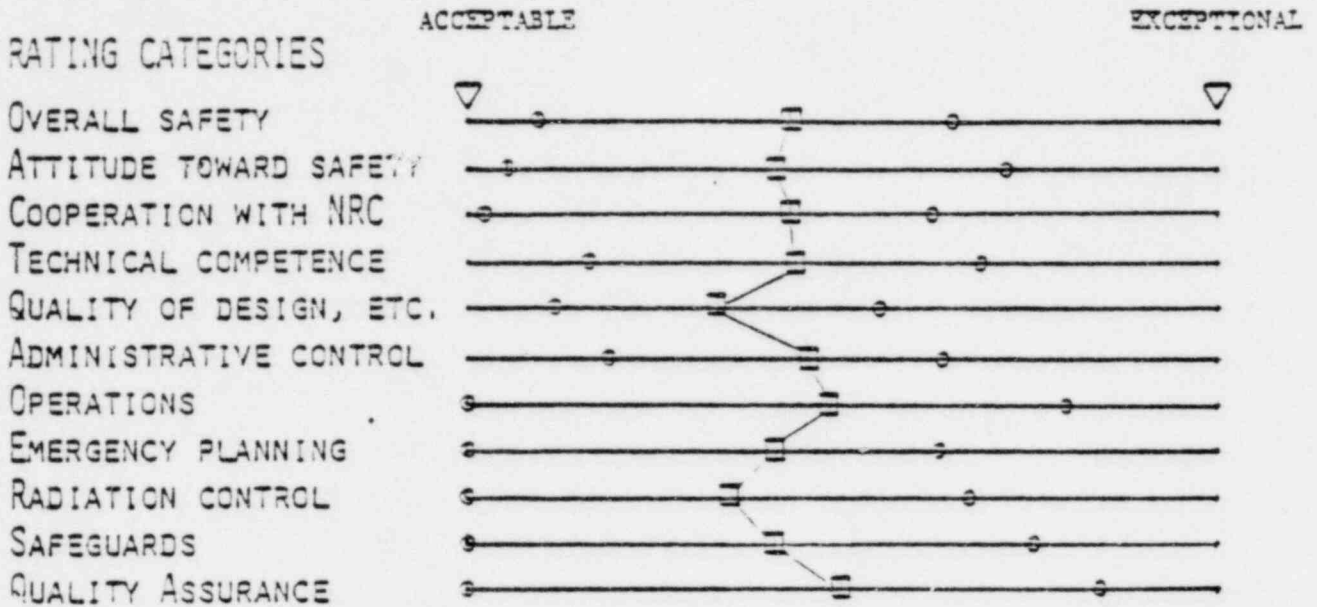
INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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 Oyster Creek
 DOCKET NUMBER 50-219



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 Nine Mile Point

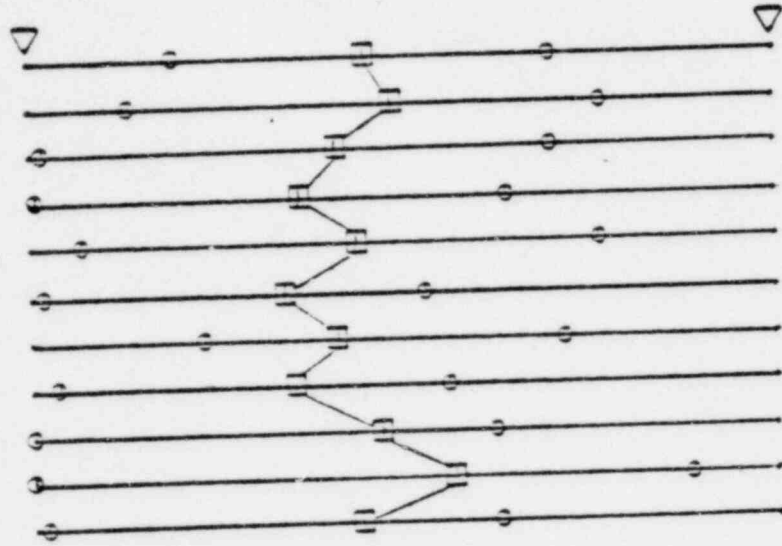
DOCKET NUMBER 50-220

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL

- OVERALL SAFETY
- ATTITUDE TOWARD SAFETY
- COOPERATION WITH NRC
- TECHNICAL COMPETENCE
- QUALITY OF DESIGN, ETC.
- ADMINISTRATIVE CONTROL
- OPERATIONS
- EMERGENCY PLANNING .
- RADIATION CONTROL
- SAFEGUARDS
- QUALITY ASSURANCE



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
2.9

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.....	<u>11</u>	
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>	
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>	
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>	
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>	

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

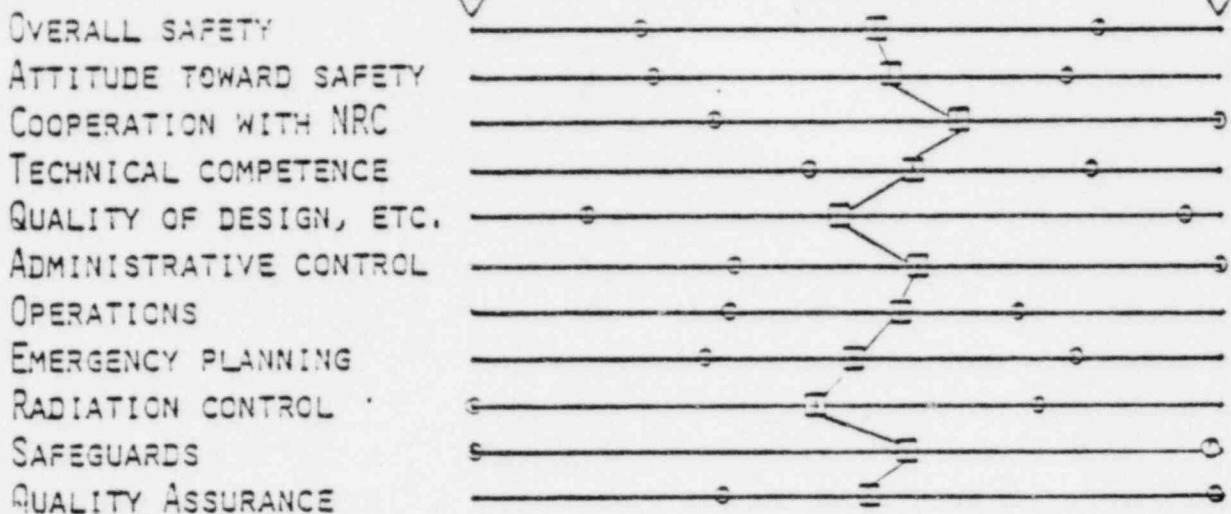
SITE Pilgrim

DOCKET NUMBER 50-293

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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 = 3.6

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

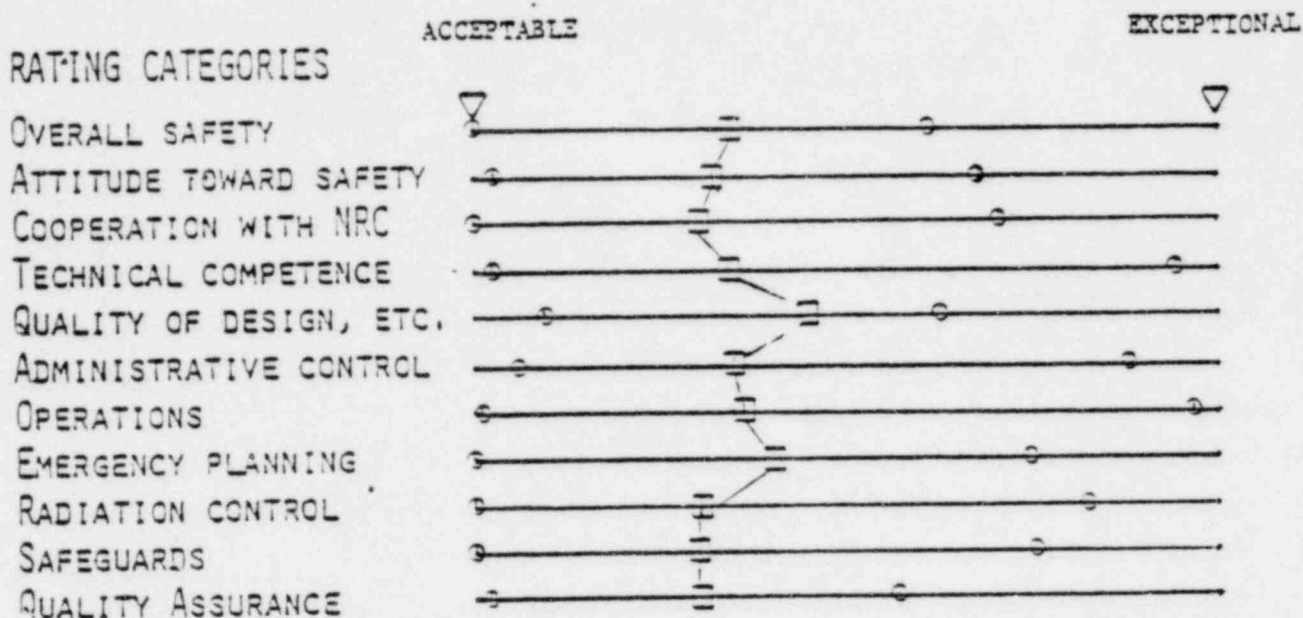
- 1 = NO CHANGE IN SAFETY..... 7
- 2 = SAFETY SLIGHTLY IMPROVED..... 1
- 3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
- 4 = SAFETY SLIGHTLY WORSE..... 1
- 5 = SAFETY SUBSTANTIALLY WORSE..... 1

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 Peach Bottom

DOCKET NUMBER 50-277



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 = 5.5

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

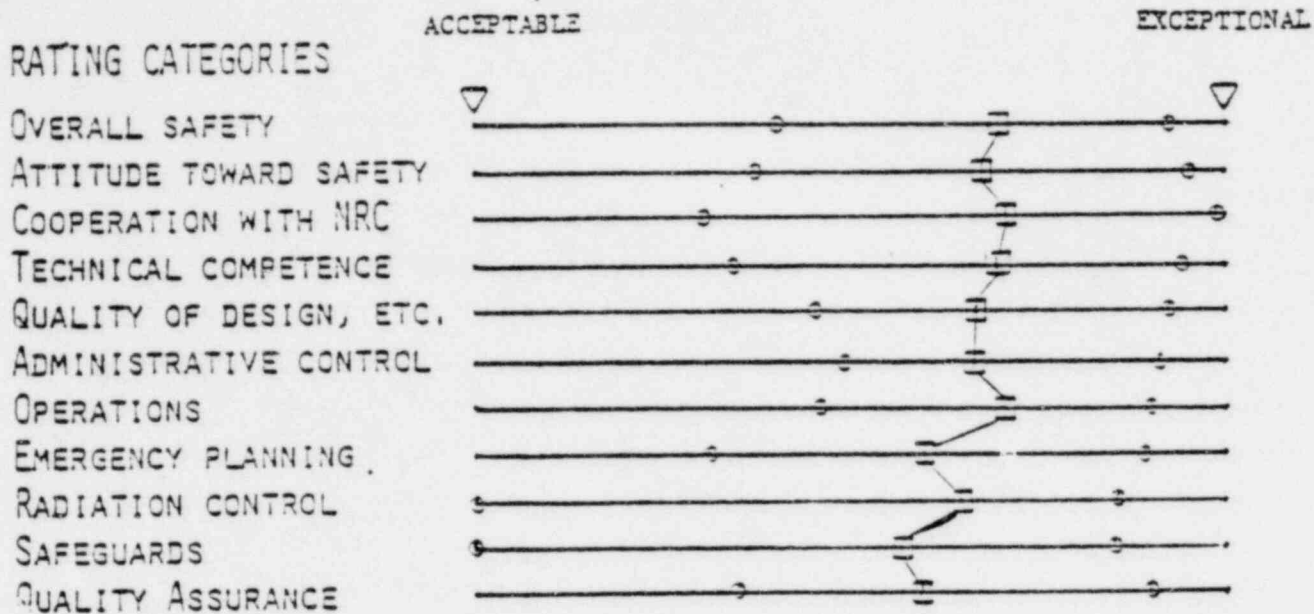
1 = NO CHANGE IN SAFETY.....	<u>8</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>3</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>3</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 security 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.

SITE Three Mile Island

DOCKET NUMBER 50-289



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.....	<u>9</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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.

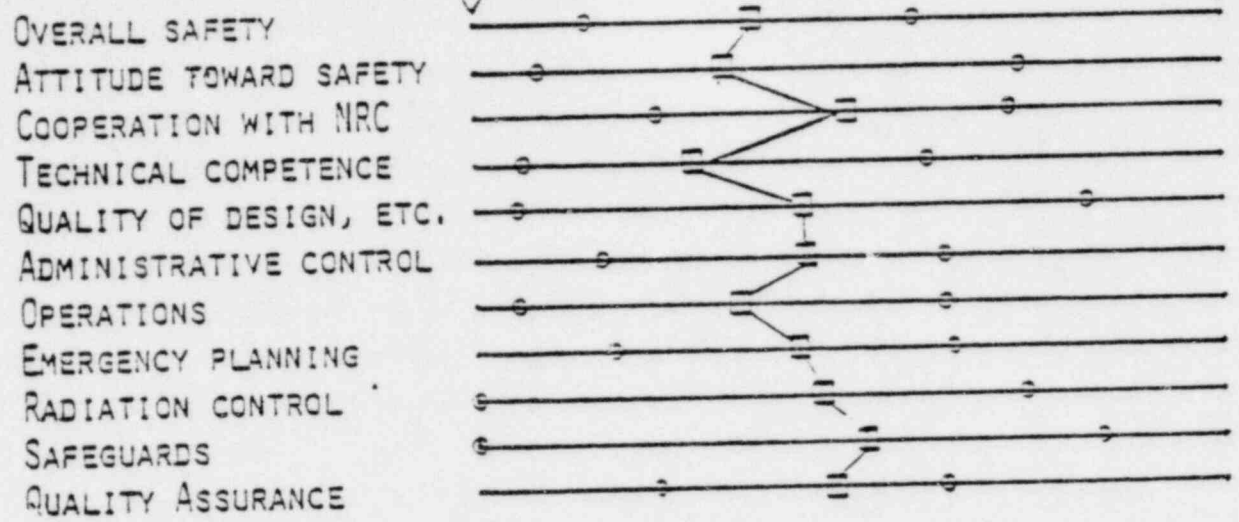
SITE Salem

DOCKET NUMBER 50-272

ACCEPTABLE

EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 19

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 = 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

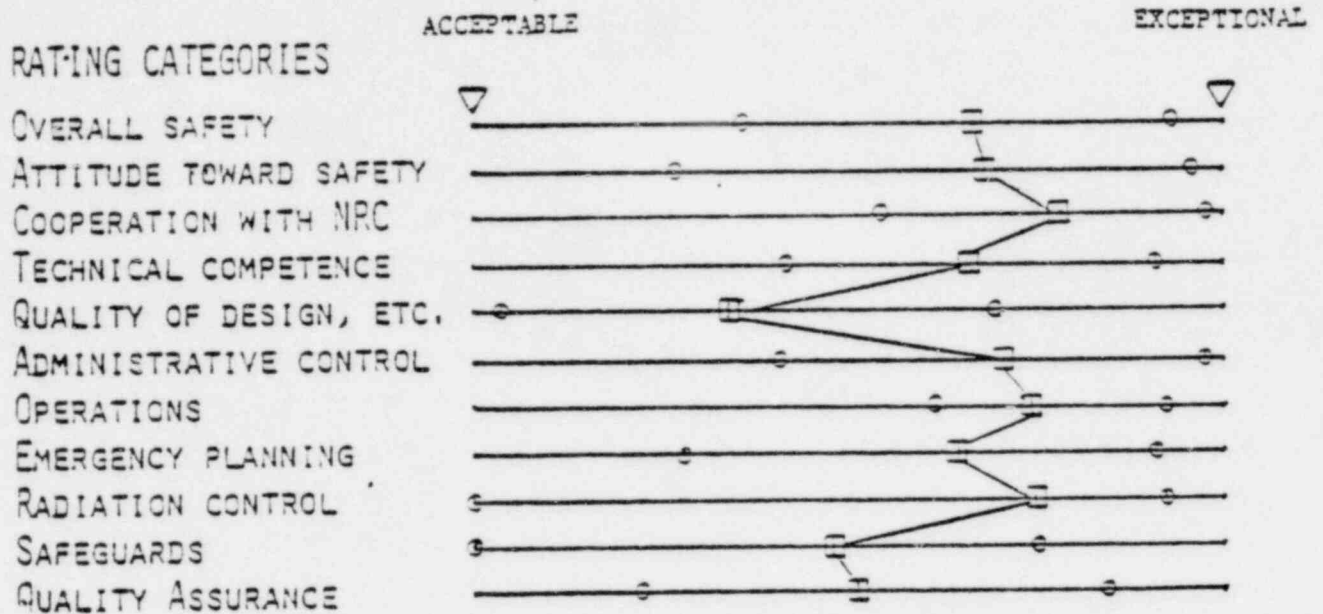
1 = NO CHANGE IN SAFETY.....	<u>5</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>1</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Yankee Rowe

DOCKET NUMBER 50-029



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.....	<u>6</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Specs. Upgraded QA program in 1977.

