02 APR 1986

Docket Nos. 50-277
50-278
50-352

Philadelphia Electric Company
ATTN: Mr. S. L. Daltroff
Vice President
Electric Production
2301 Market Street
Philadelphia, Pennsylvania 19101

Gentlemen:

Subject: Quality of PECo Licensee Event Reports (LERs)

As part of the SALP process, the NRC Office for Analysis and Evaluation of Operational Data (AEOD) evaluated LERs submitted by PECo during the recent SALP assessment periods for both Peach Bottom Units 2&3 and Limerick Unit 1. The assessments (attached) were performed using a methodology similar to that described in NUREG/CR-4178, "An Evaluation of Selected Licensee Event Reports Prepared Pursuant to 10 CFR 50.73." It is important to achieve uniform, high quality LERs from all operating power reactors to enable AEOD to effectively identify "precursor events" and emerging trends or patterns of potential safety significance. Generic studies triggered by events reported at specific units can lead to improvements in the level of reactor safety only if the available database is uniform and of high quality.

The conclusions of the AEOD reviews are that the PECo LERs sampled were generally above average in quality. I invite you to review the attached analyses and further improve your system of reporting events under 10 CFR 50.73.

Sincerely,

Original Signed By:

Richard W. Starostecki, Director
Division of Reactor Projects

Enclosure: as stated

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AEOD INPUT TO SALP REVIEW FOR
PEACH BOTTOM 2 AND 3

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Peach Bottom 2 and 3 during the April 1, 1985 to January 31, 1986 Systematic Assessment of Licensee Performance (SALP) assessment period, a representative sample of each unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178[1]. The sample consists of a total of 15 LERs for the station (i.e., 10 LERs for Peach Bottom 2 and 5 for Peach Bottom 3), which is greater than half of the LERs that were on file at the time the evaluation was started. Peach Bottom LERs were evaluated as one sample because it was determined that their LERs are both written and formally reviewed at the station, rather than unit, level. See Appendix A for a list of the LER numbers in the sample.

It was necessary to start the evaluation before the end of the SALP assessment period because the input was due such a short time after the end of the SALP period. Therefore, not all of the LERs prepared during the SALP assessment period were available for review.

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 requirements of NUREG-1022[2], and Supplements 1[3] and 2[4] to NUREG-1022.

The evaluation process for each LER is divided into two parts. The first part of the evaluation consists of documentaing 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.

ATTACHMENT B

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 reviewed. 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 the overall score determined 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 x text score + 0.3 x abstract score + 0.1 x coded fields score = 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 these appendices, the reader is cautioned not to try to directly correlate the number of comments on a comment sheet with the LER scores, as the analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

Although the purpose of this evaluation was to assess the content of the individual LERs selected for review, the analysts often make other observations which they believe should be brought to the attention of the licensee. The following discussion addresses a general observation that was noted during the evaluation.

General Observation

During the evaluation, a problem was noted concerning the numbering of certain LERs. The problem is that there are two LERs for Peach Bottom 2 (Docket Number 277) with the same LER number (i.e., 85-006-00). The two

events described in these LERs are different and, therefore, each should have been assigned a unique LER number.

What apparently happened is that the LER entitled "Improper Limitorque Operator discovered on MS Line Drain", which was reported on 7/24/85, was meant to be a supplement to LER 85-006-00 for Peach Bottom 3 but was reported as a Unit 2 LER because the improper valve operator was located on a Unit 2 valve. Whatever the reason for choosing to number the LERs as was done, the result is that two Unit 2 reports were submitted with the same LER number thus making it difficult to determine under what number to store each event in the LER data base. The event involving the discovery of the improper Limitorque operator at Unit 2 (i.e., LER 85-006-00 with a report data of 7/24/85) should not have been submitted as a supplement to LER 3-85-06, March 22, 1985. It should have been reported as a new event for Unit 2 with a reference to the Unit 3 event; for example "The discovery of the improper actuator resulted from an ongoing investigation initiated as a result of the discovery of improper operator at Unit 3 in March of 1985 (see LER 3-85-06)". Had this been done, the LER number assigned to it (85-006-00), would have been correct given that the next event, the "inadvertant scram on high neutron flux" report on 7/26/85 had been assigned a new LER number, such as 85-007-00.

