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SUBJECT: Forwards LER quality evaluation for plant from Nov 1985 - June 1987 as part of SALP program. Quality of submittals has decreased from first evaluation.

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August 4, 1987

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Docket No. 50-261  
License No. DPR-23

Carolina Power and Light Company  
ATTN: Mr. E. E. Utley  
Senior Executive Vice President  
Power Supply and Engineering  
and Construction

P. O. Box 1551  
Raleigh, NC 27602

Gentlemen:

The Nuclear Regulatory Commission's (NRC) Office for Analysis and Evaluation of Operational Data (AEOD) has recently completed an assessment of your Licensee Event Reports (LERs) for Robinson as a part of the NRC's Systematic Assessment of Licensee Performance (SALP) program. This assessment was performed to support a SALP period of November 1, 1985, to June 30, 1987, and is being forwarded at this time for your use and information in order to pattern future submittals.

The summary to the report highlights the findings of the evaluation. This is the second evaluation of Robinson LERs. The first evaluation showed a need for substantial improvement in LER quality and the present evaluation shows that, with the exception of abstract quality, there has been no improvement in this regard. In fact, in many important areas, such as discussions of safety consequences, personnel errors, safety system responses, and identification of failed components, the quality has decreased from the first evaluation.

Please let us know if you have any questions.

Sincerely,

Original Signed by  
Luis A. Reyes

Luis A. Reyes, Director  
Division of Reactor Projects

Enclosure:  
LER Quality Evaluation for  
Robinson 2

cc w/encl:  
✓ P. Beatty, Jr., Vice President  
Robinson Nuclear Project Department  
✓ R. E. Morgan, Plant General Manager

bcc w/encl: (See page 2)

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ENCLOSURE

LICENSEE EVENT REPORT (LER)  
QUALITY EVALUATION FOR  
ROBINSON 2  
DURING THE PERIOD FROM  
NOVEMBER 1 1985 TO JUNE 30 1987

## SUMMARY

An evaluation of the content and quality of a representative sample of the Licensee Event Reports (LERs) submitted by Robinson 2 during the period from November 1, 1985 to June 30, 1987 was performed. This evaluation provides an overview of the quality of the LERs by comparing their contents to the report requirements of 10 CFR 50.73(b) and the guidelines contained in NUREG-1022 and its Supplements Nos. 1 and 2.

This is the second time the Robinson 2 LERs have been evaluated using this methodology. The results of this evaluation indicate that the overall quality of the Robinson LERs, for the three areas that are evaluated (i.e., the text, abstract, and coded fields), has remained virtually unchanged from the previous evaluation. The first evaluation's overall average LER score was 7.1, compared with an industry average of 7.6 at that time. For the current evaluation, the overall average LER score is 7.7 compared with the current industry average of 8.4. This indicates that, while the licensee has made some progress in LER quality, (primarily in the area of abstracts) he has not kept pace with the overall industry effort to provide LERs of consistently high quality.

The most significant deficiencies found in this evaluation involve the requirements to provide information concerning corrective actions, safety consequences, and personnel errors, safety system response, and identification of failed components. Compared to the previous evaluation, the quality of the corrective actions discussion remained unchanged but the quality of the discussions concerning the safety consequences, personnel error, safety system responses, and the identification of failed components has decreased. In addition, while the average abstract score increased significantly since the previous evaluation, adequate root cause and corrective actions information is still not being included in many of the abstracts.

# LER QUALITY EVALUATION FOR ROBINSON 2

## INTRODUCTION

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Robinson 2 during the period from November 1, 1985 to June 30, 1987, a sample of the unit's LERs was evaluated. This evaluation was performed by comparing the contents of each LER to the reporting requirements of 10 CFR 50.73(b) and the guidelines contained in NUREG-1022<sup>1</sup> and its Supplements Nos. 1<sup>2</sup> and 2.<sup>3</sup> The sample consists of a total of 15 LERs, which is considered to be the maximum number of LERs necessary to be evaluated for a unit/station. See Appendix A for a list of the LER numbers in the sample.

This is the second time the Robinson 2 LERs have been evaluated using this methodology. As before, it was necessary to start the evaluation before the end of the assessment period because the input was due such a short time after the end of the assessment period. Therefore, any LERs prepared by the unit later in the assessment period were not available for selection.

## METHODOLOGY

The evaluation consists of a detailed review of each selected LER to determine how well the content of its text, abstract, and coded fields meet the criteria of 10 CFR 50.73(b). In addition, each selected LER is compared to the guidance for preparation of LERs presented in NUREG-1022 and Supplements No. 1 and 2 to NUREG-1022; based on this comparison, suggestions were developed for improving the quality of the LERs. The purpose of this evaluation is to provide feedback to improve the quality of LERs. It is not intended to increase the requirements concerning the "content" of these reports beyond the current requirements of 10 CFR 50.73(b). Therefore, statements in this evaluation that suggest measures be taken are not intended to increase requirements and should be

viewed in that light. However, the minimum requirements of the regulation must be met.

The evaluation process for each LER is divided into two parts. The first part of the evaluation consists of documenting comments specific to the content and presentation of each LER. The second part consists of determining a score (0-10 points) for the text, abstract, and coded fields of each LER.

The LER specific comments serve two purposes: (1) they point out what the analysts considered to be the specific deficiencies or observations concerning the information pertaining to the event, and (2) they provide a basis for a count of general deficiencies for the overall sample of LERs that was evaluated. Likewise, the scores serve two purposes: (1) they serve to illustrate in numerical terms how the analysts perceived the content of the information that was presented, and (2) they provide a basis for determining an overall score for each LER. The overall score for each LER is the result of combining the scores for the text, abstract, and coded fields (i.e.,  $0.6 \times \text{text score} + 0.3 \times \text{abstract score} + 0.1 \times \text{coded fields score} = \text{overall LER score}$ ).

The results of the LER quality evaluation are divided into two categories: (1) detailed information and (2) summary information. The detailed information, presented in Appendices A through D, consists of LER sample information (Appendix A), a table of the scores for each sample LER (Appendix B), tables of the number of deficiencies and observations for the text, abstract and coded fields (Appendix C), and comment sheets containing narrative statements concerning the contents of each LER (Appendix D). When referring to Appendix D, the reader is cautioned not to try to directly correlate the number of comments on a comment sheet with the LER scores, as the analysts have flexibility to consider the magnitude of a deficiency when assigning scores (e.g., the analysts sometimes make comments relative to a requirement without deducting points for that requirement).

## RESULTS

A discussion of the analysts' conclusions concerning LER quality is presented below. These conclusions are based solely on the results of the evaluation of the contents of the LERs selected for review and as such represent the analysts' assessment of the unit's performance (on a scale of 0 to 10) in submitting LERs that meet the criteria of 10 CFR 50.73(b) and the guidance present in NUREG-1022 and its supplements.