SITE Vermont Yankee

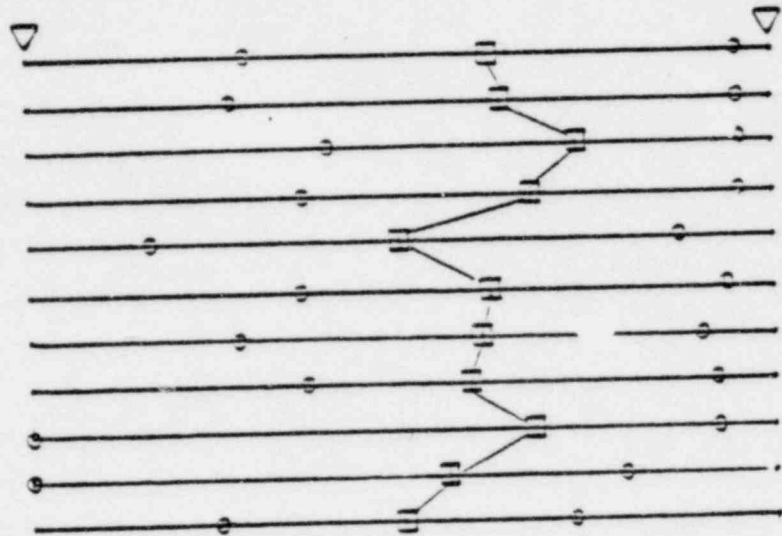
DOCKET NUMBER 50-271

ACCEPTABLE

EXCEPTIONAL

RATING CATEGORIES

- OVERALL SAFETY
- ATTITUDE TOWARD SAFETY
- COOPERATION WITH NRC
- TECHNICAL COMPETENCE
- QUALITY OF DESIGN, ETC.
- ADMINISTRATIVE CONTROL
- OPERATIONS
- EMERGENCY PLANNING
- RADIATION CONTROL
- SAFEGUARDS
- QUALITY ASSURANCE



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
3.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.3
(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.....	<u>9</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

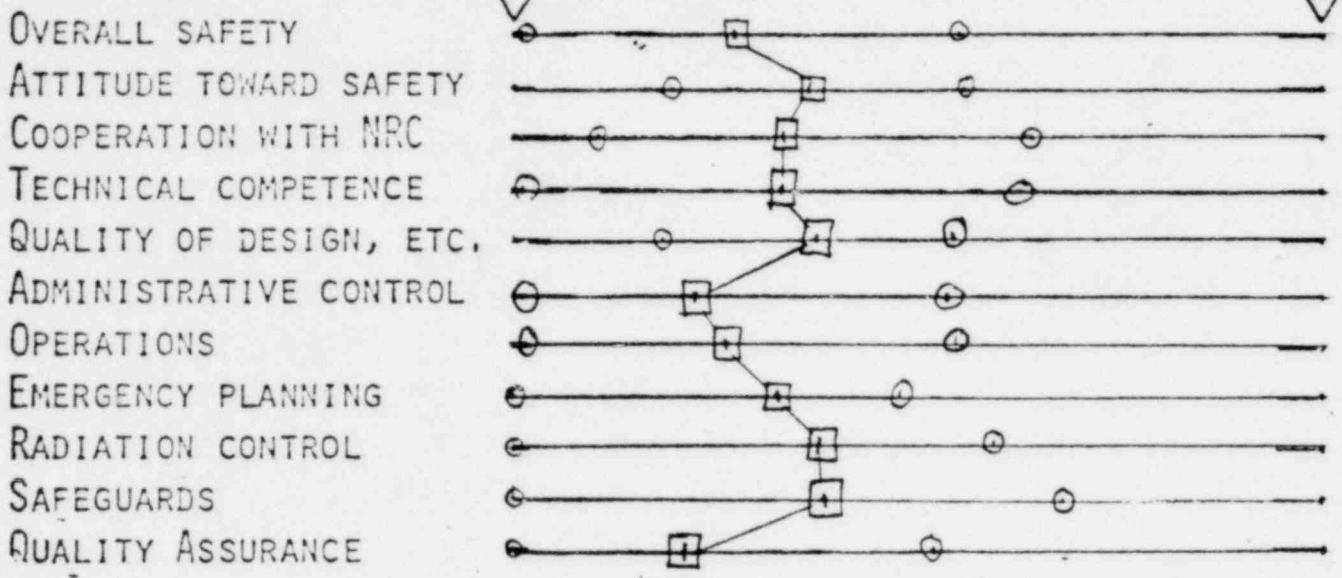
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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

ACCEPTABLE

EXCEPTION

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

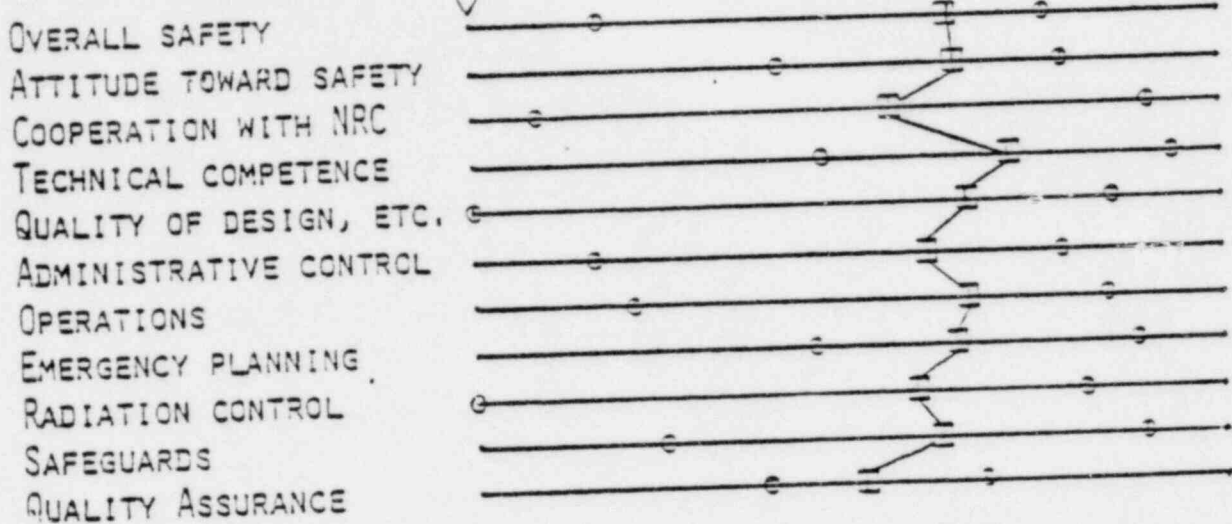
- 1 = NO CHANGE IN SAFETY..... 2
- 2 = SAFETY SLIGHTLY IMPROVED..... 4
- 3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
- 4 = SAFETY SLIGHTLY WORSE..... 1
- 5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Site has reorganized and has new people in Key positions. Some improvement in administrative 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."

RATING CATEGORIES

ACCEPTABLE EXCEPTIONAL



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

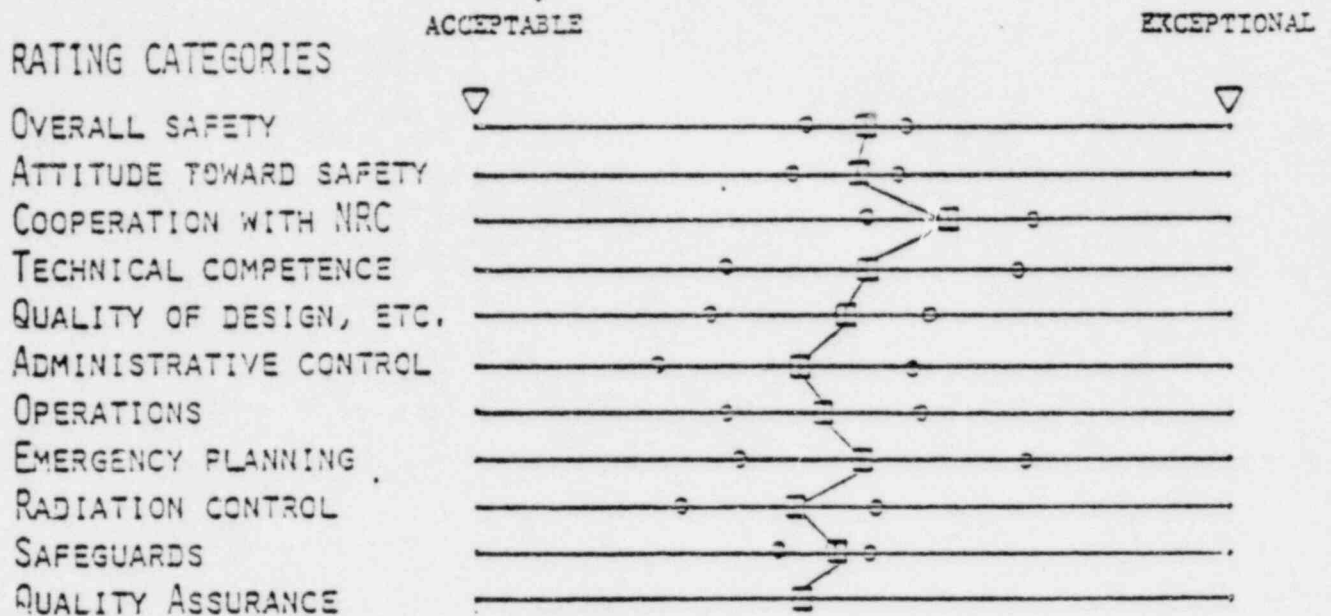
- 1 = NO CHANGE IN SAFETY..... 2
- 2 = SAFETY SLIGHTLY IMPROVED..... 4
- 3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
- 4 = SAFETY SLIGHTLY WORSE..... 1
- 5 = SAFETY SUBSTANTIALLY WORSE..... 0

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 Crystal River

DOCKET NUMBER 50-302



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

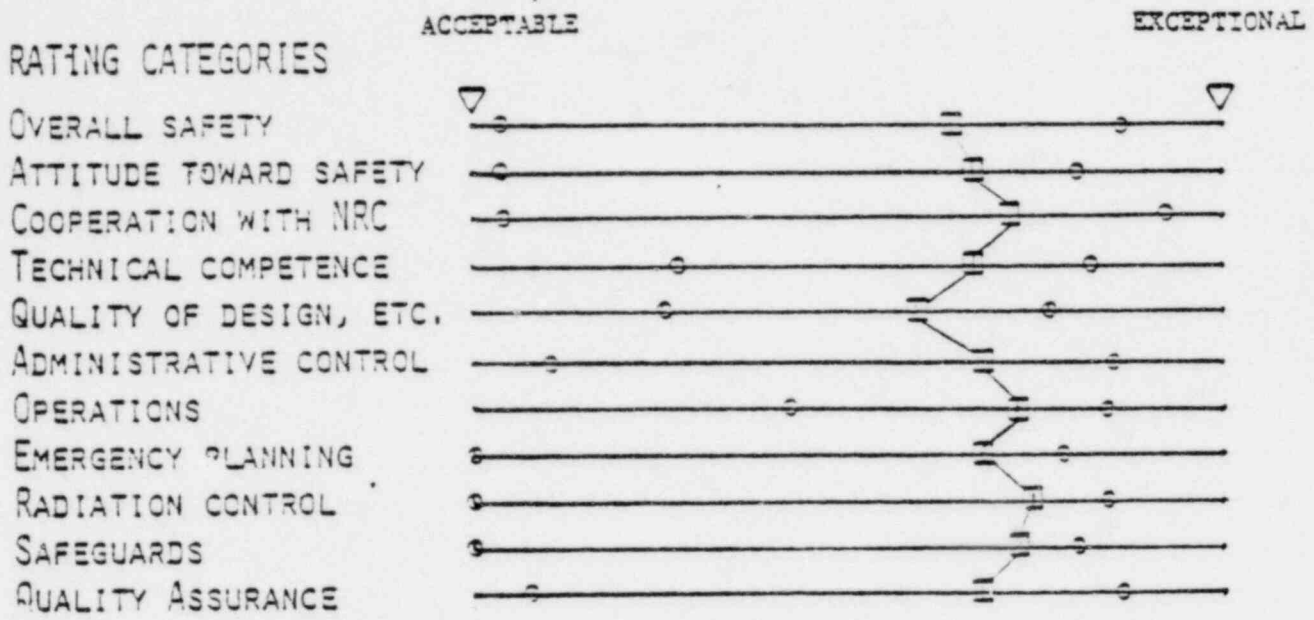
1 = NO CHANGE IN SAFETY.....	<u>1</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>2</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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



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

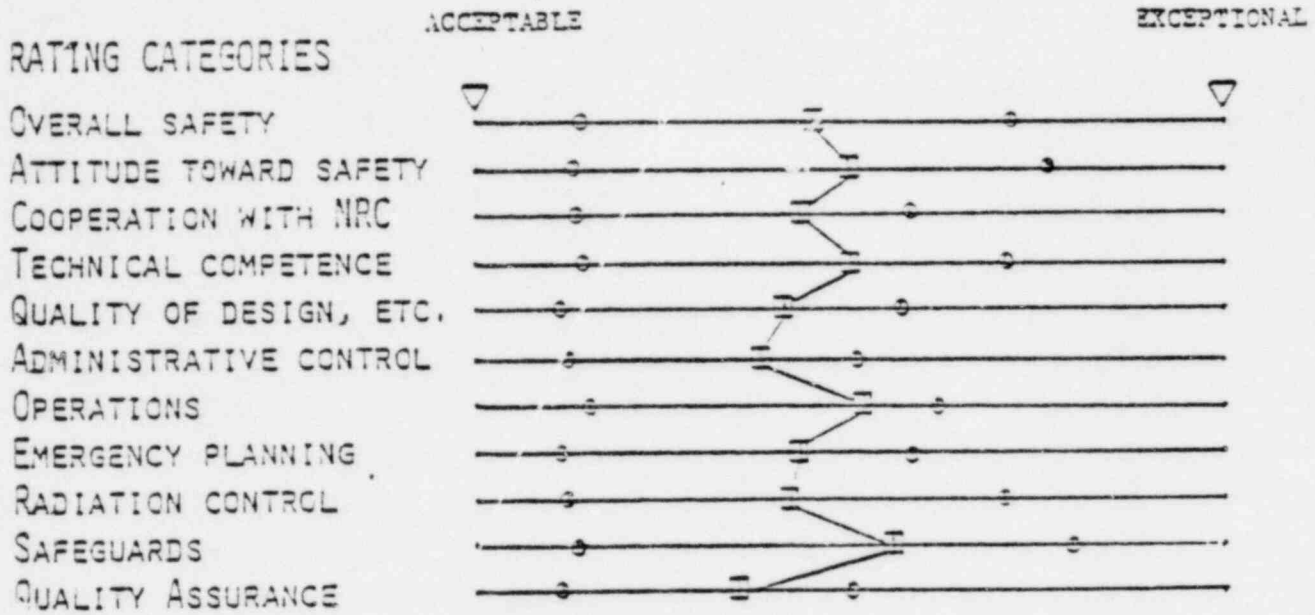
- 1 = NO CHANGE IN SAFETY..... 3
- 2 = SAFETY SLIGHTLY IMPROVED..... 0
- 3 = SAFETY SUBSTANTIALLY IMPROVED..... 0
- 4 = SAFETY SLIGHTLY WORSE..... 0
- 5 = SAFETY SUBSTANTIALLY WORSE..... 0

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Upgrading of administrative and QA controls is continuing.

SITE Robinson

DOCKET NUMBER 50-261



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 = 3.2

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.....	<u>4</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>2</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

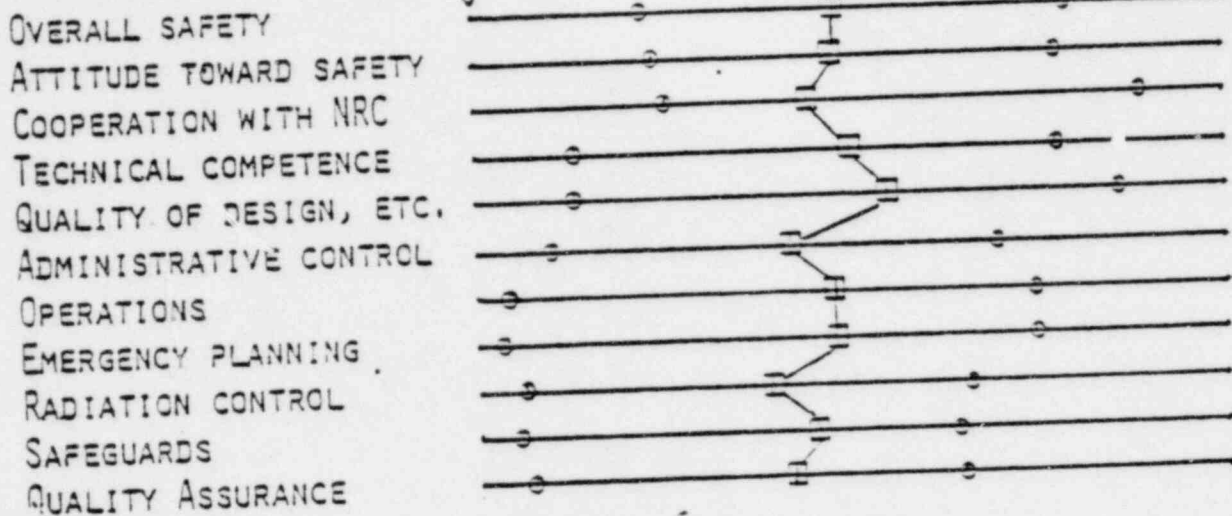
NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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.