The general rule covering LER number assignment is: assign a unique number to each event, even when events are similar or, as in this case, result from an investigation that was begun as a result of an earlier event. (Note: Had the improper valve operator been discovered at Unit 2 prior to submitting the original Unit 3 LER, 85-006-00 reported 3/22/85, it would have been permissible to report both discoveries in one LER provided the text requirements were satisfied for each.)

If an LER is intended to be a supplement, it must have the same LER number (except revision number) as the LER it is revising. In addition, the supplement must contain all information that was provided in the original report as well as providing any new or corrected information.

Discussion of 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 stations performance (on a scale of 0 to 10) in submitting LERs that meet the requirements of 10 CFR 50.73(b). Peach Bottom 2 and 3 LERs were evaluated as one sample, rather than two separate samples, because it was determined that the Peach Bottom LERs are both written and formally reviewed at the station, rather than the unit, level.

Table 1 presents the average scores for the sample of LERs evaluated for Peach Bottom 2 and 3. The reader is cautioned that the scores resulting from the methdology used for this evaluation are not directly comparable to the scores contained in NUREG/CR-4178 due to refinements in the methodology.

(Table 2 Deleted)

Table 3 and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1. For example, Peach Bottom's average score for the text of the LERs that were evaluated was 8.2 out of a possible 10 points. From Table 3 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 before the event [10 CFR 50.73(b)(2)(ii)(A)] to text presentation. The percentage scores in the text summary section of Table 3 provide an indication of how well each text requirement was addressed by the licensee for the 15 LERs that were evaluated.

Discussion of Specific Deficiencies

A review of the percentage scores presented in Table 3 will quickly point out where Peach Bottom station is experiencing the most difficulty in preparing LERs. For example, requirement percentage scores of less than 75

indicate that the licensees probably need additional guidance concerning these requirements. Scores of 75 or above, but less than 100, indicate that the licensees probably understand the basic requirement but have either: (1) excluded certain less significant information from most of the discussions concerning that requirement or (2) totally failed to address the requirement in one or two of the selected LERs. The licensees should review the LER specific comments presented in Appendix D in order to determine why they received less than a perfect score for certain requirements. The text requirements with a score of less than 75 are discussed below in their order of importance. In addition, the primary deficiencies in the abstract and coded fields are discussed.

Ten of the fifteen LERs are considered to have inadequate safety assessments, requirement 50.73(b)(3). The primary deficiency involving the consequence discussions is that the possible implications of the event are not provided. For example, most of the consequence discussions imply that there were no adverse consequences because conditions at the time of the event were such that the affected system or component would not have been required. A specific example of this type of discussion can be found in LER 85-017-00 (Unit 2). The last sentence of this consequence discussion states--"Under these conditions the suppression pool could have performed its designed function despite the low level, since the energy dissipation requirements were significantly below full power values". This statement is undoubtedly true but it does not fulfill the intent of the requirement. A question that also needs to be addressed is--"How could the consequences of this event been mitigated if the energy dissipation requirements were full power values?"

Consequence discussions should always provide: (1) information concerning the possible consequences had the event occurred under the worst set of initial conditions, as well as (2) a list of other available systems, components, or procedures that could have been used to mitigate the consequences of the postulated event.

Six of the ten LERs involving personnel error were considered inadequate. For example, in two LERs it could not be determined whether the personnel error was cognitive or procedural and in two others the type of personnel involved in the event was not mentioned. Two LERs only implied that a personnel error may have occurred and thus failed to discuss any of the requirements under 50.73(b)(2)(ii)(J)(2); (see LERs 85-007-00 and 85-010-00 for Unit 2).