Table 1 presents the average scores for the sample of LERs evaluated for the unit. In order to place the scores provided in Table 1 in perspective, the distribution of the overall average score for all units/stations that have been evaluated using the current methodology is provided on Figure 1. Figure 1 is updated each month to reflect any changes in this distribution resulting from the inclusion of data for those units/stations that have not been previously evaluated or those that have been reevaluated. (Note: The previous score for those units/stations that are reevaluated is replaced with the score from the latest evaluation). Table 2 and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1. For example, Robinson 2's average score for the text of the LERs that were evaluated is 7.0 out of a possible 10 points. From Table 2 it can be seen that the text score actually results from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions prior to the event [10 CFR 50.73(b)(2)(11)(A)] to text presentation. The resultant percentage scores in the text summary section of Table 2 provide an indication of how well each text requirement was addressed by the unit for the 15 LERs that were evaluated. Based on similar methodology, the percentage scores for the various sections of the abstract and the items in the coded fields were also computed and are shown in Table 2.

As indicated in Table 2, certain requirements or areas within the text, abstract, and coded fields are causing the unit difficulty when preparing LERs. Relatively low percentage scores may indicate that the unit needs additional guidance concerning these requirements, or it may indicate that the unit understands the basic requirement but has either: (1) excluded certain less significant information from a number of the

TABLE 1. SUMMARY OF SCORES<sup>a</sup> FOR ROBINSON 2

---

	Average	High	Low
	-----	-----	-----
Text	7.0	8.9	5.4
Abstract	8.9	9.8	6.0
Coded Fields	8.1	8.9	6.6
Overall	7.7	8.7	6.4

a. See Appendix B for a summary of scores for each LER that was evaluated.

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Figure 1. Distribution of LER Scores

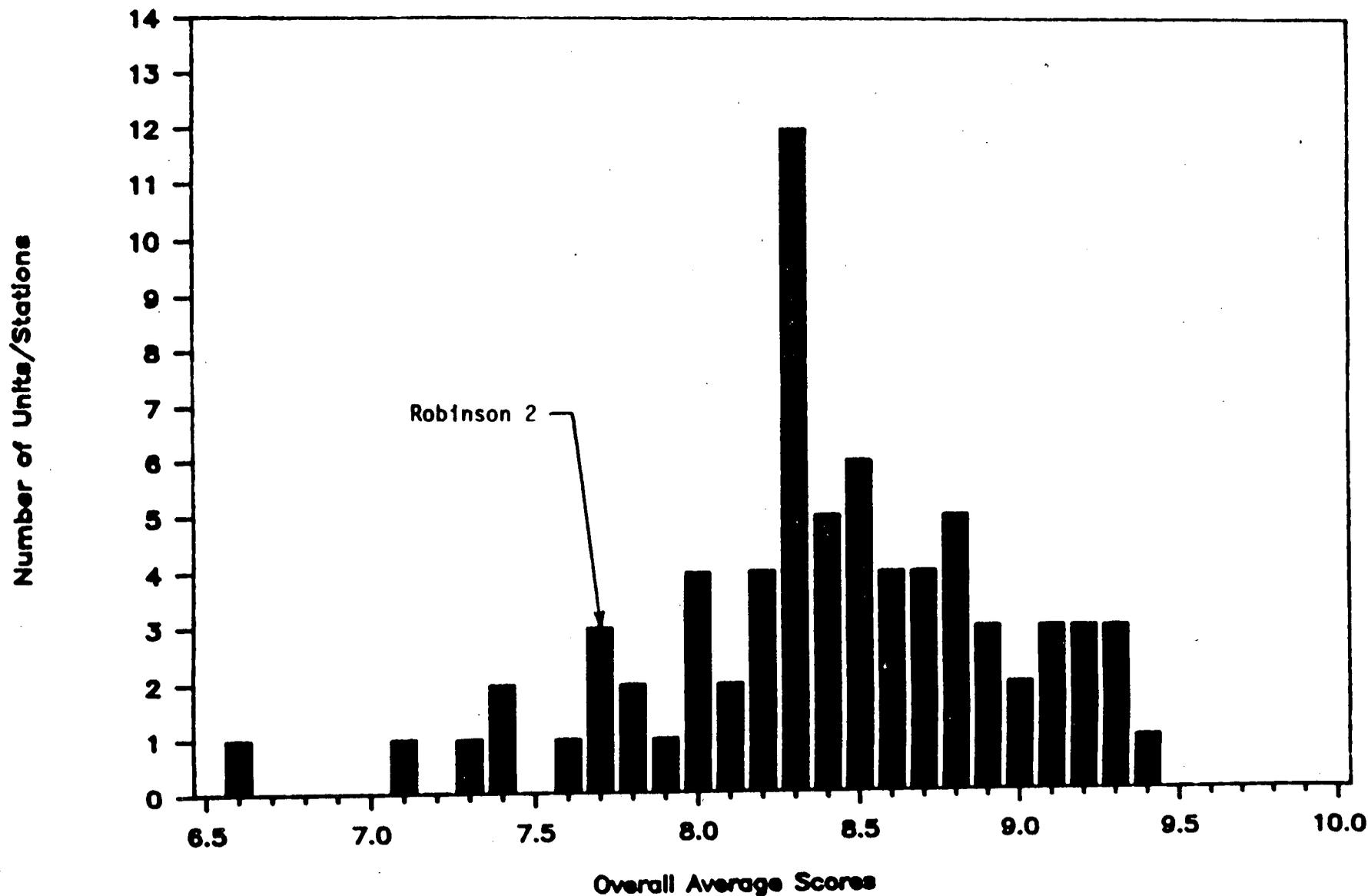


TABLE 2. LER REQUIREMENT PERCENTAGE SCORES FOR ROBINSON 2

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( ) <sup>a</sup>
(2)(ii)(A) - - Plant condition prior to event	100 (15)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate time(s)	92 (15)
(2)(ii)(D) - - Root cause and intermediate cause(s)	90 (15)
(2)(ii)(E) - - Mode, mechanism, and effect	100 ( 3)
(2)(ii)(F) - - EIIS codes	10 (15)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	100 ( 2)
(2)(ii)(I) - - Method of discovery	93 (15)
(2)(ii)(J)(1) - Operator actions affecting course	100 ( 4)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	77 (12)
(2)(ii)(K) - - Safety system responses	76 (11)
(2)(ii)(L) - - Manufacturer and model no. information	25 ( 4)
(3) - - - - - Assessment of safety consequences	8 (15)
(4) - - - - - Corrective actions	85 (15)
(5) - - - - - Previous similar event information	10 (15)
(2)(i) - - - - Text presentation	76 (15)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( ) <sup>a</sup>
- Major occurrences(immediate cause/effect)	100 (15)
- Plant/system/component/personnel responses	94 (10)
- Root cause information	83 (15)
- Corrective action information	85 (15)
- Abstract presentation	86 (15)