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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.....	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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

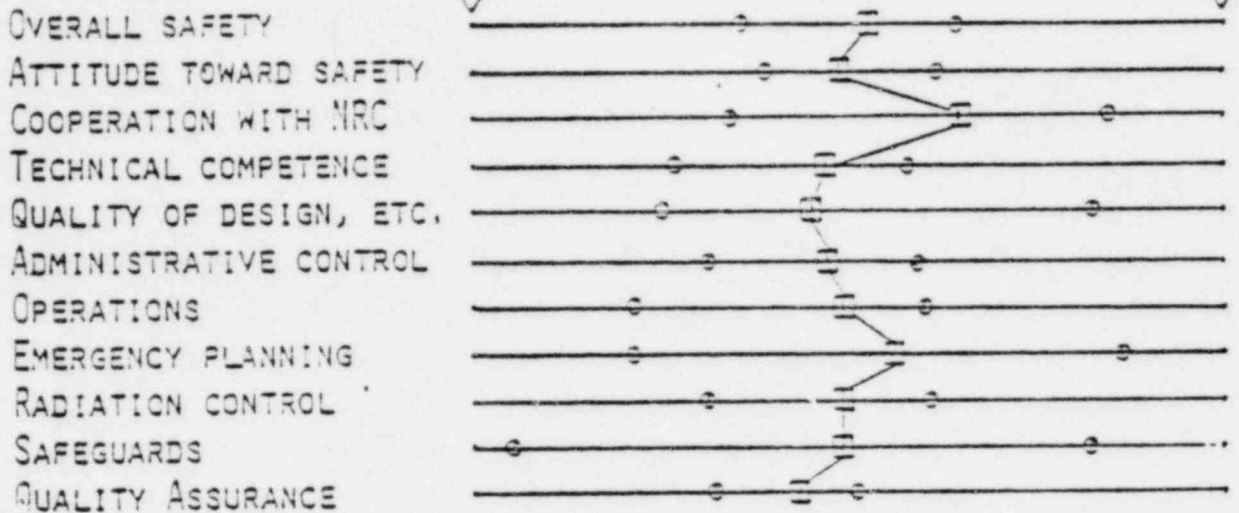
SITE Surry

DOCKET NUMBER 50-280

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 = 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.....	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>1</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety slightly worse due to degradation of steam generator.

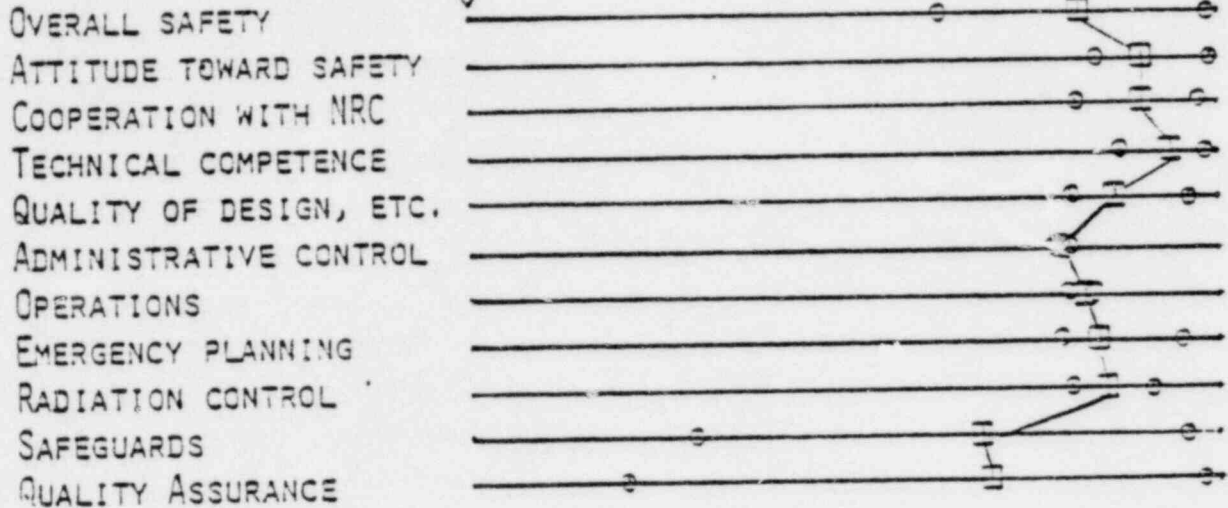
SITE Saint Lucie

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
6.0

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.....	<u>1</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 LIRs is probably due to conscientiousness in reporting.

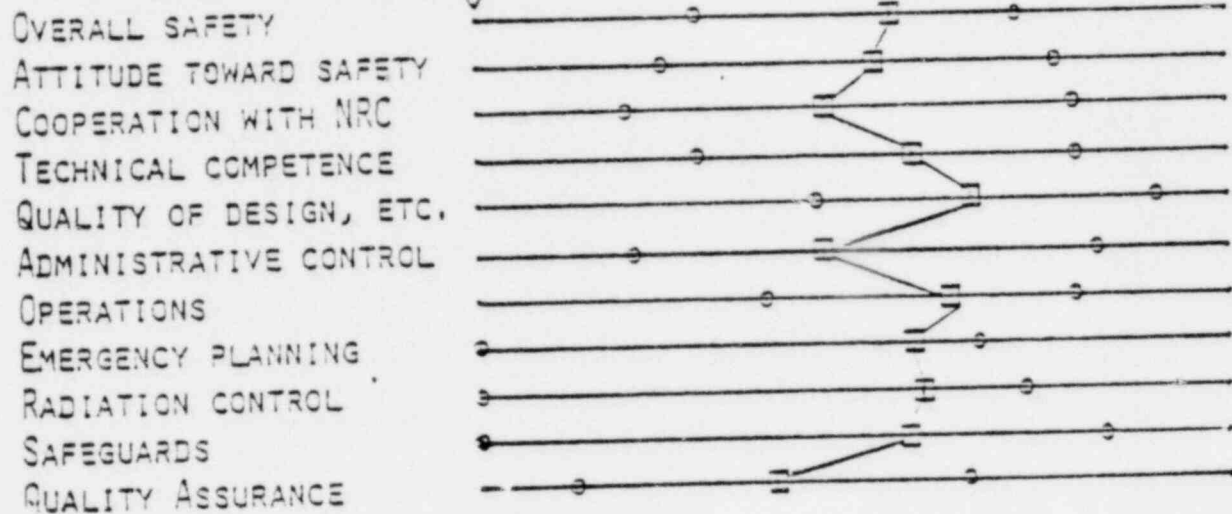
SITE Arnold

DOCKET NUMBER 50-331

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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 = $\frac{10.8}{4.6}$

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) =
(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.

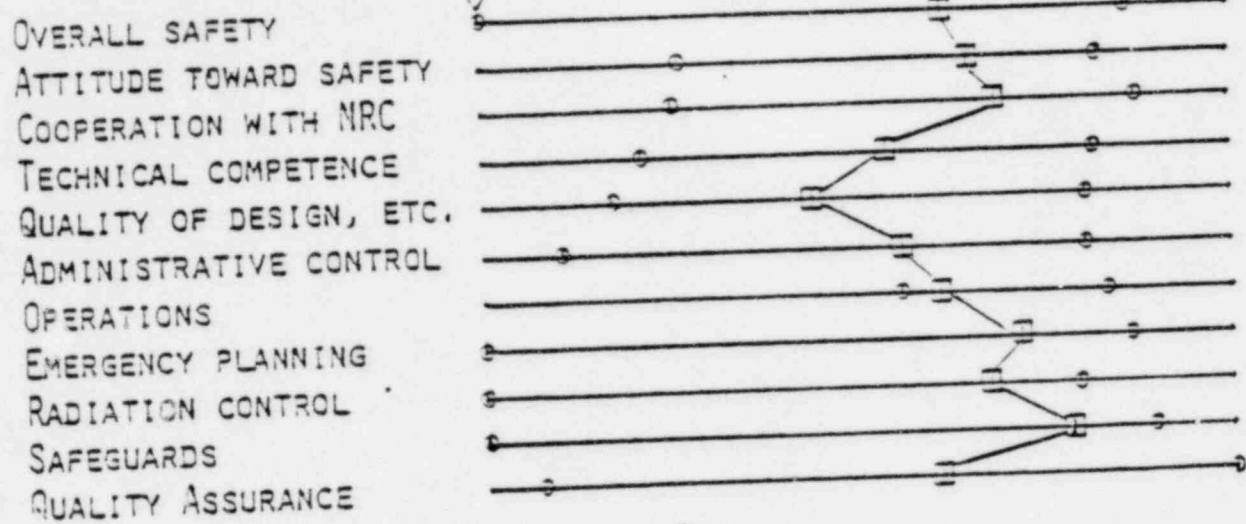
SITE Turkey Point

DOCKET NUMBER 50-250

RATING CATEGORIES

ACCEPTABLE

EXCEPTIONAL



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
3.6

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 10.0
(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

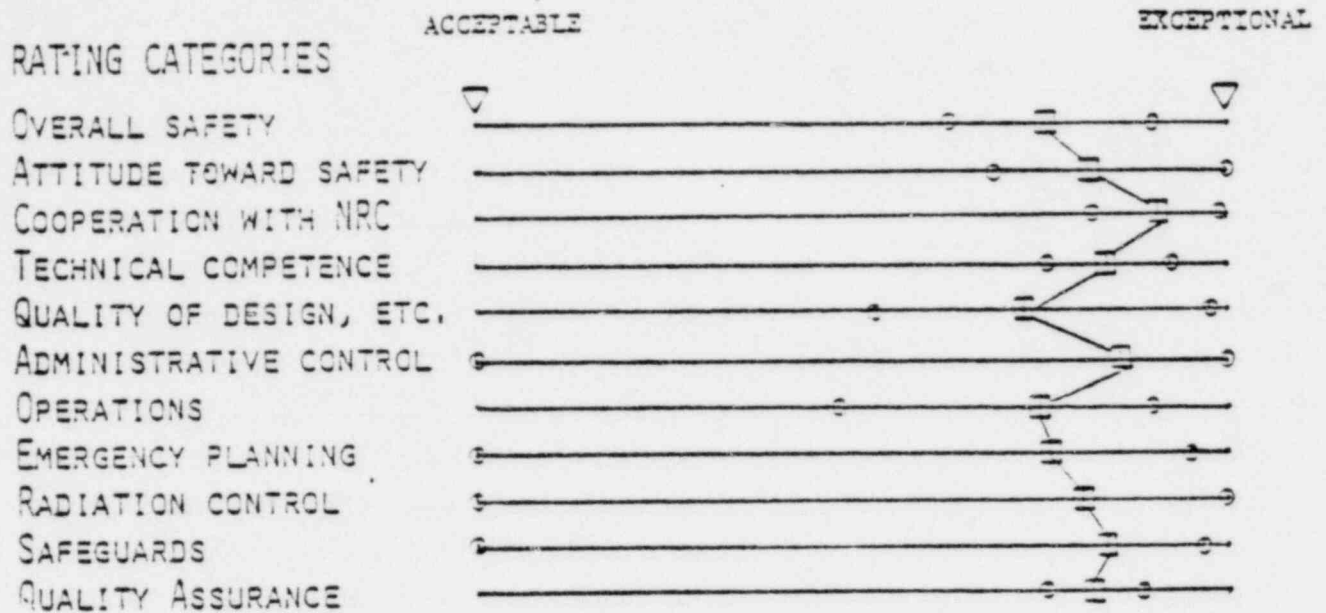
1 = NO CHANGE IN SAFETY.....	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>1</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

Safety may be slightly worse due to steam generator degradation.

SITE D. C. Cook

DOCKET NUMBER 50-315



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.....	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>2</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Big Rock Point

DOCKET NUMBER 50-155

ACCEPTABLE

EXCEPTIONAL

RATING CATEGORIES

OVERALL SAFETY

ATTITUDE TOWARD SAFETY

COOPERATION WITH NRC

TECHNICAL COMPETENCE

QUALITY OF DESIGN, ETC.

ADMINISTRATIVE CONTROL

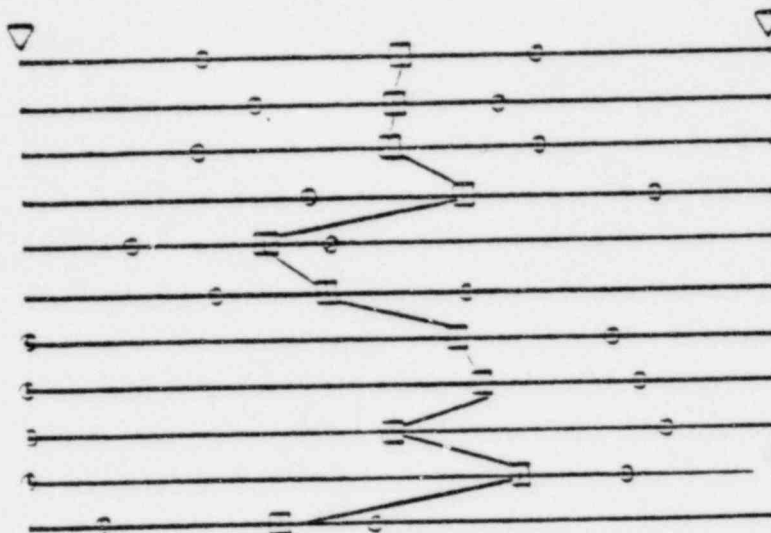
OPERATIONS

EMERGENCY PLANNING

RADIATION CONTROL

SAFEGUARDS

QUALITY ASSURANCE



NUMBER OF PEOPLE RATING SITE = 5

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 = 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

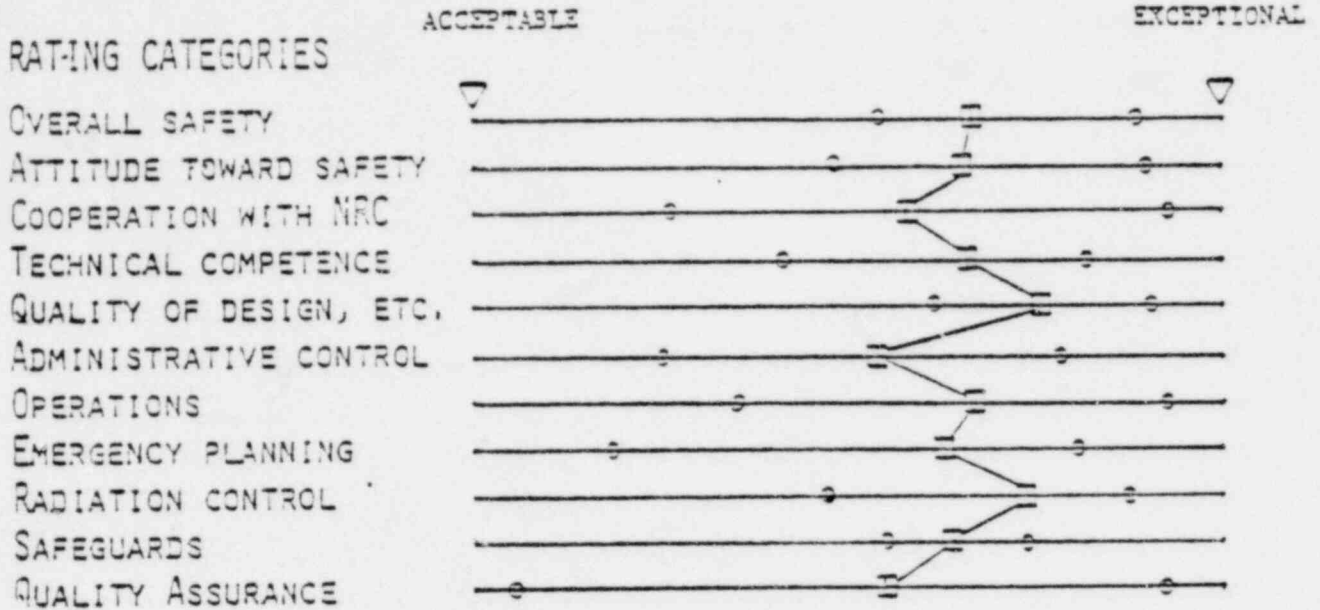
1 = NO CHANGE IN SAFETY.....	<u>1</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Kewaunee

DOCKET NUMBER 50-305



NUMBER OF PEOPLE RATING SITE = 5

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 4.3
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 6.6

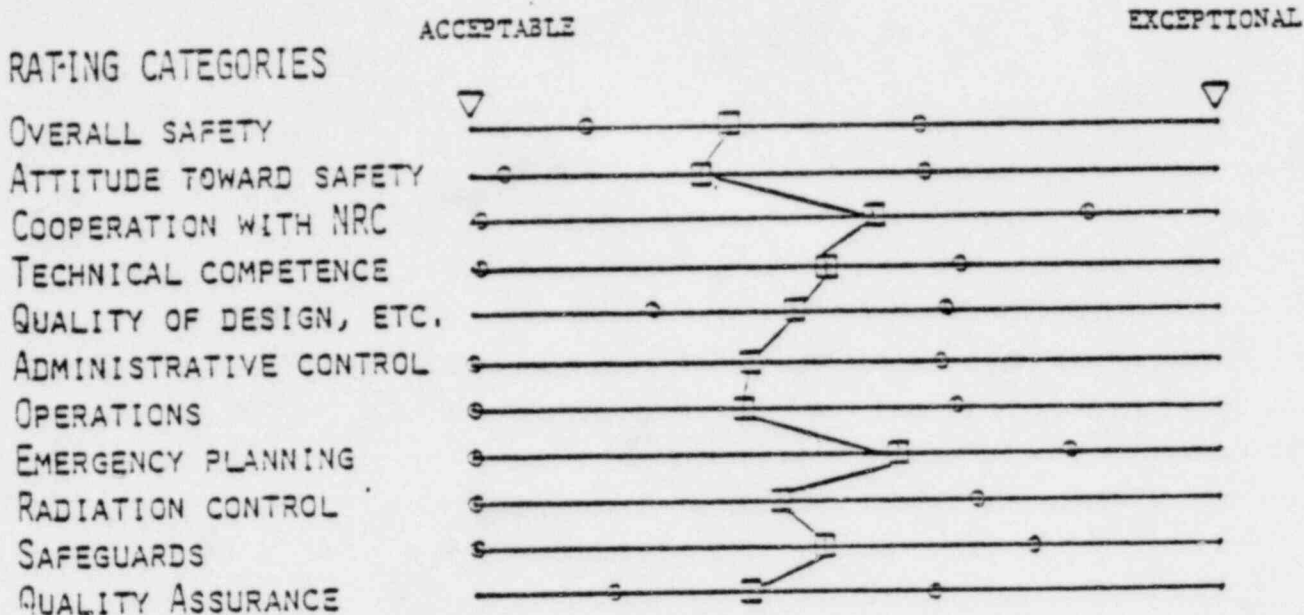
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.3
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

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 competent. Good attitude toward safety. Overall, the site has good operating performance.