The manufacturer and model number (or other unique identification) was not provided in the text of three of the four LERs that involved a component failure, requirement 50.73(b)(2)(ii)(L). Such information is important in that it could lead to the identification of possible generic problems in the industry.

Two of the six LERs involving failures in safety system trains did not provide adequate information such as dates and times so that the unavailability time of the affected train could be determined, requirement 50.73(b)(2)(ii)(H). This information is required as it becomes part of the generic data necessary to perform probabilistic risk assessments (PRAs). Adequately addressing requirement 50.73(b)(2)(ii)(C), which requires dates and times of major occurrences discussed in the event, will usually ensure that requirement 50.73(b)(2)(ii)(H) is met.

The Energy Industry Identification System component function identifier and system name codes were not provided in the text of eight of the fifteen LERs that were evaluated.

The corrective action requirement, [50.73(b)(4)], received a percentage score of 83% but was still considered to be somewhat deficient for eight of fifteen LERs in that long-term actions designed to prevent recurrence of the event were not adequately discussed.

The primary deficiencies for the abstract involve the summary of root cause and corrective action information. While the texts contained this information, the abstracts generally did not. All fifteen of the LER

abstracts were considered to be deficient in summarizing the cause of the event and eleven did not adequately summarize the corrective actions discussed in the text. Both cause and corrective action information should be included in every abstract.

The abstracts were also considered marginal in the area of presentation in that four abstracts were very brief and failed to contain the necessary information even though space was available for more details. In addition, three abstracts contained information that was not discussed in the text. This should be looked for during the licensee final review process and when found the text should be revised to include such information.

The main deficiency in the area of coded fields involves the title, Item (4). Fifteen of the titles did not indicate root cause, three failed to include the link (i.e., circumstances or conditions which tie the root cause to the result), and five failed to provide information concerning the result of the event (i.e., why the event was required to be reported). While result is considered the most important part of the title, cause and link must be included to make the title complete. An example of a title that only addresses the result might be "Reactor Scram". This is inadequate in that the cause and link are not provided. A more appropriate title might be "Inadvertant Relay Actuation During Surveillance Test LOP-1 Causes Reactor Scram". From this title the reader knows the cause involved either personnel or procedures and testing contributed to the event.

Another deficiency in the area of coded fields involves Item (13)--Failed Component Information. Three LERs contained information in this field even though no actual failure had occurred. (Note: Component faults need not be coded in this field.) In addition, one LER contained information in Item 13 that was inconsistent with information presented in the text and another contained no information even though a component failure had occurred.

Table 4 provides a summary of the areas that need improvement for Peach Bottom LERs. For more specific information concerning deficiencies the reader should refer to the information presented in Appendices C and D. General guidance concerning these requirements can be found in NUREG-1022, Supplement No. 2.[4]

TABLE 1. SUMMARY OF SCORES[a] FOR PEACH BOTTOM 2 AND 3

	Average	High	Low
Text	8.2	10.0	6.2
Abstract	7.3	8.9	5.9
Coded Fields	8.5	9.2	7.0
Overall	8.0[b]	9.1	6.8

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

b. Overall Average = 60% Text Average + 30% Abstract Average + 10% Coded Fields Average.

TABLE 3. LER REQUIREMENT PERCENTAGE SCORES FOR PEACH BOTTOM 2 AND 3

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	87 (15)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	95 (15)
(2)(ii)(D) - - Root cause and intermediate cause(s)	89 (15)
(2)(ii)(E) - - Mode, mechanism, and effect	100 (4)
(2)(ii)(F) - - EIIS Codes	60 (15)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	67 (6)
(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)	72 (10)
(2)(ii)(K) - - Safety system responses	94 (6)
(2)(ii)(L) - - Manufacturer and model no. information	25 (4)
(3) - - - - - Assessment of safety consequences	74 (15)
(4) - - - - - Corrective actions	83 (15)
(5) - - - - - Previous similar event information	97 (15)
(2)(i) - - - - Text presentation	81 (15)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	96 (15)
- Description of plant, system, component, and/or personnel responses	100 (7)
- Root cause information	54 (15)
- Corrective Action information	54 (15)
- Abstract presentation	74 (15)