TABLE 2. (continued)

CODED FIELDS

Item Number(s) - Descriptions		Percentage Scores ( ) <sup>a</sup>
1, 2, and 3 -	Plant name(unit #), docket #, page #s	100 (15)
4 - - - - -	Title	63 (15)
5, 6, and 7 -	Event date, LER no., report date	85 (15)
8 - - - - -	Other facilities involved	100 (15)
9 and 10 - -	Operating mode and power level	71 (15)
11 - - - - -	Reporting requirements	99 (15)
12 - - - - -	Licensee contact information	80 (15)
13 - - - - -	Coded component failure information	80 (15)
14 and 15 - -	Supplemental report information	99 (15)

a. Percentage scores are the result of dividing the total points for a requirement by the number of points possible for that requirement. (Note: Some requirements are not applicable to all LERs; therefore, the number of points possible was adjusted accordingly.) The number in parenthesis is the number of LERs for which the requirement was considered applicable.

b. A percentage score for this requirement is meaningless as it is not possible to determine from the information available to the analyst whether this requirement is applicable to a specific LER. It is always given 100% if it is provided and is always considered "not applicable" when it is not.

discussions concerning that requirement or (2) totally failed to address the requirement in one or two of the selected LERs. The unit should review the LER specific comments presented in Appendix D to determine why the LER received less than a perfect score for certain requirements.

### Specific Deficiencies and Observations

The more important deficiencies and observations for the text, abstract, and coded field sections of the LERs that were evaluated are discussed separately below.

### Text Deficiencies and Observations

Nine of the 15 discussions of corrective actions, Requirement 50.73(b)(4), are considered to be marginal as they lacked certain information necessary to a complete discussion. Two of these nine failed to adequately discuss those actions necessary to prevent recurrence of the event. In addition, discussions of additional corrective actions, based on the generic implications of the failure or error, are considered inadequate in three LERs. Corrective actions, both immediate and planned, should be discussed for all causes identified in an LER.

Safety assessment information for 14 of the 15 LERs was considered to be missing, Requirement 50.73(b)(3). A detailed safety assessment is required in every LER and, as suggested in NUREG-1022, Supplement No. 2, should include information such as:

1. An assessment of the consequences and implications of the event including specifics as to why it was concluded that there were "no safety consequences", if such was the case. It is inadequate to simply state "Since all required safety systems performed as designed, this event had no safety consequences or implications." without explaining how that conclusion was reached.

2. A safety assessment should discuss whether the event could have occurred under a different set of conditions where the safety implications would have been more severe. If the conditions during the event are considered the worst probable, the LER should so state.
3. Finally, a safety assessment should name other systems (if any) that were available to perform the function of the safety systems that were unavailable during the event.

Discussion of personnel/procedural error [Requirement 50.73(b)(2)(11)(J)(2)] is an area where the score slipped from the previous evaluation to below the industry average. Six of the 12 LERs containing a personnel/procedural error were considered deficient. Five of these failed to adequately identify the type of personnel involved (e.g., contractor personnel utility licensed operator, utility nonlicensed operator, other utility personnel).

The requirement to discuss automatically and manually initiated safety system responses, Requirement 50.73(b)(2)(11)(K), is considered to be deficient in six of the 11 LERs in which the event included safety system actuations. This can easily be improved by providing a list of all safety systems that initiate either automatically or manually in response to the event. It is not adequate to simply make a statement such as "all safety equipment performed as expected". Comparison with the previous evaluation indicates a significant decline in the average score for this requirement.

As in the first evaluation, the requirement to provide adequate identification for failed components, Requirement 50.73(b)(2)(11)(L), was considered to be inadequate. In most cases this requirement can be met by simply providing the manufacturer and model number for each failed component. For certain components (e.g., pipes, fitting, etc.) the material and size of the failed component may be more appropriate information. Whatever information is provided, it should be specific enough to allow a reader to determine if the failed component is the same as one used at his facility. In addition, there are instances where

information that identifies components (even though these components didn't fail) could be important to the reader. For example, if the design of a component contributes to the event, it would be helpful to provide information that would enable others to specifically identify the component. An example of such a component might be a valve that opens with a clockwise turn of its handle (which could lead to an improper valve line-up due to a personnel error while operating the valve).

The requirement to provide a reference to previous similar events [Requirement 50.73(b)(5)] was not addressed in 14 of the 15 LERs. Reference to previous similar events is best accomplished by providing LER numbers and some background information if the event was reported. If no previous similar events are identified, this information should be stated in the text (see NUREG-1022, Supplement No. 2, Appendix D, page D-4).

The Energy Industry Identification System (EIIS) codes [Requirement 50.73(b)(2)(ii)(F)] were not provided for the systems and/or components mentioned in 13 of the 15 LERs. Coding for each system or component referred to in the text (not just for those that fail) should be provided.

The text presentations could be improved by using a more consistent outline format for LERs. Three of the presentations included undefined acronyms or plant-specific designators. These should be defined at their first appearance in the text.

### Abstract Deficiencies and Observations

While there are no specific requirements for an abstract, other than those given in 10 CFR 50.73(b)(1), an abstract should, as stated in NUREG-1022, Supplement No. 2, summarize the following information from the text:

- |                 |   |
|-----------------|---|
| 1. Cause/Effect | What happened that made the event reportable. |
|-----------------|---|

- |    |                         |  |
|----|-------------------------|--|
| 2. | Responses               | Major plant, system, and personnel responses as a result of the event.   |
| 3. | Root/Intermediate Cause | The underlying cause of the event. What caused the component and/or system failure or the personnel error.                                     |
| 4. | Corrective Actions      | What was done immediately to restore the plant to a safe and stable condition and what was done or planned to prevent recurrence of the event. |

Numbers 1, and 2 above were adequately addressed in the abstracts of the LERs reviewed with Item 2 showing a marked improvement since the last evaluation; however, information from the text that pertains to items Number 3 and 4, is not being adequately summarized in the abstract of many of the LERs.

#### Coded Fields Deficiencies and Observations

As in the original evaluation, several deficiencies were identified in the area of coded fields. One of these involves the titles, Item (4). An improvement in score from 41 to 63 percent was noted, but 14 of the 15 titles still failed to provide adequate cause information, two failed to include the result of the event, and eight failed to include the link between the cause and result. While the result is considered to be the most important part of the title, cause and link information (as suggested in NUREG-1022, Supplement No. 2) must be included to make a title complete. Example titles are presented in Appendix D for many of the LERs that were considered to have deficient titles.