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)

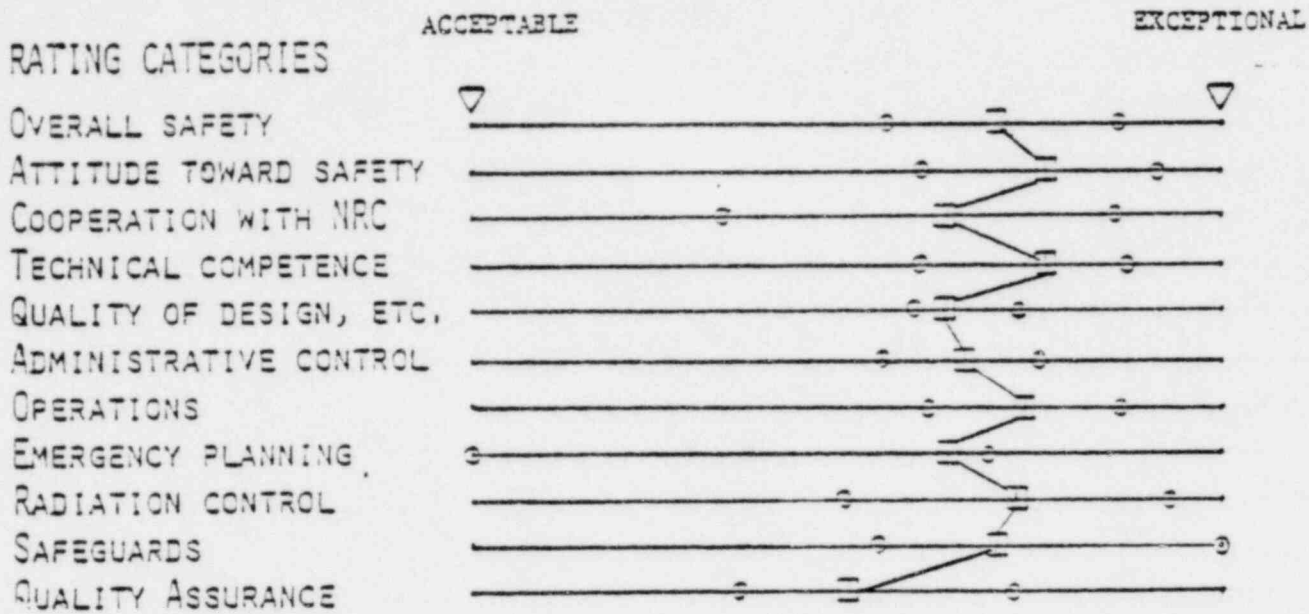
INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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 Monticello
 DOCKET NUMBER 50-263



NUMBER OF PEOPLE RATING SITE = 3

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 = 6.5

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.....	<u>4</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

No narrative comments.

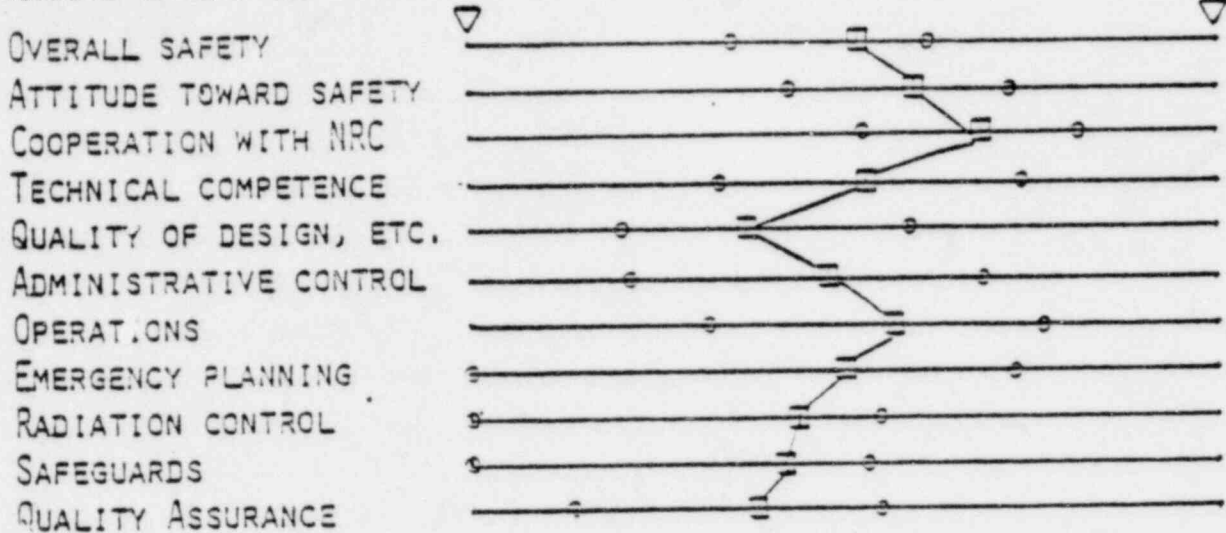
SITE LaCrosse

DOCKET NUMBER 50-409

ACCEPTABLE

EXCEPTIONAL

RATING CATEGORIES



NUMBER OF PEOPLE RATING SITE = 7

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 6.0
(1 = HARDLY AT ALL, 7 = EXTREMELY WELL)

AVERAGE NUMBER OF MONTHS SINCE RATERS' LAST INSPECTION = 2.8

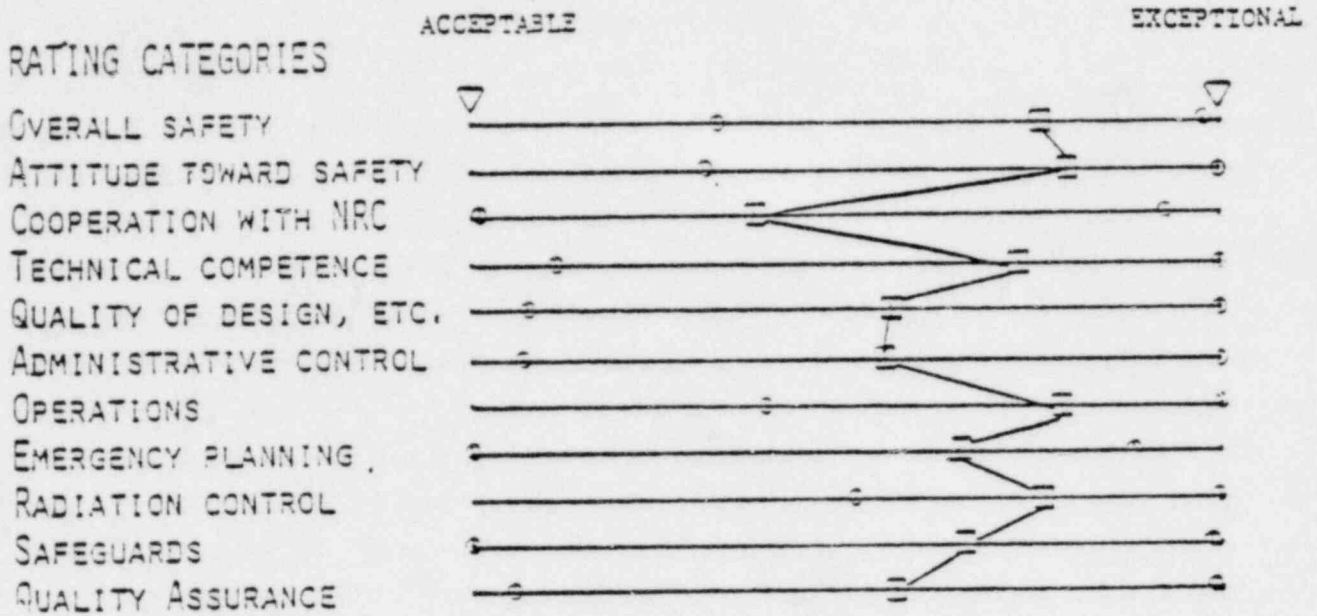
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

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.



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

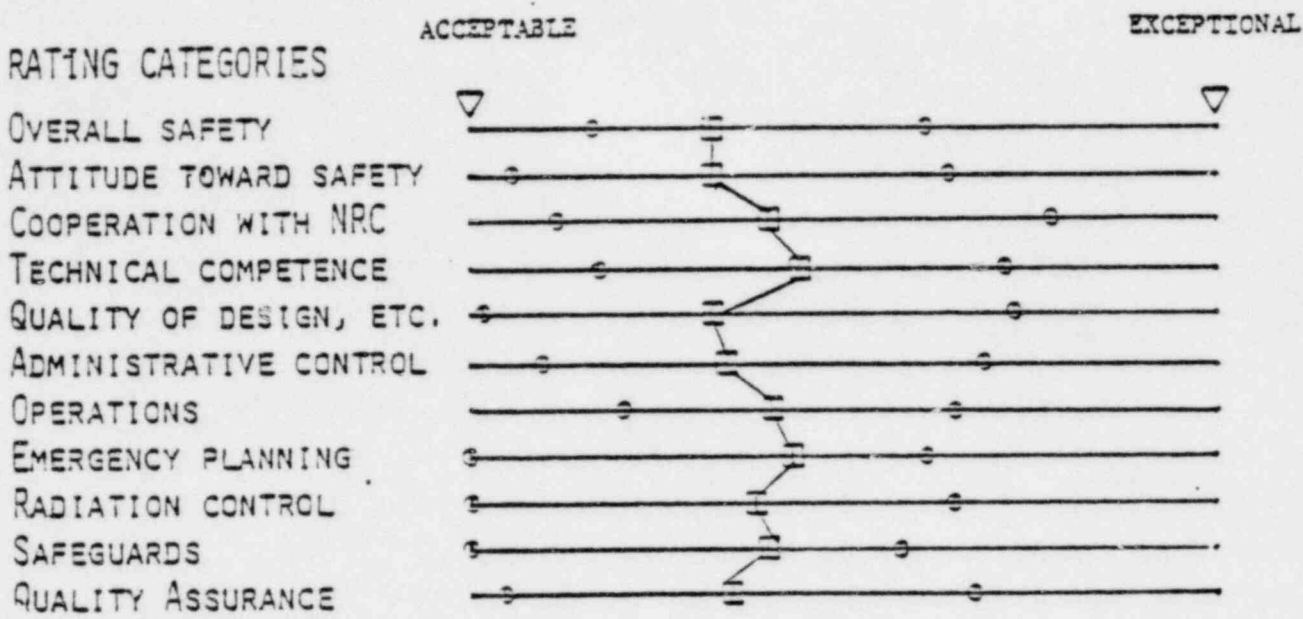
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.8
 (1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
 7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

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 constructive criticism of NRC. Plant management is strong in all areas, and has a total team effort from staff. Attitude on safety matters is excellent.



NUMBER OF PEOPLE RATING SITE = 8

FAMILIARITY OF RATERS WITH SITE (ON 7 POINT SCALE) = 1.3
 (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

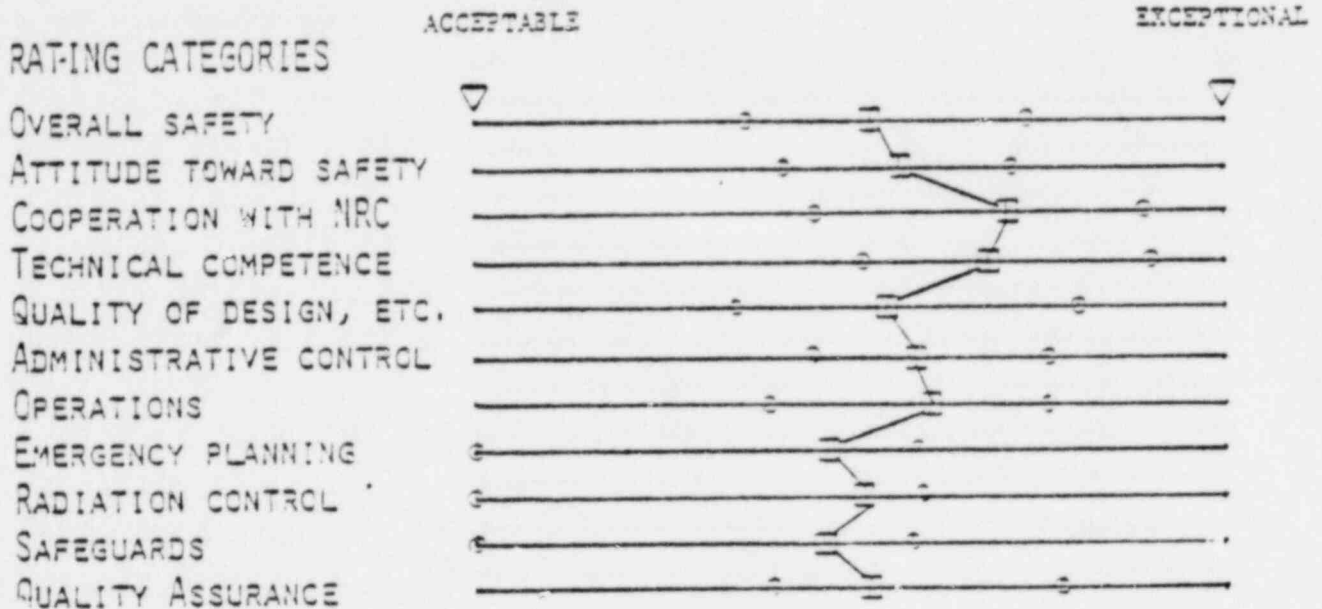
1 = NO CHANGE IN SAFETY.....	<u>2</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>3</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>1</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 Quad Cities

DOCKET NUMBER 50-254



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

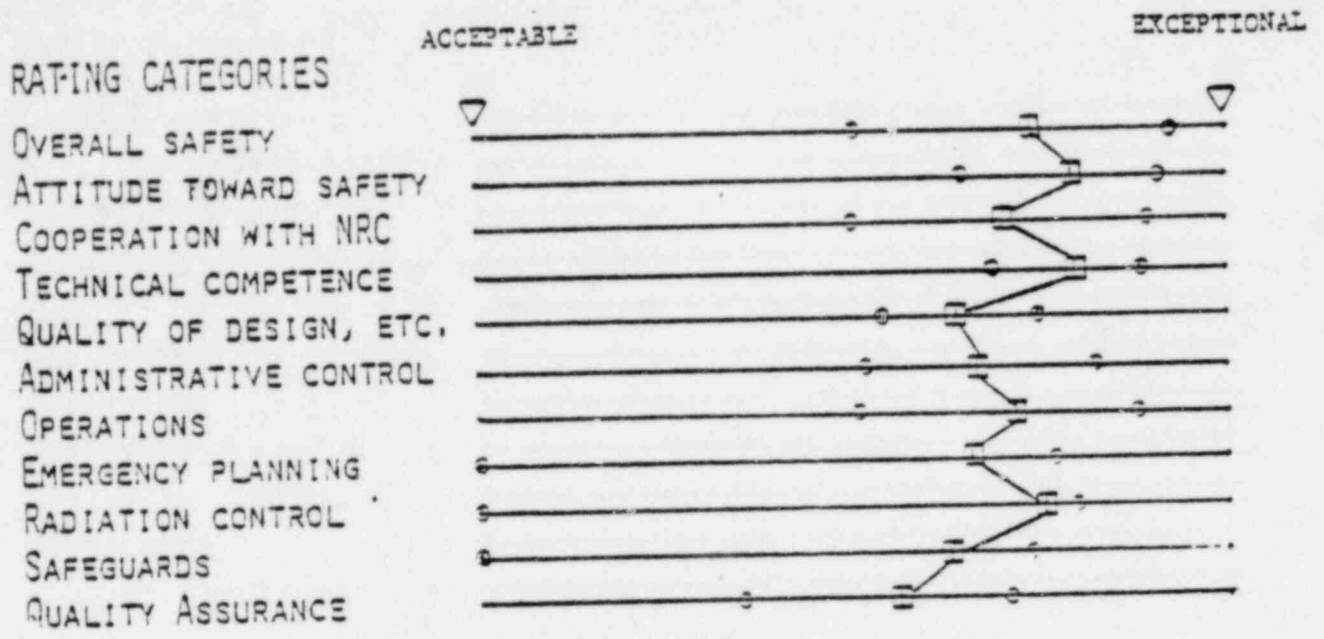
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.9
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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.