TABLE 3. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	100 (15)
4 - - - - - - Title	57 (15)
5, 6, and 7 - Event date, LER No., and report date	95 (15)
8 - - - - - - Other facilities involved	100 (15)
9 and 10 - - Operating mode and power level	96 (15)
11 - - - - - Reporting requirements	83 (15)
12 - - - - - Licensee contact information	100 (15)
13 - - - - - Coded component failure information	92 (15)
14 and 15 - - Supplemental report information	95 (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.

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR PEACH BOTTOM LERs

Areas	Comments
Safety assessment information	Be sure to include a detailed safety assessment in all LERs. The text should discuss whether or not the event could be worse under different circumstances and provide information about backup systems which could limit the consequences of the event.
Personnel error discussions	Details should be explicitly stated; the cause of personnel error should be discussed, (e.g., cognitive or procedural). Titles for the personnel involved should also be provided.
Manufacturer and model number information	Component identification information should be included in the text for each component failure or whenever a component is suspected of contributing to the event because of its design.
Safety train unavailability	Sufficient dates and times should be included in the text to enable the reader to determine the length of time that safety system trains or components were out of service.
EIIS codes	EIIS codes should be provided in the text for all systems and/or components discussed in the text.
Abstracts	Root cause and corrective action information was very often inadequate or was not included. Abstracts should summarize information that is discussed in the text. If it is necessary to include additional information in the abstract, the text should be revised so as to discuss it.

TABLE 4. (continued)

Areas	Comments
Coded fields	
a. Titles	Titles should be written such that they better describe the event. In particular, include the root cause and result of the event in all titles.
b. Failed component information	Only provide information in Item 13 for failed components and then be sure the information provided is consistent with the text.

REFERENCES

1. B. S. Anderson, C. F. Miller, B. M. Valentine, An Evaluation of Selected Licensee Event Reports Prepared Pursuant to 10 CFR 50.73 (DRAFT), NUREG/CR-4178, March 1985.

2. Office for Analysis and Evaluation of Operational Data, Licensee Event Report System, NUREG-1022, U.S. Nuclear Regulatory Commission, September 1983.

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

4. 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 PEACH BOTTOM 2 AND 3

TABLE A-1. LER SAMPLE SELECTION FOR PEACH BOTTOM 2 AND 3

LER Number	Unit Number	LER Number	Comments
1	2	85-003-01	
2	2	85-005-00	
3	2	85-006-00	
4	2	85-007-00	
5	2	85-008-01	
6	2	85-010-00	ESF
7	2	85-014-00	ESF/SCRAM
8	2	85-017-00	
9	2	85-018-00	ESF
10	2	85-019-00	ESF
11	3	85-010-00	ESF
12	3	85-011-02	
13	3	85-012-00	
14	3	85-013-00	
15	3	85-015-00	

APPENDIX B

EVALUATION SCORES OF
INDIVIDUAL LERS FOR PEACH BOTTOM 2 AND 3

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR PEACH BOTTOM 2 AND 3

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	10.0	8.9	8.3	8.2	7.2	8.2	8.4	8.4	6.2	9.0	8.2	8.2	7.8	7.6	8.7	--
Abstract	7.5	8.8	5.9	6.0	8.1	6.5	8.5	6.3	7.2	8.9	7.6	7.1	6.9	6.6	7.5	--
Coded Fields	8.8	8.0	7.9	8.5	8.5	9.2	8.9	8.5	9.0	9.0	9.0	7.0	8.9	7.4	8.8	--
Overall	9.1	8.8	7.5	7.5	7.6	7.8	8.5	7.8	6.8	8.9	8.1	7.7	7.6	7.3	8.3	--