Other deficiencies in the coded fields involve the omission of the report date, Item (7), on six LERs; the operating mode, Item (9), on 11 LERs; and the licensee contact position title, Item (12), on all 15 LERs. If the Technical Specifications do not specifically define operating modes, the letter "N" should be used in this field. The position

title of the licensee contact should be included in addition to the person's name (see NUREG-1022, pg. 24, Item 12).

The component failure field, Item (13), was considered deficient in seven LERs. One line in this field is required to be completed for each component (or set of identical components) that fails. The field is not required to be completed (i.e. should be left blank) in the event of "component faults," examples of which are: (a) a valve that is found closed when it is required to be open because it had been inadvertently positioned wrong, or (b) a relief valve that lifts prematurely because it was set to the wrong lift pressure. If, in example (a), the valve was found closed because it had a disc-stem separation, this would be a component failure and must be reported in Item 13. Similarly, in example (b), the valve would be considered failed if the pressure setpoint had "drifted" to a higher setpoint.

#### SUMMARY

Table 3 provides a summary of the areas that need improvement for the Robinson 2 LERs. For additional and more specific information concerning deficiencies, the reader should refer to the information presented in Appendices C and D. General guidance concerning requirements can be found in NUREG-1022, and NUREG-1022 Supplements No. 1 and 2.

As was noted, this is the second time that the Robinson 2 LERs have been evaluated using this same methodology. The previous evaluation was reported in November of 1985. Table 4 provides a comparison of the scores for both evaluations. While the overall score (7.7) was slightly higher for this evaluation, this score is still below the current industry overall average of 8.4. (Note: The industry overall average is the result of averaging the latest overall average LER score for each unit/station that has been evaluated using this methodology.)

TABLE 3. AREAS MOST NEEDING IMPROVEMENT FOR ROBINSON 2

Areas	Comments
Corrective actions	Be sure to discuss details concerning actions taken as opposed to just stating that repairs were made. These details should address the actions necessary to fix the immediate problem, the actions taken to prevent recurrence of the event or similar events, and additional actions based on any generic implications of the failure or error.
Safety assessment information	All LERs should include a detailed safety assessment. The text should discuss whether or not the event could have been worse had it occurred under different, but probable, circumstances and provide information about backup systems that were available to limit the consequences of the event.
Personnel/procedural error	Details should be explicitly stated (e.g., whether the error is cognitive or procedural, the type of personnel involved, and unusual circumstances, if any, should be discussed).
Automatic/manual safety system response	All safety systems that were actuated automatically or manually during the event should, as a minimum, be listed in the text.
Manufacturer and model number	Component identification information (manufacture and model number, if possible, or other unique information about the component) should be included in the text whenever a component fails. In addition, (although not specifically required by current regulation) it would be helpful to identify a component if its design is suspected of contributing to the event.
Previous similar events	Previous similar events should be referenced (e.g., by LER number) or, as stated in NUREG-1022, Supplement No. 2, if none are identified, the text should so state.

TABLE 3. (Continued)

Areas	Comments
EIIS code	EIIS should be provided in the text for each component or system referred to in the text, not just for those components or systems that fail. It is not necessary to put the whole code line in the text as is required in Item (13) of the Coded Fields.
Text presentation	Improvement in text presentation could be made by using a more consistent outline format such as the one suggested in NUREG-1022, Supplement No. 2. All acronyms should be defined on their first usage.
Abstracts	Root cause and corrective action information was often inadequate or was not included. Be sure to summarize all major points concerning these text requirements in the abstract.
Coded fields	
a. Titles	Titles should be written such that they better describe the event. In particular, include cause information, the result, and the link between them in each title.
b. Report date	Include the report date in the appropriate space.
Operating mode and power level	The operating mode and power level fields should be filled in on all LERs. The letter "N" should be used in Item 9 if operating mode numbers are not defined in the Technical Specifications.
Licensee contract position title	The position title of the licensee contact named in Item 12 should be provided (see NUREG-1022, Item 12, page 24).
Failed component	For each component failure identified in the text, a complete line (i.e., all five fields) should be entered into Item (13). The field should be left blank in the event of component faults.

TABLE 4. COMPARISON OF LER SCORES FROM PREVIOUS EVALUATION

<u>Report Date</u>	<u>November-85</u>	<u>July-87</u>
Text average	7.1	7.0
Abstract average	6.9	8.9
Coded fields average	7.8	8.1
Overall LER average	7.1	7.7

## REFERENCES

1. Office for Analysis and Evaluation of Operational Data, Licensee Event Report System, NUREG-1022, U.S. Nuclear Regulatory Commission, September 1983.
2. Office for Analysis and Evaluation of Operational Data, Licensee Event Report System, NUREG-1022 Supplement No. 1, U.S. Nuclear Regulatory Commission, February 1984.
3. Office for Analysis and Evaluation of Operational Data, Licensee Event Report System, NUREG-1022 Supplement No. 2, U.S. Nuclear Regulatory Commission, September 1985.

APPENDIX A  
LER SAMPLE SELECTION  
INFORMATION  
FOR ROBINSON 2

TABLE A-1. LER SAMPLE SELECTION FOR ROBINSON 2

Sample Number	LER Number	Comments
1	85-023-00	
2	86-001-00	
3	86-002-00	SCRAM
4	86-003-00	SCRAM
5	86-004-00	SCRAM
6	86-006-00	ESF
7	86-007-00	
8	86-008-00	
9	86-010-00	SCRAM
10	86-011-00	SCRAM
11	86-012-01	SCRAM
12	86-013-00	SCRAM
13	86-014-00	SCRAM
14	87-001-00	
15	87-002-00	SCRAM

APPENDIX B  
EVALUATION SCORES OF  
INDIVIDUAL LERS FOR ROBINSON 2

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERS FOR ROBINSON 2

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	LER Sample Number <sup>a</sup>							
	1	2	3	4	5	6	7	8
Text	8.9	7.0	6.7	7.4	7.2	7.0	7.0	7.0
Abstract	8.5	9.1	8.7	9.5	9.8	9.4	9.2	9.4
Coded Fields	8.7	8.6	7.9	8.7	8.6	7.9	6.6	8.9
Overall	8.7	7.8	7.4	8.1	8.1	7.8	7.6	7.9

---

	LER Sample Number <sup>a</sup>							
	9	10	11	12	13	14	15	Average
Text	6.2	6.9	5.4	7.2	6.5	6.5	7.5	7.0
Abstract	8.6	9.6	9.0	9.3	9.1	6.0	8.9	8.9
Coded Fields	8.4	8.8	8.4	6.9	8.3	7.4	7.6	8.1
Overall	7.1	7.9	6.8	7.8	7.5	6.4	7.9	7.7

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a. See Appendix A for a list of the corresponding LER numbers.