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
4.3

STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) =
 (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.....	<u>5</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

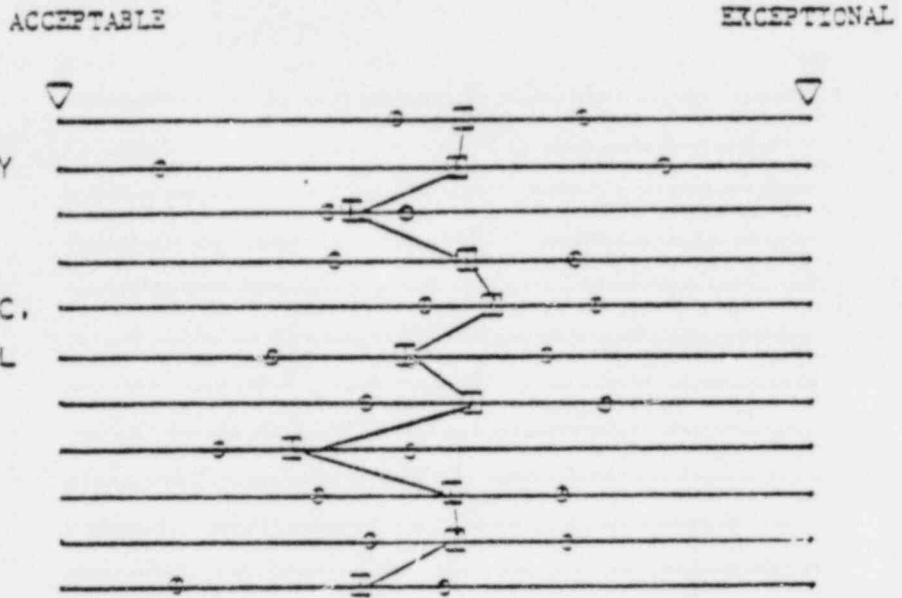
The technical staff is closely integrated with operations and maintenance; this helps prevent safety problems and provides good information.

SITE Arkansas

DOCKET NUMBER 50-313

RATING CATEGORIES

- OVERALL SAFETY
- ATTITUDE TOWARD SAFETY
- COOPERATION WITH NRC
- TECHNICAL COMPETENCE
- QUALITY OF DESIGN, ETC.
- ADMINISTRATIVE CONTROL
- OPERATIONS
- EMERGENCY PLANNING
- RADIATION CONTROL
- SAFEGUARDS
- QUALITY ASSURANCE



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

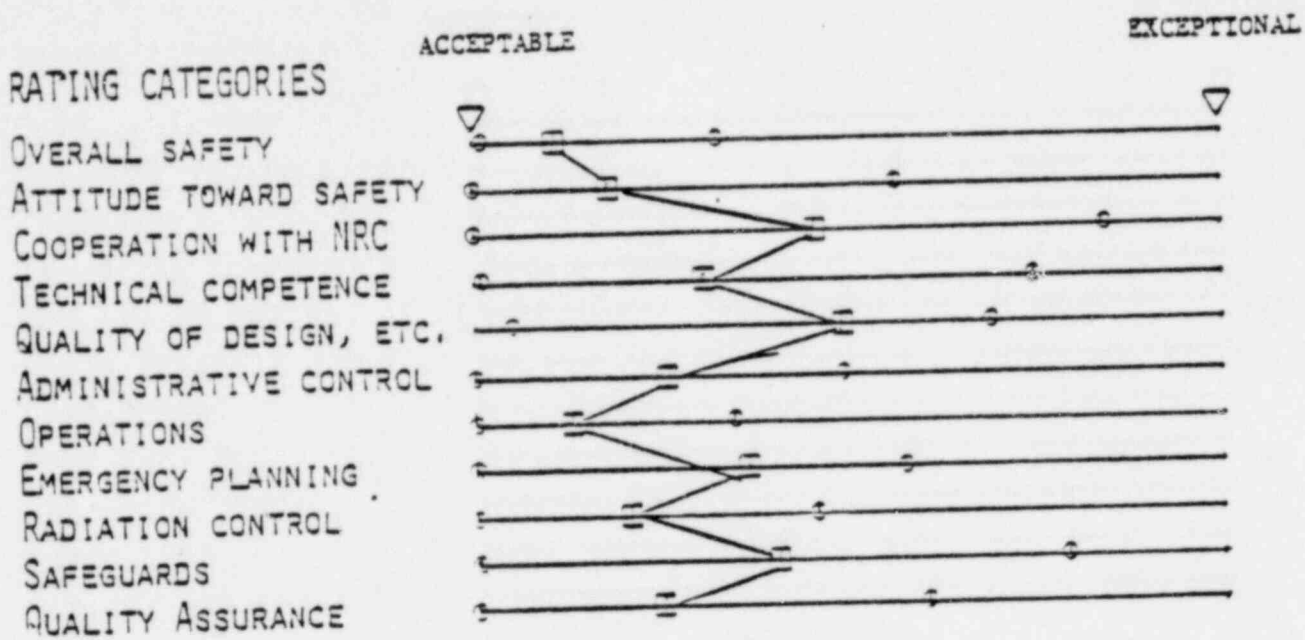
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.5
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

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.



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 = 9.7

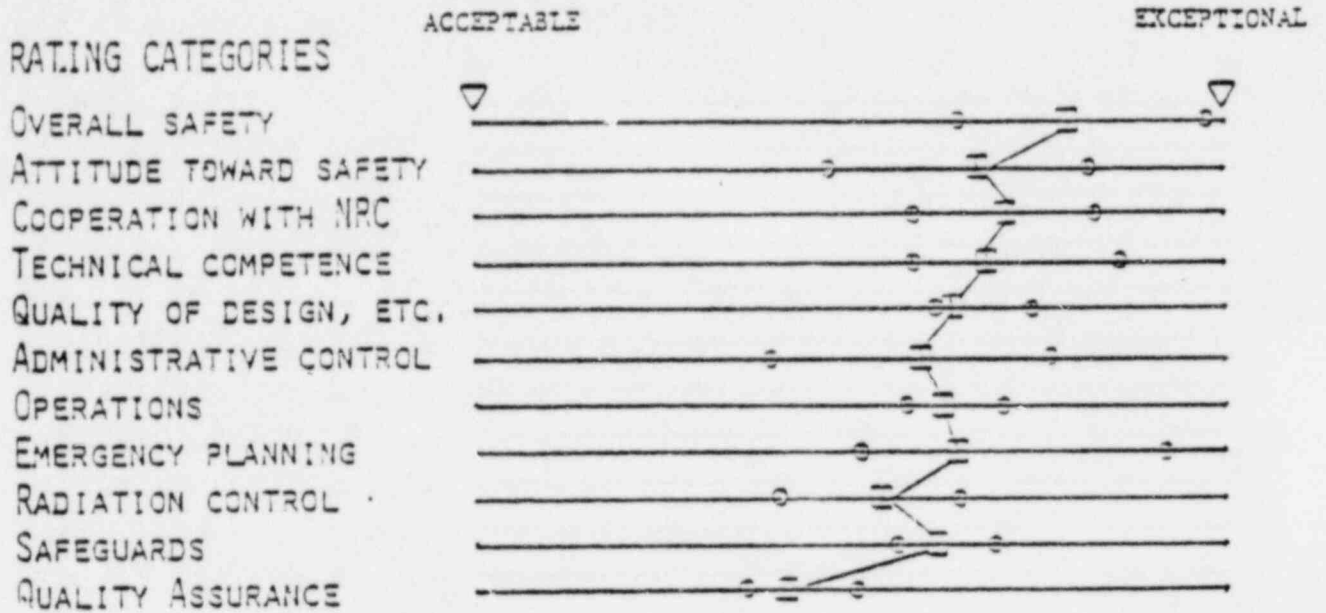
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 4.4
 (1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES;
 7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

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

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.



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

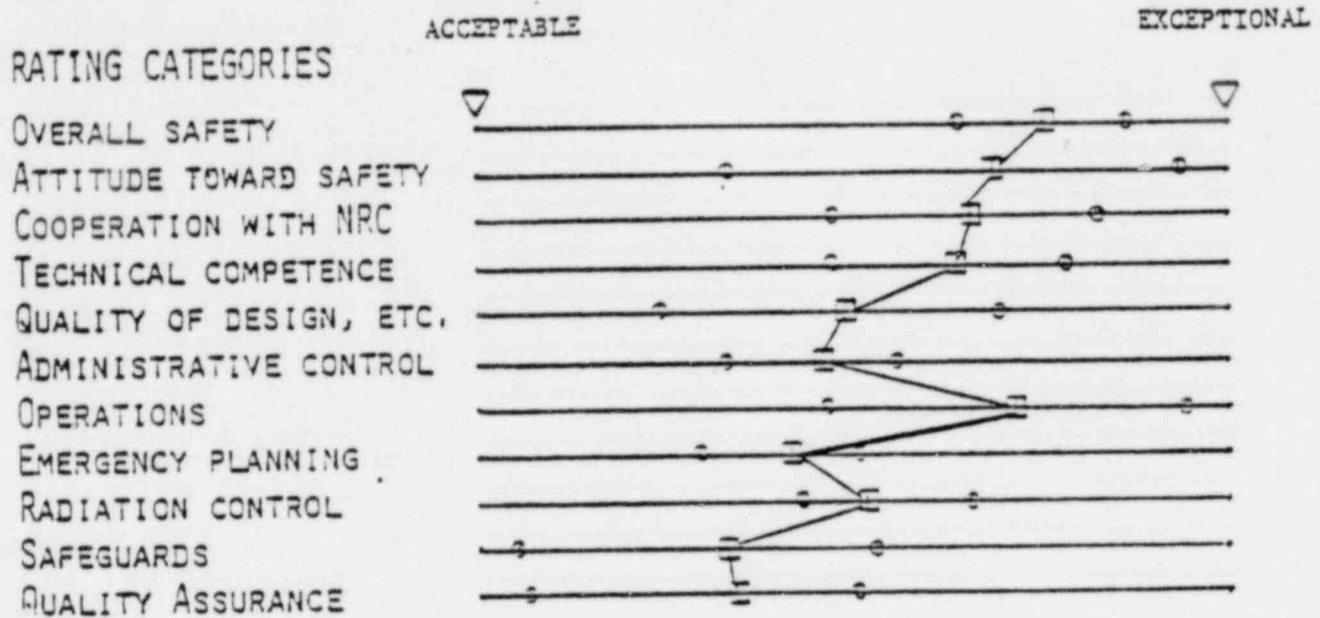
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 3.7
 (1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
 7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

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.



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

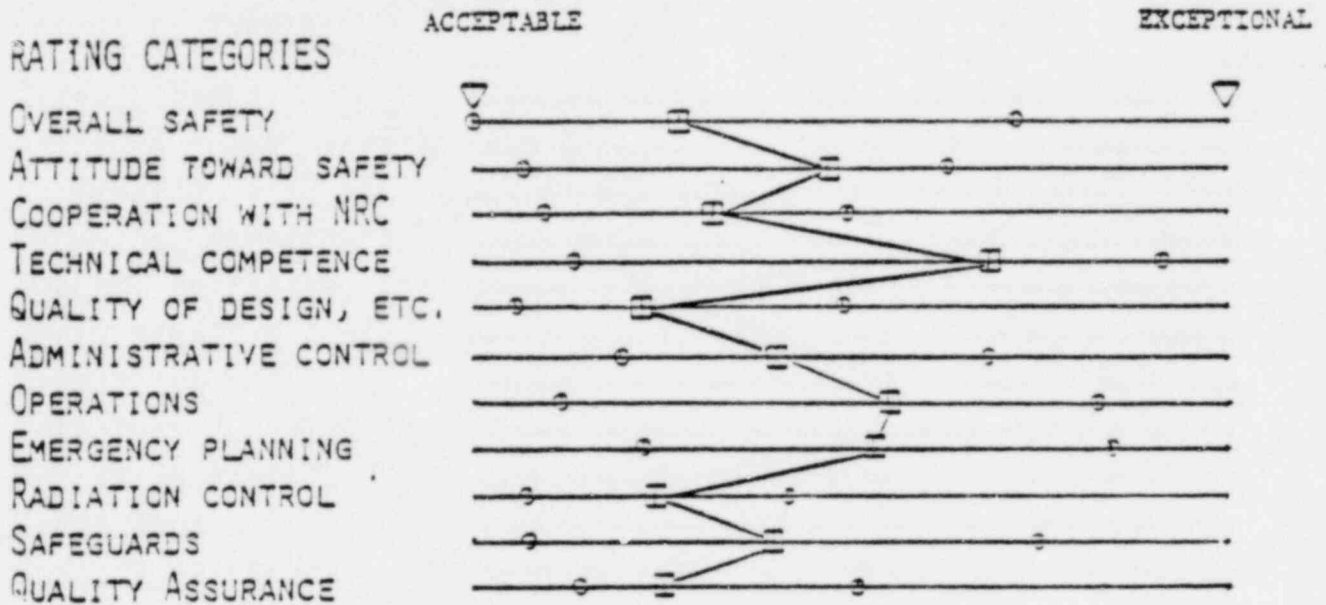
1 = NO CHANGE IN SAFETY.....	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>0</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>1</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

No narrative comments.

SITE Humboldt Bay

DOCKET NUMBER 50-133



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

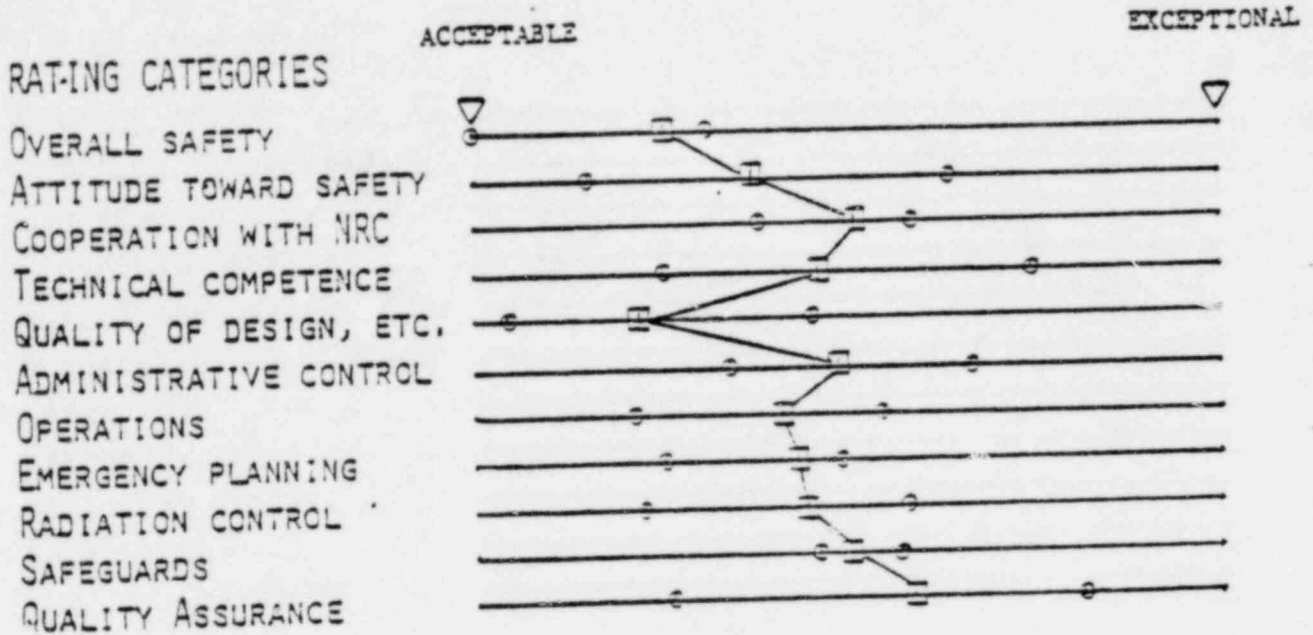
STRINGENCY OF REQUIREMENTS FOR SITE (ON 7 POINT SCALE) = 2.6
(1 = MUCH LESS DEMANDING THAN THOSE OF OTHER SITES,
7 = MUCH MORE DEMANDING THAN THOSE OF OTHER SITES)

INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

1 = NO CHANGE IN SAFETY	<u>3</u>
2 = SAFETY SLIGHTLY IMPROVED	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED	<u>3</u>
4 = SAFETY SLIGHTLY WORSE	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE	<u>0</u>