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**APPENDIX C**  
**DEFICIENCY AND OBSERVATION**  
**COUNTS FOR ROBINSON 2**

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR ROBINSON 2

<u>Description of Deficiencies and Observations</u>	Number of LERs with Deficiencies and Observations	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
<u>50.73(b)(2)(11)(A)</u> --Plant operating conditions before the event were not included or were inadequate.		0 (15)
<u>50.73(b)(2)(11)(B)</u> --Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 ( 1)
<u>50.73(b)(2)(11)(C)</u> --Failure to include sufficient date and/or time information.		5 (15)
a. Date information was insufficient.	3	
b. Time information was insufficient.	3	
<u>50.73(b)(2)(11)(D)</u> --The root and/or intermediate cause of the component or system failure was not included or was inadequate.		4 (15)
a. Cause of component failure was not included or was inadequate.	3	
b. Cause of system failure was not included or was inadequate.	1	
<u>50.73(b)(2)(11)(E)</u> --The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		0 ( 3)
a. Failure mode was not included or was inadequate.		
b. Mechanism (immediate cause) was not included or was inadequate.		
c. Effect (consequence) was not included or was inadequate.		

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals <sup>a</sup>	Paragraph Totals ( ) <sup>b</sup>
<u>50.73(b)(2)(1)(F)</u> --The Energy Industry Identification System component function identifier for each component or system was not included.		13 (15)
<u>50.73(b)(2)(1)(G)</u> --For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		-- ( 0)
<u>50.73(b)(2)(1)(H)</u> --For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the time of the failure until the train was returned to service was not included.		0 ( 2)
<u>50.73(b)(2)(1)(I)</u> --The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		2 (15)
a. Method of discovery for each component failure was not included or was inadequate.	1	
b. Method of discovery for each system failure was not included or was inadequate.	0	
c. Method of discovery for each personnel error was not included or was inadequate.	1	
d. Method of discovery for each procedural error was not included or was inadequate.	0	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals <sup>a</sup>	Paragraph Totals ( ) <sup>b</sup>
<u>50.73(b)(2)(11)(J)(1)</u> --Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		0 ( 4)
<u>50.73(b)(2)(11)(J)(2)</u> --The discussion of each personnel error was not included or was inadequate.		6 (12)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	0	
b. <u>50.73(b)(2)(11)(J)(2)(1)</u> --Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	1	
c. <u>50.73(b)(2)(11)(J)(2)(11)</u> --Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	2	
d. <u>50.73(b)(2)(11)(J)(2)(111)</u> --Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	1	
e. <u>50.73(b)(2)(11)(J)(2)(1v)</u> --Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	5	

TABLE C-1. (continued)

<u>Description of Deficiencies and Observations</u>	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals <sup>a</sup>	Paragraph Totals ( ) <sup>b</sup>
<u>50.73(b)(2)(11)(K)</u> --Automatic and/or manual safety system responses were not included or were inadequate.		6 (11)
<u>50.73(b)(2)(11)(L)</u> --The manufacturer and/or model number of each failed component was not included or was inadequate.		3 ( 4)
<u>50.73(b)(3)</u> --An assessment of the safety consequences and implications of the event was not included or was inadequate.		14 (15)
<ul style="list-style-type: none"> <li>a. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event was not discussed. If no other systems or components were available, the text should state that none existed.</li> <li>b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state.</li> </ul>		
<u>50.73(b)(4)</u> --A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		9 (15)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals <sup>a</sup>	Paragraph Totals ( ) <sup>b</sup>
a. A discussion of actions required to correct the problem (e.g., return the component or system to an operational condition or correct the personnel error) was not included or was inadequate.	1	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	2	
c. OBSERVATION: A discussion of actions required to prevent similar failures in similar and/or other systems (e.g., correct the faulty part in all components with the same manufacturer and model number) was not included or was inadequate.	3	
<u>50.73(b)(5)</u> --Information concerning previous similar events was not included or was inadequate.		14 (15)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals <sup>a</sup>	Paragraph Totals ( ) <sup>b</sup>
<u>50.73(b)(2)(1)</u> --Text presentation inadequacies.		4 (15)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	3	
c. The text contains other specific deficiencies relating to the readability.	2	

a. The "sub-paragraph total" is a tabulation of specific deficiencies or observations within certain requirements. Since an LER can have more than one deficiency for certain requirements, (e.g., an LER can be deficient in the area of both date and time information), the sub-paragraph totals do not necessarily add up to the paragraph total.

b. The "paragraph total" is the number of LERs that have one or more requirement deficiencies or observations. The number in parenthesis is the number of LERs for which the requirement was considered applicable.

TABLE C-2. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR ROBINSON 2

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
A summary of occurrences (immediate cause and effect) was not included or was inadequate.		0 (15)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		1 (10)
a. Summary of plant responses was not included or was inadequate.	0	
b. Summary of system responses was not included or was inadequate.	1	
c. Summary of personnel responses was not included or was inadequate.	0	
A summary of the root cause of the event was not included or was inadequate.		6 (15)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		8 (15)

TABLE C-2. (continued)

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
Abstract presentation inadequacies.		5 (15)
a. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.	3	
b. The abstract was greater than 1400 spaces.	1	
c. The abstract contains undefined acronyms and/or plant specific designators.	2	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.).	1	

a. The "sub-paragraph total" is a tabulation of specific deficiencies or observations within certain requirements. Since an LER can have more than one deficiency for certain requirements, the sub-paragraph totals do not necessarily add up to the paragraph total.

b. The "paragraph total" is the number of LERs that have one or more deficiency or observation. The number in parenthesis is the number of LERs for which a certain requirement was considered applicable.

TABLE C-3. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR ROBINSON 2

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
Facility Name		0 (15)
a. Unit number was not included or incorrect.		
b. Name was not included or was incorrect.		
c. Additional unit numbers were included but not required.		
Docket Number was not included or was incorrect.		0 (15)
Page Number was not included or was incorrect.		0 (15)
Title was left blank or was inadequate.		15 (15)
a. Root cause was not given or was inadequate.	14	
b. Result (effect) was not given or was inadequate.	2	
c. Link was not given or was inadequate.	8	
Event Date		1 (15)
a. Date not included or was incorrect.	0	
b. Discovery date given instead of event date.	1	
LER Number was not included or was incorrect.		0 (15)
Report Date		7 (15)
a. Date not included.	6	
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).	1	
Other Facilities information in field is inconsistent with text and/or abstract.		0 (15)
Operating Mode was not included or was inconsistent with text or abstract.		11 (15)

TABLE C-3. (continued)

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
Power level was not included or was inconsistent with text or abstract.		1 (15)
Reporting Requirements		1 (15)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It may have been more appropriate to report the event under a different paragraph.	0	
c. OBSERVATION: It may have been appropriate to report this event under an additional unchecked paragraph.	1	
Licensee Contact		15 (15)
a. Field left blank.	0	
b. Position title was not included.	15	
c. Name was not included.	0	
d. Phone number was not included.	0	
Coded Component Failure Information		6 (15)
a. One or more component failure sub-fields were left blank.	3	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	3	
d. Component failure occurred but entire field left blank.	1	

TABLE C-3. (continued)

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals<sup>a</sup></u>	<u>Paragraph Totals ( )<sup>b</sup></u>
Supplemental Report		1 (15)
a. Neither "Yes"/"No" block of the supplemental report field was checked.		
b. The block checked was inconsistent with the text.		
Expected submission date information is inconsistent with the block checked in Item (14).		0 (15)

a. The "sub-paragraph total" is a tabulation of specific deficiencies or observations within certain requirements. Since an LER can have more than one deficiency for certain requirements, the sub-paragraph totals do not necessarily add up to the paragraph total.

b. The "paragraph total" is the number of LERs that have one or more requirement deficiencies or observations. The number in parenthesis is the number of LERs for which a certain requirement was considered applicable.

APPENDIX D  
LER COMMENT SHEETS FOR  
ROBINSON 2

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
1. LER Number: 85-023-00	
Scores: Text = 8.9    Abstract = 8.5    Coded Fields = 8.7    Overall = 8.7	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(4)</u>--Was Surveillance Test MST-014 permanently revised?</li> <li>2. <u>50.73(b)(5)</u>--Information concerning previous similar events is inadequate. Have discrepancies between Technical Specifications and surveillance tests been discovered in the past?</li> <li>3. Be careful to provide data under appropriate section headings. For example, the last paragraph in the <u>Event</u> section contains a lot of data that appears more appropriate for the <u>Impact on Safety</u> section.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of cause is inadequate. The lack of accountability for procedural changes is only implied from the corrective actions.</li> <li>2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. The change to the procedure (MST-014) wasn't mentioned.</li> <li>3. Abstract contains acronym(s) and/or plant specific designator(s) that are undefined (CP&amp;L was not defined on first usage).</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause is not included. A more appropriate title might be "Improper Steam/Feedwater Flow Mismatch Test (Technical Specification Violation) due to Procedural Error".</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
2. LER Number: 86-001-00	
Scores: Text = 7.0    Abstract = 9.1    Coded Fields = 8.6    Overall = 7.8	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(C)</u>--Date information for the IE Information Notice 85-94 and the planned permanent modification to the SI recirculation valves would be helpful.</li> <li>2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>3. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>4. <u>50.73(b)(4)</u>--OBSERVATION: Discussion of additional corrective actions, based on the generic implications of the failure or error, is not included. Were any other ECCS valves reviewed for the potential design deficiencies?</li> <li>5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> <li>6. Acronym(s) and/or plant specific designator(s) are undefined for RWST and LOCA.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. See text comment number 3.</li> <li>2. The abstract contains greater than 1400 spaces.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Result (potential SI pump damage) is not included. A better title might be: "Safety Injection (SI) Valve Failure Concurrent with Loss of Coolant Accident Could Damage SI Pumps--Design Deficiency".</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
3. LER Number: 86-002-00	
Scores: Text = 6.7    Abstract = 8.7    Coded Fields = 7.9    Overall = 7.4	
Text	<ol style="list-style-type: none"> <li data-bbox="444 426 1372 646">1. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion concerning the 74% and increasing S/G A level indication is inadequate. Was this an actual level or a erroneous indication due to a test signal? Note that reference to the strip chart in the forth paragraph of page 2 says the level was about 30% just prior to the trip.</li> <li data-bbox="444 684 1372 779">2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li data-bbox="444 816 1372 1037">3. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of the personnel error/procedural deficiency is inadequate.  <u>50.73(b)(2)(11)(J)(2)(iv)</u>--Discussion of the type of personnel involved (e.g., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) is not included.</li> <li data-bbox="444 1075 1372 1138">4. <u>50.73(b)(2)(11)(K)</u>--Discussion of automatic and/or manual safety system responses is not included.</li> <li data-bbox="444 1173 1372 1299">5. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g., manufacturer and model no.) of the failed component(s) discussed in the text is not included (toggle switch CR-476).</li> <li data-bbox="444 1337 1372 1432">6. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li data-bbox="444 1470 1372 1728">7. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Does the phrase "will be reviewed with the personnel involved", see the last paragraph on page 3, mean that the event will be reviewed with all personnel <u>who could be</u> involved in performing MST-013 (or other such tests) or only those three individuals directly involved in this event?</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
3. LER Number: 86-002-00 (Continued)	
	<p>8. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</p> <p>9. The statement in parentheses in the fifth paragraph of page 2 (i.e., "only the signal injection test jacks cover is annunciated") appears to contradict other information provided in the text.</p> <p>10. The terms "Hagen Racks" and "RTGB" are undefined.</p>
Abstract	<p>1. <u>50.73(b)(1)</u>--Summary of cause information is inadequate. The link between the level increase and "either personnel error or equipment malfunction" is not apparent from the information provided in the abstract.</p> <p>2. OBSERVATION: The abstract is intended to be a summary of the text; therefore, the text must include all information summarized in the abstract. This abstract contains information that was not included in the text (e.g., the turbine trip).</p>
Coded Fields	<p>1. <u>Item (4)</u>--Title: Cause is not included and the link is inadequate. A better title might be "Personnel Error and/or Equipment Malfunction During Testing Results In Reactor Trip on High Steam Generator Level".</p> <p>2. <u>Item (9)</u>--Operating mode is not included.</p> <p>3. <u>Item (12)</u>--Position title is not included.</p> <p>4. <u>Item (13)</u>--Possible component failure occurred but entire field is blank.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
4. LER Number: 86-003-00	
Scores: Text = 7.4    Abstract = 9.5    Coded Fields = 8.7    Overall = 8.1	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(ii)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>3. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. How will new technicians (in the future) be made aware of the problem (is a warning in the procedure needed)?  A supplemental report would be appropriate to describe the results of the design review if these results significantly change the reader's perception of the event and/or require additional corrective actions be taken.</li> <li>4. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	1. No comment.
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (personnel error) is not included.</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> <li>4. <u>Item (14)</u>--The block checked appears to be inconsistent with information provided in the text; see text comment number 3.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
5. LER Number: 86-004-00	
Scores: Text = 7.2    Abstract = 9.8    Coded Fields = 8.6    Overall = 8.1	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(C)</u>--Date of the installation of the additional labeling for the cabinet doors identifying the NIS Channel and the time the plant was placed in a safe hot shutdown condition are not included.</li> <li>2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>3. <u>50.73(b)(2)(11)(K)</u>--Discussion of automatic and/or manual safety system responses is inadequate. What safety systems (if any) were actuated as a result of this event?</li> <li>4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. No comments.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (personnel error) is not included.</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
6. LER Number: 86-006-00	
Scores: Text = 7.0    Abstract = 9.4    Coded Fields = 7.9    Overall = 7.8	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of the personnel error/procedural deficiency is inadequate. Details concerning the "oversight" would be appropriate (e.g., it appears that a minor deficiency in the procedure may have been involved).  <u>50.73(b)(2)(11)(J)(2)(iv)</u>--Discussion of the type of personnel involved (e.g., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) is not included.</li> <li>3. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>4. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. The procedural involvement was not mentioned in relation to either cause or corrective actions (see text comment number 2).</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (personnel error) is not included and the link (during performance of GP-007) is inadequate.</li> <li>2. <u>Item (7)</u>--Report date is not included.</li> <li>3. <u>Item (9)</u>--Operating mode is not included.</li> <li>4. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
7. LER Number: 86-007-00	
Scores: Text = 7.0    Abstract = 9.2    Coded Fields = 6.6    Overall = 7.6	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(2)(11)(H)</u>--Since the time that the snubbers were inoperable is sometime between the 1984 Outage and January 31, 1986, a more specific date (say the end of the 1984 Outage) would be more useful in determining the unavailability of the snubbers.</li> <li>3. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of the personnel error/procedural deficiency is inadequate. Why wasn't the system pressure tested after the last disassembly? Who (by type/title) was responsible?</li> <li>4. <u>50.73(b)(2)(11)(L)</u>--If the design of the fitting contributed to the problem, it would be helpful to identify these fittings even though they didn't fail.</li> <li>5. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>6. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	1. No comment.
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (personnel error) and link (maintenance) are not included and the result (inoperable snubbers) isn't made clear.</li> <li>2. <u>Item (5)</u>--Discovery date is given instead of event date. A more appropriate event date would be the end of the 1984 Outage (see text comment 2).</li> <li>3. <u>Item (7)</u>--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
7. LER Number: 86-007-00 (Continued)	
	4. <u>Item (9)</u> --Operating mode is not included.
	5. <u>Item (11)</u> --OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(1).
	6. <u>Item (12)</u> --Position title is not included.
	7. <u>Item (13)</u> --This field probably didn't need to be completed since the snubbers did not actually fail. When this field needs to be completed however, all subfields should be filled in. Manufacturer codes are available from the Institute of Nuclear Plant Operation's Nuclear Plant Reliability Data System for manufacturers not listed in the code book.