NARRATIVE STATEMENTS OF CHANGES IN SAFETY AND OTHER SAFETY CONSIDERATIONS

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



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

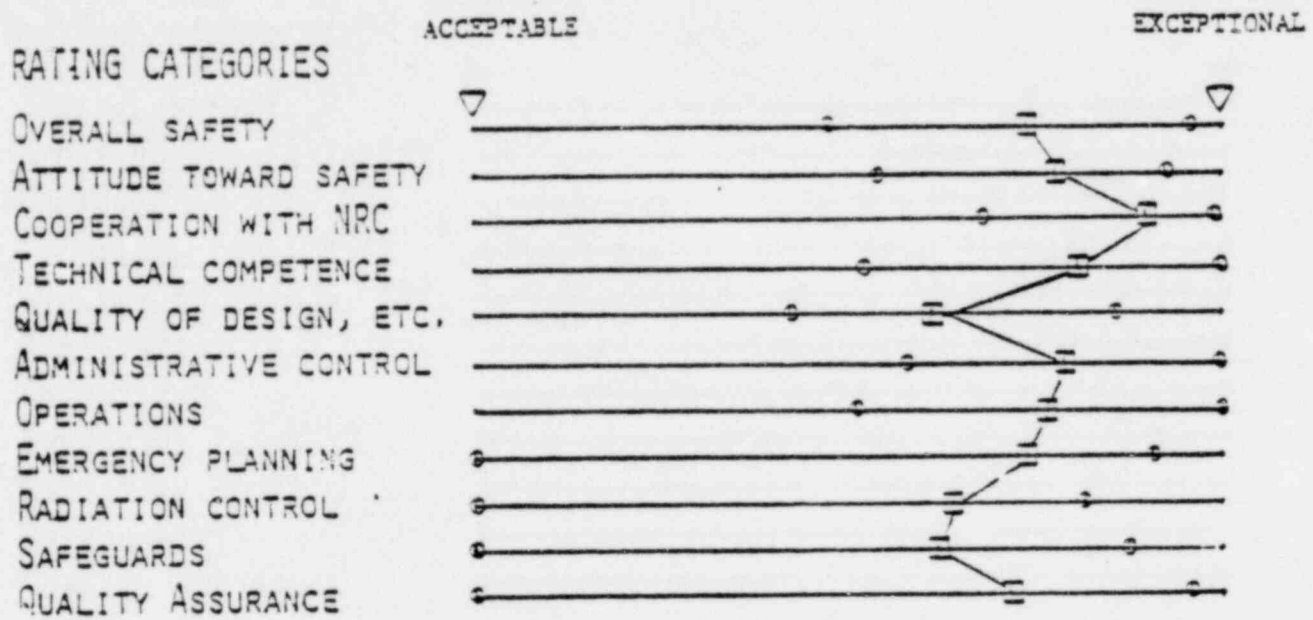
	<u>3</u>
1 = NO CHANGE IN SAFETY.....	<u>1</u>
2 = SAFETY SLIGHTLY IMPROVED.....	<u>1</u>
3 = SAFETY SUBSTANTIALLY IMPROVED.....	<u>0</u>
4 = SAFETY SLIGHTLY WORSE.....	<u>0</u>
5 = SAFETY SUBSTANTIALLY WORSE.....	<u>0</u>

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 San Onofre

DOCKET NUMBER 50-206



NUMBER OF PEOPLE RATING SITE = 3

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)

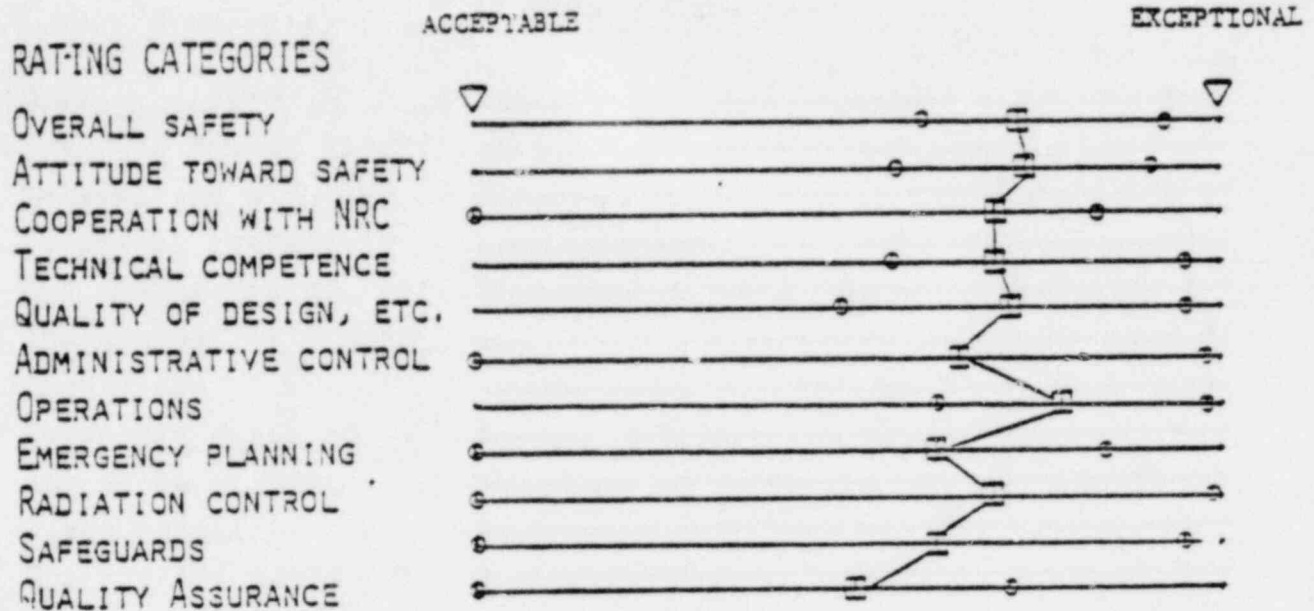
INDICATIONS OF CHANGE IN SITE SAFETY SINCE JANUARY 1977

- 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 organization. Extensive EOCs and seismic codes have been completed.

SITE Rancho Seco
 DOCKET NUMBER 50-312



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.

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.

Changes in level of safety.

Site: Beaver Valley
Docket No.: 50-334

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

QA controls slightly 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.

Site: Calvert Cliffs
Docket No.: 50-317

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.

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.

Site: Connecticut Yankee
Docket No.: 50-213

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

Site: Fitzpatrick
Docket No.: 50-333

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.

Site: Ginna
Docket No.: 50-244

None.

Site: Indian Point
Docket No.: 50-247, 286

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 controls.

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.

Site: Maine Yankee
Docket No.: 50-309

None.

Site: Millstone
Docket No.: 50-245

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.

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

None.

Site: Oyster Creek
Docket No.: 50-219

Imposition of new operational procedures and facility record maintenance system has improved safety.

Installation of storage facility to house torus chromated water - and permit draining of torus.

QA program has been more fully implemented. New storage facilities, new document control center becomes operational.

Substantial upgrading of QA has been, and is, in progress.

Site: Peach Bottom
Docket No.: 50-277

Plant radiation levels have been increasing with time. Design and staffing of plant appear to have not been capable of handling this change. Management has been slow to take large step changes to correct problems.

Back to back overhaul/upkeep periods for units 2 & 3 appear to have produced a tired operating group prone to error.

Careless operations and poor maintenance.

Corrective action taken to repair core spray line cracks, feedwater spargers and nozzles and control rod drive return nozzle.

Licensee made significant effort to reduce routine radioactive release from reactor building vents through equipment repairs.

Site: Pilgrim
Docket No.: 50-293

Improved corporate management. Improved radiation management at site.

Due to instability in plant management. Drift due to lack of management direction.

Refueling outage.

Site: Salem
Docket No.: 50-272

Relatively new plant. Still has growing pains. Needs close attention (by IE) to assure appropriate improvements are made.

Power ascension testing revealed problems that were corrected by management, both in hardware and procedures.

Site: Three Mile Island
Docket No.: 50-289

Increased security by addition of fence surveillance, guard force and search equipment.

Site: Vermont Yankee
Docket No.: 50-271

Management experience and depth is increasing.

Site: Yankee Rowe
Docket No.: 50-029

Issuance of standard Technical Specifications.

Site: Browns Ferry
Docket No.: 50-259

Attention to QA principles seems somewhat less

- a. More experience and exposure of plant personnel = improved safety and operation.
- b. More inspections by NRC
- c. Plant management changes

Improved response to alarms - enforcement meeting

More safety awareness

In fire protection

Site: Brunswick
Docket No.: 50-325

Some improvement in administrative controls. More experience by operating staff.

New management and experience.

Management seemed to become more aware of events at plant.

Site: Hatch
Docket No.: 50-321

Continued upgrading of Adm 8 QA control

Operating experience

Site: Oconee
Docket No.: 50-269

Change in Operating Superintendent should improve situation in next few months.

Site: Robinson
Docket No.: 50-261

Licensee has made increased site commitment to QA/QC.

Site: Saint Lucie
Docket No.: 50-335

Improved due to increased operations, etc., experience of plant personnel over time period involved.

Site: Surry
Docket No.: 50-280

One to degradation of steam generators.

Site: Turkey Point
Docket No.: 50-250

Safety may be slightly worse due to steam generator degradation.

Site: Crystal River
Docket No.: 50-302

More safety awareness

Improved Adm control. Improved Operations awareness.

Site: Arnold
Docket No.: 50-331

Improvement in administrative control and QA program.

New plant superintendent. Stronger enforcement action - increased inspection effort.

Management change.

More awareness regarding significance of personnel error.

Steady improvement in management controls and quality of onsite staff.
Increased attention by engineering and corporate office.

Site: Big Rock Point
Docket No.: 50-155

QA program implementation continuing resulting in an improved plant safety level.

Site: D. C. Cook
Docket No.: 50-315

Increased number of personnel errors and procedural violations occurred during 1977.

Demands placed upon personnel and management due to Unit 2 startup, fire protection and security have brought a decrease in attention and review unit 1 is given. Events are occurring that would not have a year ago.

Site: Dresden
Docket No.: 50-010

Improved training program, and improved QA programs.

Better housekeeping, more attention to detail.

Poor operation, instrumentation problems.

Site: Kewanee
Docket No.: 50-305

None.

Site: LaCrosse
Docket No.: 50-409

Improved QA program

Site: Monticello
Docket No.: 50-263

None

Site: Palisades
Docket No.: 50-255

QA scope implementation continuing resulting in an improved plant safety level.

Improved attention by management toward more timely correction of problems.

Site: Point Beach
Docket No.: 50-266

None.

Site: Prairie Island
Docket No.: 50-282

None.

Site: Quad Cities
Docket No.: 50-254

Improvement in training program, improved QA program, improved radiological program.

Site: Zion
Docket No.: 50-295

Apparent PWR attitude of personnel resulting from marginal management.

Safety reduced as evidenced by loss of DC power and by passing all pressurizer level channels in 1977. Inadequate management controls.

Continued deterioration of management controls.

Nonconformance with technical specifications; failure to adhere to administrative procedure; failure to adhere to operating, emergency, and test procedures; inadequate procedure; operator error; poor overall operating performance; weak overall management.

Procedures improved; administrative procedures improved; better training.

Site: Arkansas
Docket No.: 50-313

Cable penetration barriers and fire proofing of essential and safety cables. Improvement in procedural controls.

Site: Cooper Station
Docket No.: 50-298

None.

Site: Fort Calhoun
Docket No.: 50-285

Site management at this plant is young and they are maturing and recognizing their safety responsibilities.

Site: Fort St. Vrain
Docket No.: 50-267

Cable separation, training program, penetration fire barriers and flammastic on essential and safety related cable. Experience of operating personnel as operation of plant continues.

Based on an IE inspection the licensee has recently had to review the setpoints of his safety systems to determine that instrument and calibration inaccuracies are adequately accounted for in the selected setpoints.

Site: Humboldt Bay
Docket No.: 50-133

Seismic modifications completed during past year.

Seismic modifications have been performed, feedwater sparger has been replaced.

Upgrading structures to new seismic criteria.

The plant has undergone an extensive outage to upgrade the structural integrity of the facility to limit seismic damage.

Plant shutdown for extensive modification in July 1976.

Site: Rancho Seco
Docket No.: 50-312

Overall plant safety increasing with experience of operations organization and management's understanding and knowledge of nuclear plant operations.

Site: San Onofre
Docket No.: 50-246

QA program improvement.

Completed outage which improved their emergency power capability substantially.

Installed emergency diesel generator capacity to carry LOCA load coincident with loss of off-site power. Also, constructed concrete shield around containment vessel.

Extensive ECCS and seismic modifications have been completed.

Installation of onsite emergency power capability.

Site: Trojan
Docket No.: 50-344

Equipment improvements in engineered safety features brought about by operating experiences.

Improving with experience as operating organization and management matures and gains nuclear experience.

QA program implementation onsite has substantially improved by identifying problems before they became issues or items of noncompliance detected by NRC inspectors.

Fire protection program is being implemented.

Improved attitude toward value of QA auditing and initiating corrective measures to correct recurring deficiencies identified from operating experience.

Other things relevant to safety of this site?

Site: Beaver Valley
Docket No.: 50-334

Technical competence of management personnel.

New plant - recently completed full power testing.

Site: Calvert Cliffs
Docket No.: 50-317

The Chief Engineer is anti-NRC, anti-QA.

The operation philosophy of this plant is 2.5 and survive - they don't do anything above that which is required toward 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.

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.

Site: Connecticut Yankee
Docket No.: 50-213

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.

Site: Fitzpatrick
Docket No.: 50-333

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

Site: Fitzpatrick (Continued)
Docket No.: 50-333

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 PANSY - improvements already noted - more anticipated.

Site: Ginna
Docket No.: 50-244

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.

Site: Indian Point
Docket No.: 50-247, 286

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 at full power with question on calibration of nuclear instruments and resolution of read-out available to operations. 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 PANSY 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.

Site: Maine Yankee
Docket No.: 50-309

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. Became effective 8/16/77.

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

Site: Millstone
Docket No.: 50-245

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 gas turbine, acceptance of the feedwater injection system as a high pressure ECCS system. Plant lacks a lot of separation and fire protection systems. Rad waste system undersized.

Inter-relationship between diverse units at single site.

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

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

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 operation and a real high pressure inspection system. Excellent security program.

Site: Nine Mile Point (Continued)
Docket No.: 50-224

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

Nine Mile also has 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.

Site: Oyster Creek
Docket No.: 50-219

Security should be upgraded, i.e., increase capabilities of guard force and surveillance equipment.

Upgrading of requirements, imposition of environmental T.S.

An early generation BWR - its age and generation made it different in inherent safety from facilities - and facility management has been less than willing to endorse in principle a comprehensive management control system - they conform as required rather than aggressively prosecute.

This plant received a poor design review as demonstrated by logic system inadequacies, recently found. Plant was built at minimum cost. Radioactive waste and fire protection are inadequate. Plant lacks system separation.

Management at corporate level has a first-hand technical and working level knowledge of the plant.

Site: Peach Bottom
Docket No.: 50-277

QA program not upgraded to current standards. Security not upgraded. Many repeat items of noncompliance. Least safe plant in RI! Poorest management!

Site: Peach Bottom (Continued)
Docket No.: 50-277

Quality of people (i.e., technical educational level) that are operating a plant and the type of organizational structure they are placed in can have a significant impact on safety.

Higher number of inspections due to proximity to regional office.

Recent management meeting with the President - expect to determine by scheduled inspections in the next 30 days if significant improvements were made.

Plant management exhibits an appearance of attempting to "control" NRC inspector access thru continual escort - general attitude appears to be one of compliance as required instead of an aggressive prosecution of management controls.

The problem with this plant is that it is a big BWR - by definition, they will have problems unless they have a good operating staff. PB does...

Upgrading of requirements upon this license, particularly in cases of security and QA.

Site: Pilgrim
Docket No.: 50-293

Generation of design may be the overriding factor for this early generation BWR.

Have experienced a number of station manager changes.

Recent change in corporate radiological protection and all old fuel is being removed. Significant improvements in reducing effluents and worker exposure expected.

Several changes in upper level management, some instability because of changes.

The cleanest BWR in the country.

Site: Salem
Docket No.: 50-272

The plant control room was designed in-house - it is a disaster waiting to happen.

In startup phase. Have had a number of problems. This can be due either to poor system or poor management or the "normal" failures when new systems are placed into service.

Design of controls with back-lighted pushbuttons results in operator data assessment problems, especially when lights are burned out. Management is aware of problem and IE is following up.

New plant - recently completed full power testing - plant still in early operating phases.

Site: Three Mile Island
Docket No.: 50-289

Pay close attention to performance of newly assigned station and unit superintendents.

This is the first designed B&W plant of this generation. Construction was largely accomplished without aggressive prosecution of nuclear management control. Operation is conducted under strong management control.

The licensing of Unit 2 in 10/77 will have an impact on the site/corporate staffs. In all probability the overall safety may become worse over the year due to this increased workload.

2nd plant in startup places some additional "drag" on operating facility equipment and manpower.


Site: Vermont Yankee
Docket No.: 50-271

Have upgraded QA plan which became effective 8/16/77.

Frequent changes in plant superintendent - has resulted in slight degradation of management controls.

Very clean.

Public interest in events at site.



Site: Yankee Rowe
Docket No.: 50-029

Plant is very small and very isolated - virtually no health hazard to the public exists.

Old plant Tech Specs. New, upgraded QA program became effective 8/16/77.

Site: Browns Ferry
Docket No.: 50-259

Core performance analysis, qualifications of technicians and mechanics who maintain safety equipment.

Site: Brunswick
Docket No.: 50-325

The training or experience of senior site management - none of the top three have had SRO training in BWRs. The plant has had a very high personnel turnover rate. Consequently, the staff is young for the responsibilities needed. Corporate management apparently still has not faced up to what this inexperience costs in safety and efficiency. They appear to believe they are being over-regulated.

Qualifications of technicians and mechanics that maintain safety equipment.

All pre-op testing must be completed prior to licensing.

Site: Hatch
Docket No.: 50-321

Qualifications of technicians and mechanics that maintain safety equipment.

Site: Oconee
Docket Number: 50-269

Qualifications of technicians and mechanics that maintain safety equipment. Maintenance of test equipment.

Site: Robinson
Docket No.: 50-261

Low number of LERs reflects attitude of reporting only items that are conspicuously reportable. Licensee impedes IE freedom of movement and access at site. No information freely given. Definite attitude of do only what is required.

Qualifications of technicians and mechanics that maintain safety systems.

Site: Saint Lucie
Docket No.: 50-335

This plant has more than average number of LER's. I believe this is due to Licensee's determination to report all possibly reportable items rather than poor performance.

Site: Surry
Docket No.: 50-280

None.

Site: Turkey Point
Docket No.: 50-250

Qualifications of technicians and mechanics that maintain safety equipment.

Site: Crystal River
Docket No.: 50-302

None.

Site: Arnold
Docket No.: 50-331

Site: Big Rock Point
Docket No.: 50-155

On original BWR - Design, operation relatively uncomplicated. Closeness of operating staff.

Site: Big Rock Point (Continued)
Docket No.: 50-155

General safety of older plants.

Plant personnel qualifications have improved (technical capability) monthly.

Site: D. C. Cook
Docket No.: 50-315

One plant in operations the other in startup. Plant using standardized Tech Specs.

Resident inspector stationed thru 74-77.

Design, its newer with greater indepth protection.

Site: Dresden
Docket No.: 50-010

See Zion comments.

U-1 is a 200 MWe plant while U-2&3 are 800 MWe each - U-1 will never receive priority at the management level - One should also consider the manpower availability on site.

Site: Kewanee
Docket No.: 50-305

Resident Inspector assigned 74-76.

Very stable and competent plant management; overall good operating performance; strong safety attitude.

Site: LaCrosse
Docket No.: 50-409

Part 115 plant (AEC developmental reactor) small utility - limited technical staff with minimal corporate backup - difficult to absorb costly NRC regulations.

Site: Monticello
Docket No.: 50-263

None

Site: Palisades
Docket No.: 50-255

Utility constantly confronted by intervention - legal challenge from the outside.

Effectiveness of management controls. Resident inspection assigned 74-77.

Site: Point Beach
Docket No.: 50-266

This plant is of older design with its management attitudes it would be above exceptional if designed like present day.

Disciplined staff, well motivated, pride which includes their ability to positively criticize the NRC in matters which distract from their ability to conduct their plant operations.

The exceptional strength of plant management in all areas. The total team effort in all matters - the excellence of all personnel attitude in regard to safe plant operation.

Site: Prairie Island
Docket No.: 50-282

The technical staff is closely integrated with operations and maintenance. This helps resolve problems before safety concerns develop and provides good information where failures have occurred.

Site: Quad Cities
Docket No.: 50-254

See Zion comments.

The licensee has been "overinspected" by NRC and state for the past 2 or 3 years. The plant cannot operate at design load because of an agreement with the state to operate with a closed cycle cooling canal, after the plant was built as designed for once thru cooling. This affects plant operation and also attitudes of operators.

Site: Zion
Docket No.: 50-295

Lack of management. Ability of discipline employees for operators error/carelessness.

Management - union interface and its effect on selection of personnel and disciples. Attitude and support from support engineering and corporate management to resolve operating equipment problems. Corporate management involvement in plant operations. Corporate management attitudes and followup.

Part of a complex nuclear commitment which carries with it the management problems associated with "bigness." Stability of staff a continuous problem.

Overall attitude regarding safety is not strong. Lax operating performance and attitude.

Adequacy of training program; number of personnel errors resulting in significant problems.

Site: Arkansas
Docket No.: 50-313

Unit 2 which is soon to be operational will be managed by the same size management as that which controls Unit 1. I feel this practice considerably dilutes management's control over these plants.

Upgrade technical specifications to standard T/S.

Site: Cooper Station
Docket No.: 50-298

None.

Site: Fort Calhoun
Docket No.: 50-285

Top management (Board of Directors) have an anti-nuclear attitude which is upsetting to site personnel and management. Since there is a correlation between morale and job satisfiers, I am concerned about this situation. This concern is due to the fact that morale affects employee safety practices more than production.

Site: Fort St. Vrain
Docket No.: 50-267

First of a kind - fits the category of a demonstration site.

The basic design and configuration of the HTGR introduces a completely different set of parameters and accidents to be considered in plant safety.

This is a one of a kind HTGR. The existing regulatory guides, standards, etc., do not apply to this plant. The existing Technical Specifications need to be completely revised.

Site: Humboldt Bay
Docket No.: 50-133

The other matters I feel are necessary to consider are being pursued by NRR - they include adequacy of ECCS, single failure design and gaseous effluent treatment.

The plant would be hard pressed to meet any of today's criteria for nuclear plant safety.

No opinion.

New Technical Specifications.

Adequacy of seismic design, ECCS and reactor protection system. Results of analyzing these safety questions could change (significantly) my rating of overall plant safety.

Site: Rancho Seco
Docket No.: 50-312

Not that I'm aware of.

Site: San Onofre
Docket No.: 50-246

This company should be studied to determine how and why their management has been so successful in instilling good safety attitudes and habits so uniformly thru their organization.

Site: Trojan
Docket No.: 50-344

Active role of State of Oregon in attempting to regulate this plant could have an effect on safety - possibility of contradictory requirements and demands of federal/state agencies.

SK Conner
1978

IE EMPLOYEE SURVEY ON EVALUATION OF LICENSEES

PURPOSE - TO OBTAIN INSIGHT INTO MAJOR EVALUATION ISSUES

- o SHOULD NRC EVALUATE LICENSEES?
- o IF SO, HOW SHOULD EVALUATIONS BE DONE?
- o HOW DO EMPLOYEES ASSESS SAFETY OF OPERATING PLANTS?

178-03-03

RESEARCH METHODOLOGY

- o DESIGN OF QUESTIONNAIRE
 - TECHNICAL INPUT - IE STAFF
 - SURVEY EXPERTISE - HAY ASSOCIATES

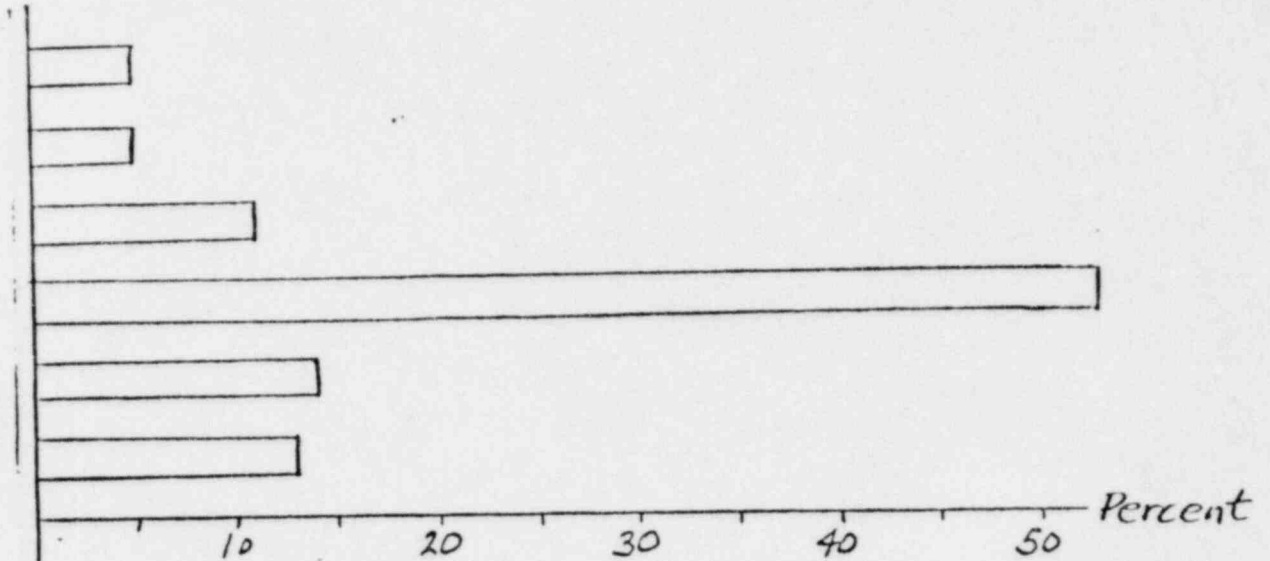
- o TYPES OF QUESTIONS
 - SEVEN POINT LIKERT SCALE
 - "DRAW A LINE" CONTINUUM
 - MULTIPLE CHOICE
 - NARRATIVE

- o SURVEY PROCEDURES
 - DISTRIBUTED BY REGIONAL AND HQ MANAGEMENT
 - ANONYMOUS RESPONSES MAILED TO HAY
 - RESULTS COMPLIED BY HAY

POSITIONS AND DUTY LOCATIONS OF RESPONDENTS

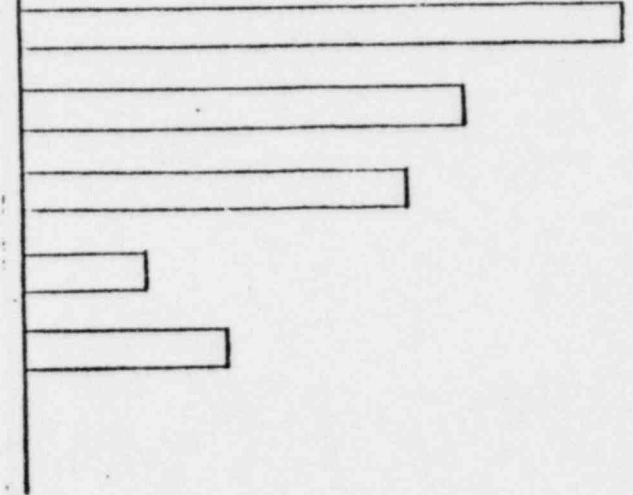
Positions

Regional Director
Branch Chief
Section Chief
General Inspector
Technical Inspector
Headquarters Staff

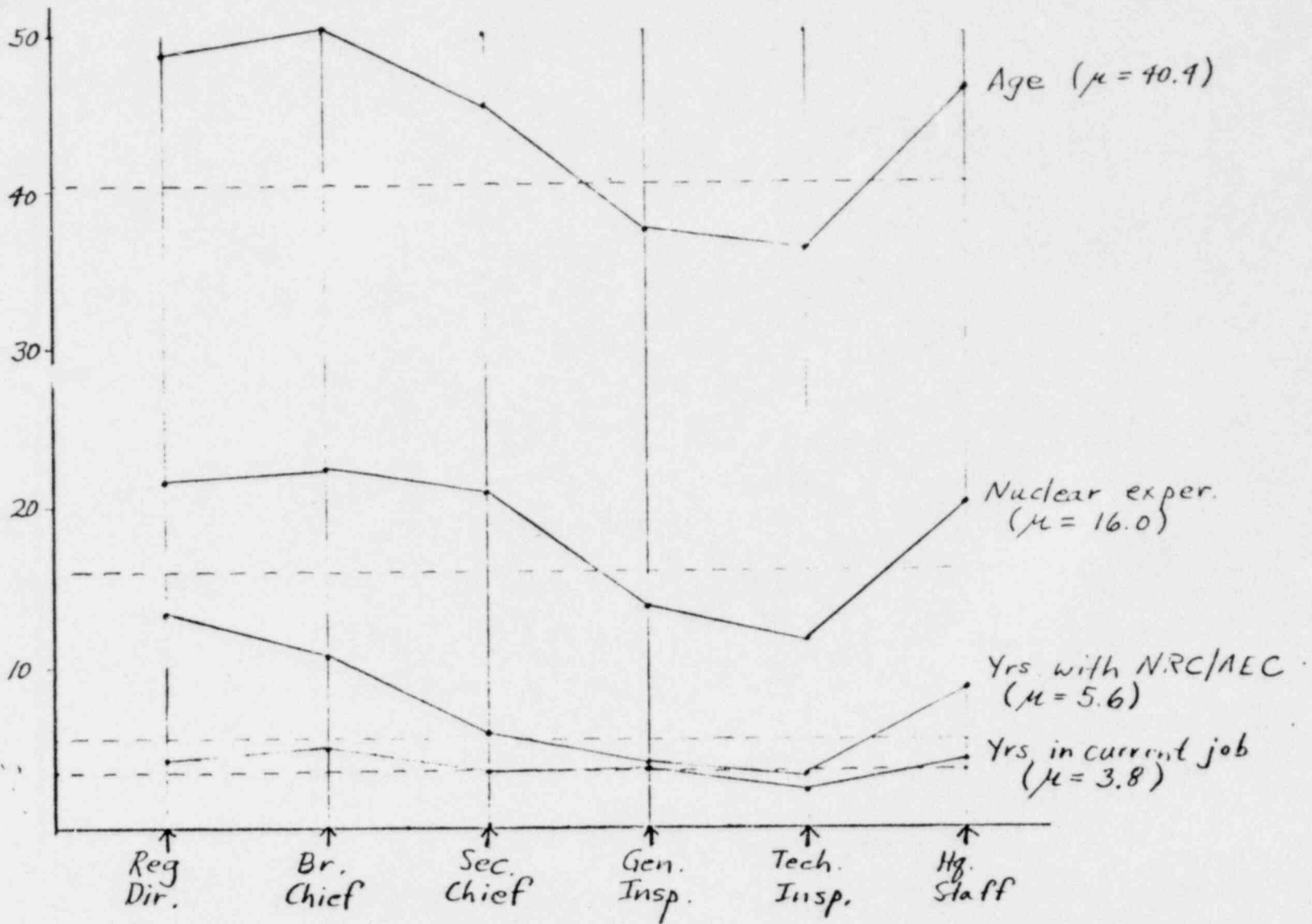


Places of Duty

Region 1
Region 2
Region 3
Region 4
Region 5
Headquarters



AGE AND EXPERIENCE OF RESPONDENTS



SHOULD NRC EVALUATE LICENSEES?

O MAJORITY IN FAVOR

- 68% YES

- 25% NO

O BY POSITION, ONLY BRANCH CHIEFS DISFAVOR

O RESERVATIONS AND UNCERTAINTIES

- USE OF INDICATORS

- DIFFERENCES IN REQUIREMENTS AND INSPECTIONS

- PUBLIC MISUSE OF EVALUATIONS

O EVALUATION INFORMATION WOULD BE USEFUL

- LICENSEE IMPROVEMENT

- INTERNAL NRC MANAGEMENT

SHOULD NRC EVALUATE LICENSEES?

SUMMARY

- 0 SHOULD EVALUATE
- 0 RESULTS WOULD BE USEFUL
- 0 MUST BE CAREFUL HOW WE DO IT

HOW SHOULD EVALUATIONS BE DONE?

COMPLIANCE = SAFETY?

- O RESPONDENTS BELIEVE PLANTS DIFFER IN TERMS OF SAFETY
 - 87% AGREE THAT SOME PLANTS SAFER THAN OTHERS
 - 89% DISAGREE THAT ALL PLANTS IN COMPLIANCE ARE EQUALLY SAFE
 - 75 POINT RANGE IN SITE RATINGS (100 POINT SCALE)

- O RESPONDENTS NOT SURE IF COMPLIANCE IS NECESSARY FOR SAFETY
 - 41% YES
 - 42% NO

- O RESPONDENTS DO NOT THINK COMPLIANCE IS SUFFICIENT FOR SAFETY
 - 19% YES
 - 67% NO

HOW SHOULD EVALUATIONS BE DONE?

- o CONTENT - WHAT FACTORS IMPORTANT?
- o MEASUREMENT METHODS - WHO SHOULD EVALUATE?
- o MECHANICS -
 - ABSOLUTE VERSUS RELATIVE
 - SITE VERSUS PLANT
 - HOW OFTEN?

HOW SHOULD EVALUATIONS BE DONE?

CONTENT

- o ALMOST ALL FACTORS CONSIDERED IMPORTANT (31 OF 45)
- o FACTORS CONSIDERED VERY IMPORTANT
 - INCLUDE MANAGEMENT AND TECHNICAL COMPETENCY
 - ARE DIRECT MEASURES OF OPERATIONS AND CONSTRUCTION ACTIVITIES
 - ARE NOT "SITUATION DEPENDENT"
 - ARE NOT DIRECTLY MEASURABLE
- o FACTORS CONSIDERED SOMEWHAT IMPORTANT
 - INCLUDE NONCOMPLIANCES AND THEIR CAUSES
 - ARE SOMEWHAT "SITUATION DEPENDENT"
 - ARE GENERALLY MORE MEASUREABLE

HOW SHOULD EVALUATIONS BE DONE?

MEASUREMENT METHODS

- o INSEPCION RESULTS ALONE NOT CONSIDERED AN ADEQUATE BASIS FOR SAFETY ASSESSMENT (50% TO 32%)

- o STRONG AGREEMENT THAT EVALUATIONS MUST INCLUDE INSPECTOR JUDGMENTS (81% TO 11%)

- o CAPABILITY OF EVALUATING PLANTS (IN ORDER)
 - PRINCIPAL INSPECTORS
 - SECTION CHIEFS
 - GENERAL INSPECTORS (OTHER THAN P.I.)
 - BRANCH CHIEFS, TECHNICAL INSPECTORS
 - REGIONAL DIRECTORS

HOW SHOULD EVALUATIONS BE DONE?

MECHANICS

- o USE BOTH RELATIVE AND ABSOLUTE MEASURES (63%)

- o EVALUATE ON A SITE, RATHER THAN PLANT, BASIS (59%)

- o EVALUATE EVERY ONE (39%) OR TWO (40%) YEARS

SAMPLE RATING SHEET AND RANGE OF RESPONSES

OPERATING SITE: _____

NAME: _____

DOCKET NO.: _____

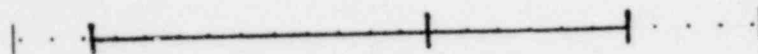
Considering all you know about this site, what overall general safety rating would you give to it? Draw a line indicating how safe you think this site is.