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
8. LER Number: 86-008-00	
Scores: Text = 7.0    Abstract = 9.4    Coded Fields = 8.9    Overall = 7.9	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(C)</u>--Date information for the next refueling outage would be helpful.</li> <li>2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>3. <u>50.73(b)(2)(11)(I)</u>--Discussion of the method of discovery of the test procedure OST-162 discrepancy is inadequate. Who (by type/title) performed the review that discovered the discrepancy?</li> <li>4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>5. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. How often is the test OST-162 performed? If it's to be revised before the next refueling outage, and if the Technical Specification requires testing of the AFW blackout initiation before then, what interim actions were implemented to ensure Technical Specifications adherence?</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. See text comment number 4.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (procedural discrepancy) is not included.</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
9. LER Number: 86-010-00	
Scores: Text = 6.2    Abstract = 8.6    Coded Fields = 8.4    Overall = 7.1	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of the personnel error/procedural deficiency is inadequate. Is training a problem area? Why weren't the operators aware that the subject limit switches were part of the generator monitoring trip circuit? Who (by type/title) was responsible for setting the limit switches wrong? Why didn't the generator startup procedure address the limit switch/circuit relationship?</li> <li>3. <u>50.73(b)(2)(11)(K)</u>--Discussion of automatic and/or manual safety system responses is inadequate. Those plant safety systems that "performed as expected during the event" should be named.</li> <li>4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>5. <u>50.73(b)(4)</u>--Will the limit switch/trip circuit relationship be included as part of the training lecture for new operators?</li> <li>6. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> <li>7. What is the approximate numerical relationship between rated speed and megawatts?</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of safety system responses is inadequate. While the text is expected to name the safety systems that actuate, the abstract should at least contain a statement acknowledging the actuations (e.g., such as the last sentence of the second paragraph in the "Event Description").</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
9. LER Number: 86-010-00 (Continued)	2. The cause and corrective action information in the abstract is deficient for the same reasons discussed in the text.
Coded Fields	1. <u>Item (4)</u> --Title: Cause (i.e., personnel error) is not included and the link (i.e., during turbine generator startup procedure) is inadequate. 2. <u>Item (9)</u> --Operating mode is not included. 3. <u>Item (12)</u> --Position title is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
10. LER Number: 86-011-00	
Scores: Text = 6.9    Abstract = 9.6    Coded Fields = 8.8    Overall = 7.9	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(2)(11)(J)(2)(iv)</u>--Discussion of the type of personnel involved (e.g., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) is not included.</li> <li>3. <u>50.73(b)(2)(11)(K)</u>--It is insufficient to state that all equipment responded as expected. As a minimum, the safety systems that actuated (manually or automatically) should be listed.</li> <li>4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. No comment.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Link (during initial installation) is not included and the cause is vague.</li> <li>2. <u>Item (9)</u>--Operating mode is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> <li>4. <u>Item (13)</u>--This field probably didn't need to be filled in since the component didn't actually fail. The component was faulty because of a personnel error.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
11. LER Number: 86-012-01	
Scores: Text = 5.4    Abstract = 9.0    Coded Fields = 8.4    Overall = 6.8	
Text	<ol style="list-style-type: none"> <li data-bbox="479 430 1421 493">1. <u>50.73(b)(2)(11)(C)</u>--What time was the plant placed in hot shutdown?</li> <li data-bbox="479 525 1421 724">2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion concerning the heater drain tanks level controller is inadequate. Did a component failure occur with the controller? Why was it necessary to decrease the turbine load? Why did the heater drain pumps fail to restart?</li> <li data-bbox="479 756 1421 850">3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li data-bbox="479 882 1421 1081">4. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of the personnel error/procedural deficiency is inadequate. Was the control operator following a procedure when he cycled the emergency boration valve? Why did he inadvertently leave the boration valve open (distracted, not in procedure, etc.)?</li> <li data-bbox="479 1113 1421 1249">5. <u>50.73(b)(2)(11)(K)</u>--Discussion of automatic and/or manual safety system responses is inadequate. What safety systems actuated as a result of this event? See the last sentence under EVENT DESCRIPTION.</li> <li data-bbox="479 1281 1421 1375">6. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li data-bbox="479 1407 1421 1575">7. <u>50.73(b)(4)</u>--The discussion of actions required to correct the immediate problem and return the applicable systems/component(s) to an operable status is inadequate. How was the heater drain tank level controller problem resolved?</li> <li data-bbox="479 1606 1421 1709">8. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
11. LER Number: 86-012-01 (Continued)	
	9. A logical transition does not exist between all ideas.
	10. This event appears to be too complex to attempt to discuss it with such a brief text.
Abstract	1. <u>50.73(b)(1)</u> --Summary of cause information concerning the operator is inadequate. See text comment number 4.
	2. <u>50.73(b)(1)</u> --Summary of corrective actions taken or planned as a result of the event is inadequate. See text comment number 7.
Coded Fields	1. <u>Item (4)</u> --Title: Cause information (personnel error) is not included.
	2. <u>Item (7)</u> --Report date is not included.
	3. <u>Item (12)</u> --Position title is not included.
	4. <u>Item (13)</u> --Component failure field contains data when no component failure occurred in the Plant Protection System. If a component failure occurred in the heater drain tanks level controller, then data should appear here.