SAFETY

ACCEPTABLE

EXCEPTIONAL

1. Overall safety



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

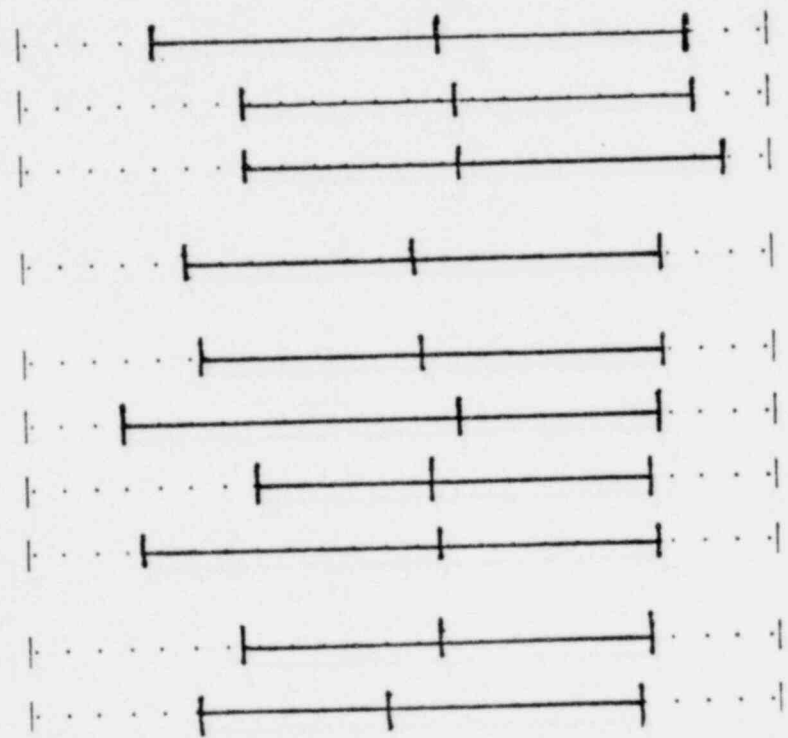
SAFETY

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



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.

RATINGS OF REGION I SITES

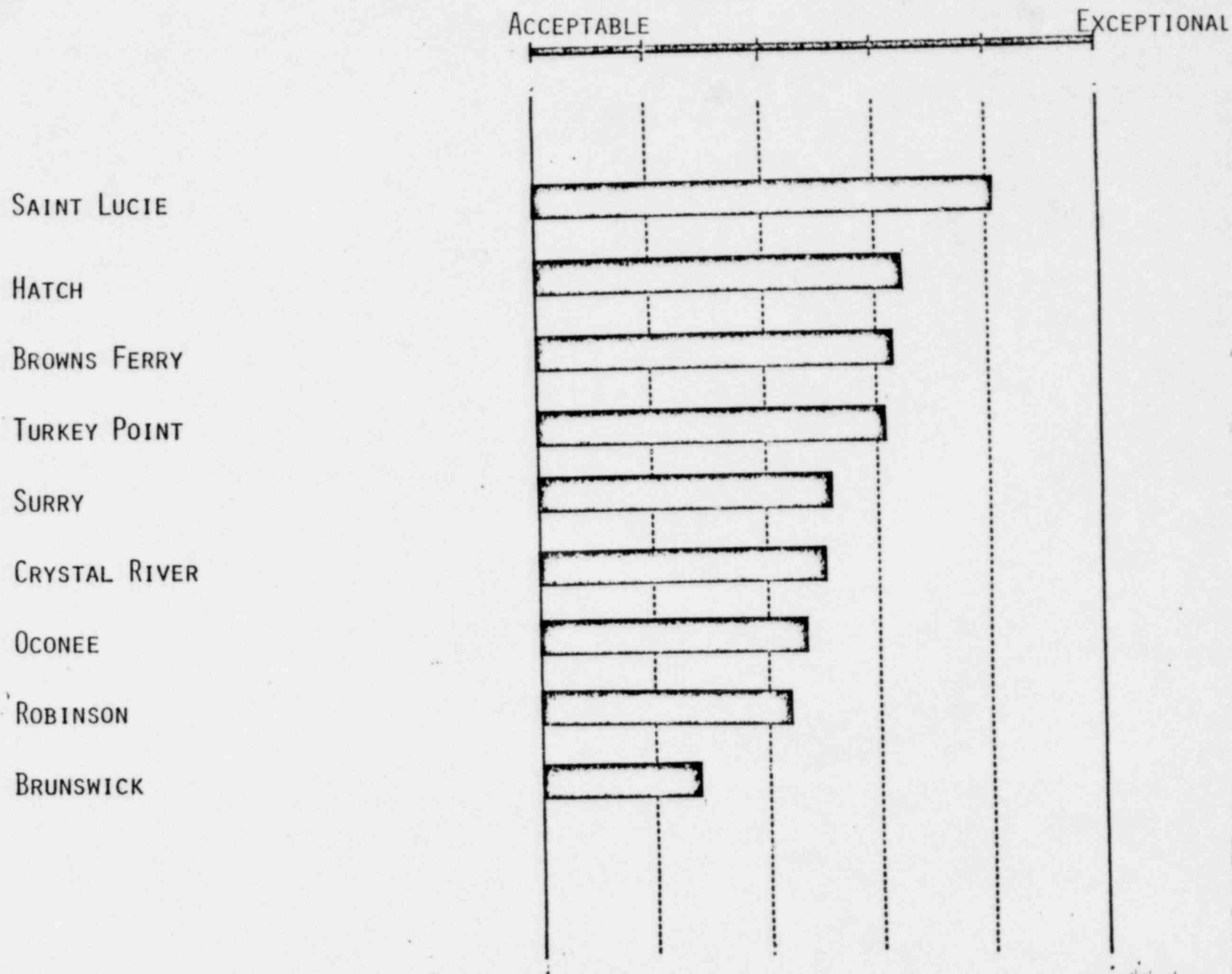
ACCEPTABLE

EXCEPTIONAL

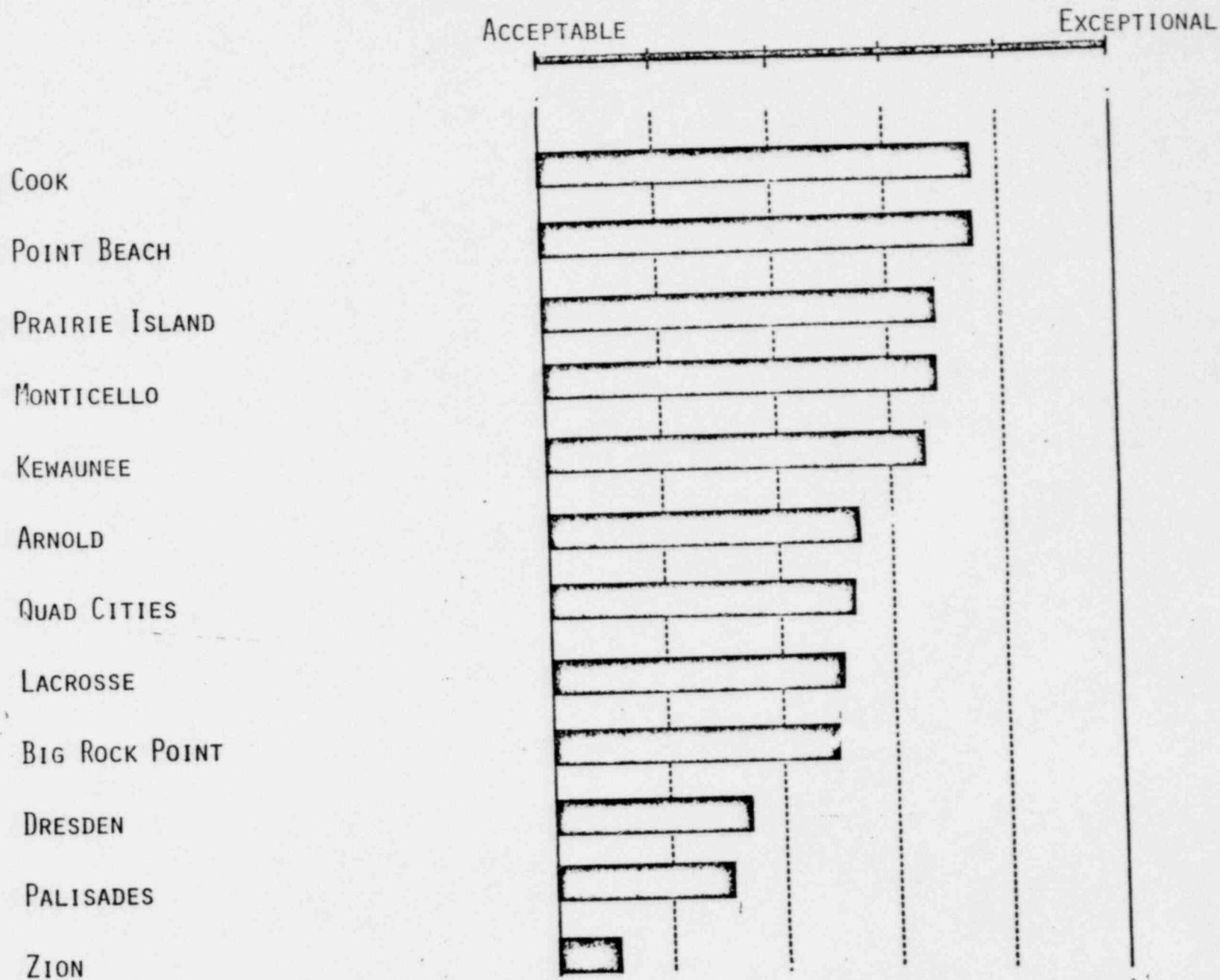
CONNECTICUT YANKEE
GINNA
THREE MILE ISLAND
YANKEE ROWE
MAINE YANKEE
FITZPATRICK
MILLSTONE
CALVERT CLIFFS
PILGRIM
NINE MILE POINT
OYSTER CREEK
BEAVER VALLEY
SALEM
PEACH BOTTOM
INDIAN POINT



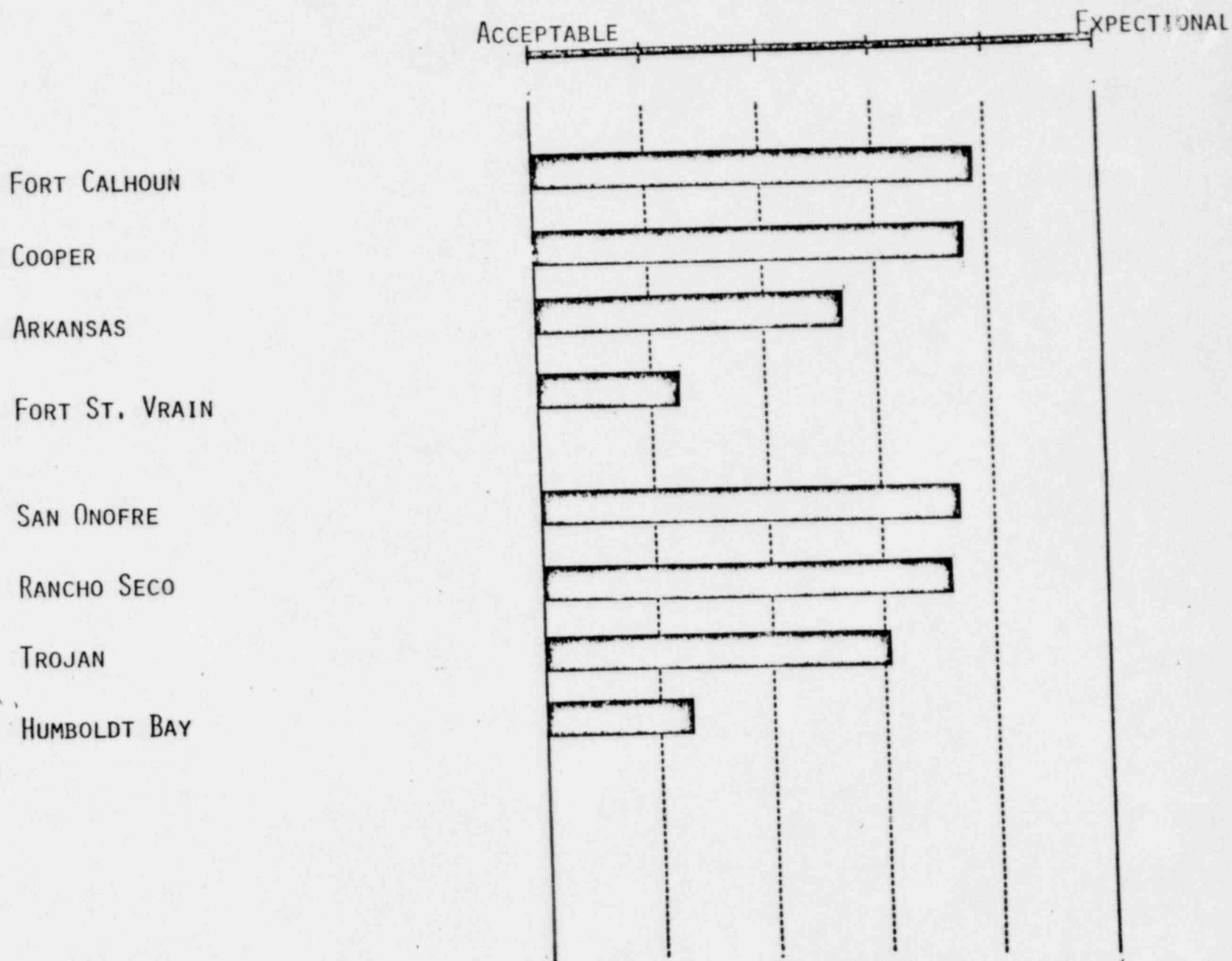
RATINGS OF REGION II SITES



RATINGS OF REGION III SITES



RATINGS OF REGION IV AND V SITES



SITE RATING DEMOGRAPHICS

<u>REGION</u>	<u>AVERAGE NUMBER OF RATERS PER SITE</u>	<u>AVERAGE NUMBER OF MONTHS SINCE LAST INSPECTION</u>	<u>AVERAGE FAMILIARITY WITH SITE*</u>
1	13.0	7.5	5.2
2	6.3	9.1	5.0
3	8.4	8.4	4.9
4	4.0	3.4	5.2
5	7.5	5.1	5.5

*ON SEVEN POINT SCALE, 1 = HARDLY FAMILIAR AT ALL, 2 = VERY FAMILIAR

FUTURE PLANS

- 0 BRIEFINGS
 - HQ STAFF
 - REGIONS

- 0 TECHNICAL REPORT
 - EXECUTIVE SUMMARY
 - SUPPORTING DETAIL
 - DETAILED SITE RATING INFORMATION

- 0 FOLLOW-ON SURVEY (?)

AUG 29 1979

Distribution:
s/f
ODTLynch ✓
FJMiraglia
RDeYoung

MEMORANDUM FOR: Victor Stello, Jr., Director
Division of Operating Reactors

FROM: Richard C. DeYoung, Deputy Staff Director
NRC/TMI/Special Inquiry Group

SUBJECT: MEETING WITH NRC REGIONAL INSPECTORS TO DISCUSS
LICENSEE RADIATION PROTECTION PROGRAMS FOR
NUCLEAR POWER PLANTS

The Three Mile Island Special Inquiry Group is examining, in general, the Health Physics programs of the various utilities operating nuclear power plants. This will enable us to evaluate the TMI program in relation to other utilities. In pursuit of this inquiry we would like to discuss the radiation protection programs of nuclear power plant licensees with various NRC regional inspectors knowledgeable in this area and familiar with the utilities in their respective regions.

In order to accomplish this task we request the following I&E personnel attend a meeting with the Special Inquiry Staff to discuss the subject at our offices on Arlington Road, beginning at 9:00 a.m. on Tuesday, September 25 and continuing thru Wednesday, September 26, 1979.

G. Yuhas RO-I
D. Neely RO-I
A. Gibson RO-II
W. Fisher RO-III
B. Murray RO-IV
F. Wenslawski RO-V

The elements of the licensees program to be discussed at the meeting are provided in the attached agenda. Each individual should be prepared to make a presentation on the situation in his region.

If you have any questions regarding the above, please contact F. J. Miraglia on 2-8936.

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Richard C. DeYoung, Deputy Staff Director
NRC/TMI/Special Inquiry Group

Attachment:
As stated

OFFICE	NRC/TMI/SIG3	NRC/TMI/SIG			
SURNAME	ODTLynch	RDeYoung			
DATE	8/29/79	8/29/79			

MEETING WITH NRC I & E INSPECTORS
ON LICENSEE RADIATION PROTECTION PROGRAMS

AGENDA

Management of Radiation Protection Programs

Procedures
Personnel Exposure Control and Allocation
Access Control to Restricted Areas

Training

Basic Radiation Protection
Familiarity with Use of Equipment
Qualification Testing
Retraining
Requalification Testing
Drills
Records

Personnel Dosimetry

Personnel Exposure and Contamination Experience

Instrumentation (Portable and Fixed)

Type
Calibration
Maintenance
Issue Control
Quantity

Contamination Control

Personnel
Equipment
Area

Emergency Planning

Environmental Monitoring

Exposure Measurements
Systems
Locations

Sampling
Media
Locations

General Impressions