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
12. LER Number: 86-013-00	
Scores: Text = 7.2    Abstract = 9.3    Coded Fields = 6.9    Overall = 7.8	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(2)(11)(K)</u>--Discussion of automatic and/or manual safety system responses is inadequate. All safety systems that actuated (manually or automatically) as a result of this event should be named.</li> <li>3. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>4. <u>50.73(b)(4)</u>--A supplemental report would be appropriate to describe the results of the procedure review to determine if any changes are necessary if these results significantly change the reader's perception of the event and/or require additional corrective actions be taken.</li> <li>5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> <li>6. Acronym(s) and/or plant specific designator(s) are undefined.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. The fact that the LER will be reviewed as a means of additional operating experience training was not mentioned.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause (personnel error) and link (during performance of MST-014) are not included.</li> <li>2. <u>Item (7)</u>--Report date is not included.</li> <li>3. <u>Item (9)</u>--Operating mode is not included.</li> <li>4. <u>Item (10)</u>--Power level is not included.</li> <li>5. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
13. LER Number: 86-014-00	
Scores: Text = 6.5    Abstract = 9.1    Coded Fields = 8.3    Overall = 7.5	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(11)(C)</u>--When were repairs completed?</li> <li>2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion concerning the feedback linkage is inadequate. What component did the vibration affect (i.e., broken link, pin fell out, etc.). The text implies that 102 days is a lot of operation time for the linkage to be exposed to the vibration, so why wasn't the linkage checked sometime during the period?</li> <li>3. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g., manufacturer and model no.) of the failed component(s) discussed in the text is not included.</li> <li>4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>5. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Specifics as to repairs made to the linkage were not discussed. The lockwires certainly appear appropriate if a pin or bolt fell out, but the details of the failure were never discussed (see text comment 2). Is additional surveillance needed for this type linkage?</li> <li>6. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. The cause and corrective action information is deficient for the same reasons discussed in text comments 2 and 5.</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause is not included.</li> <li>2. <u>Item (7)</u>--Report date is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
14. LER Number: 87-001-00	
Scores: Text = 6.5    Abstract = 6.0    Coded Fields = 7.4    Overall = 6.4	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(1)(D)</u>--The root and/or intermediate cause discussion concerning the lube cooler leaking tubes is inadequate. Why did the tubes leak (corrosion, erosion, loose fittings, etc.)? Why were the diesel generator repairs not completed within seven days?</li> <li>2. <u>50.73(b)(2)(1)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included. The system code for the diesel generator is not included.</li> <li>3. <u>50.73(b)(2)(1)(I)</u>--Discussion of the method of discovery of the high crankcase pressure is inadequate. Was the diesel generator in operation, testing, etc.?</li> <li>4. <u>50.73(b)(2)(1)(L)</u>--Identification (e.g., manufacturer and model no.) of the failed component(s) discussed in the text is not included.</li> <li>5. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>6. <u>50.73(b)(4)</u>--A discussion of actions required to reduce the probability of recurrence (i.e., correction of the root cause) is not included. What actions were performed to prevent recurring lube oil cooler leaks?</li> <li>7. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of root cause of the diesel generator failure is not included.</li> <li>2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
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14. LER Number: 87-001-00 (Continued)

3. **OBSERVATION:** The abstract is intended to be a summary of the text; therefore, the text must include all information summarized in the abstract. This abstract contains information that was not included in the text. The ten percent per hour power descent and the notification of NRC at 2035 hours on March 16 are not mentioned in the text.

Coded Fields

1. Item (4)--Title: Cause information (lube oil cooler tube leaks--unknown cause) and link (inoperable diesel generator for more than seven days) are not included.
2. Item (7)--Report date is not included.
3. Item (12)--Position title is not included.
4. Item (13)--The system, component and manufacturer subfields are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
15. LER Number: 87-002-00	
Scores: Text = 7.5    Abstract = 8.9    Coded Fields = 7.6    Overall = 7.9	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(1)(F)</u>--The Energy Industry Identification System code for each component and/or system referred to in the text is not included.</li> <li>2. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is not included.</li> <li>3. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.</li> </ol>
Abstract	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(1)</u>--Summary of cause discussion is inadequate. The investigation into the work in progress at the time of the spike was not mentioned. The conclusions resulting from this investigation (i.e., no trends and considered to be an isolated incident) were also not mentioned.  Additional space is available within the abstract field to provide more information but it was not utilized.</li> <li>2. OBSERVATION: The abstract is intended to be a summary of the text; therefore, the text must include all information summarized in the abstract. This abstract contains information that was not included in the text.</li> <li>3. Abstract contains acronym(s) and/or plant specific designator(s) that are undefined (PT-447).</li> </ol>
Coded Fields	<ol style="list-style-type: none"> <li>1. <u>Item (4)</u>--Title: Cause and link are not included. A better title might be "Spurious Voltage Spike Involving P-7 Permissive Causes Turbine Trip/Reactor Trip Signal".</li> <li>2. <u>Item (7)</u>--Report date is not included.</li> <li>3. <u>Item (12)</u>--Position title is not included.</li> </ol>

TABLE D-1. SPECIFIC LER COMMENTS FOR ROBINSON 2 (261)

Section	Comments
15. LER Number: 87-002-00 (Continued)	
	4. <u>Item (13)</u> --One or more component failure sub-fields are blank. Actually, it would have been permissible to leave all the fields blank given that no actual component failure could be identified.