	LER Sample Number[a]														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.2
Abstract	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.3
Coded Fields	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5
Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0

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

APPENDIX C

DEFICIENCY AND OBSERVATION COUNTS FOR PEACH BOTTOM 2 AND 3

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR PEACH BOTTOM 2 AND 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		2 (15)
50.73(b)(2)(ii)(B)--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 (2)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		2 (15)
a. Date information was insufficient.	1	
b. Time information was insufficient.	2	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		7 (15)
a. Cause of component failure was not included or was inadequate	3	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	4	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		0 (4)
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[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		8 (15)
50.73(b)(2)(ii)(G)--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 (0)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		2 (6)
50.73(b)(2)(ii)(I)--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[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		0 (4)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		6 (10)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	2	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	2	
c. 50.73(b)(2)(ii)(J)(2)(ii)--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.	1	
d. 50.73(b)(2)(ii)(J)(2)(iii)--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.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--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.	2	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		1 (6)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		3 (4)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		10 (15)
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.	2	
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.	7	
50.73(b)(4)--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.		8 (15)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
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.	1	
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.	2	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		1 (15)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		3 (15)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	1	
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 PEACH BOTTOM 2 AND 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		2 (15)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		0 (7)
a. Summary of plant responses was not included or was inadequate.		
b. Summary of system responses was not included or was inadequate.		
c. Summary of personnel responses was not included or was inadequate.		
A summary of the root cause of the event was not included or was inadequate.		15 (15)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		11 (15)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		6 (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 characters	0	
c. The abstract contains undefined acronyms and/or plant specific designators.	0	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	4	

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 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 PEACH BOTTOM 2 AND 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
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 in title	15	
b. Result (effect) was not given in title	5	
c. Link was not given in title	3	
Event Date		1 (15)
a. Date not included or was incorrect.	1	
b. Discovery date given instead of event date.	0	
LER Number was not included or was incorrect		0 (15)
Report Date		2 (15)
a. Date not included	0	
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).	2	
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.		0 (15)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		1 (15)
Reporting Requirements		3 (15)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	2	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	1	
Licensee Contact		0 (15)
a. Field left blank		
b. Position title was not included		
c. Name was not included		
d. Phone number was not included.		
Coded Component Failure Information		5 (15)
a. One or more component failure sub-fields were left blank.	1	
b. Cause, system, and/or component code is inconsistent with text.	1	
c. Component failure field contains data when no component failure occurred.	3	
d. Component failure occurred but entire field left blank.	0	

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		1 (15)
a. Neither "Yes"/"No" block of the supplemental report field was checked.	0	
b. The block checked was inconsistent with the text.	1	
Expected submission date information is inconsistent with the block checked in Item (14).		1 (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, (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 a certain requirement was considered applicable.

APPENDIX D

LER COMMENT SHEETS FOR
PEACH BOTTOM 2 AND 3

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section		Comments
1. LER Number:		84-003-01
Scores:	Text = 10.0	Abstract = 7.5 Coded Fields = 8.8 Overall = 9.1
Text	1.	Use of vertical bars to indicate the additional information in the revision is good.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. The abstract should indicate that the valve was damaged due to operating against an excessive pressure differential and that the particular test situation was not covered by a procedure.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The abstract should indicate that the test procedure was changed.
Coded Fields	1.	Item (4)--Title: Root cause and link are not included.
	2.	Item (13)--The manufacturer code appears to be in conflict with the text.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section		Comments
2. LER Number:		85-005-00
Scores: Text = 8.9		Abstract = 8.8 Coded Fields = 8.0 Overall = 8.8
Text	1.	50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the removal of the information tag is inadequate. Are there procedures for checking on or clearing information tags?
	2.	50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. What will prevent removal of a red tag just as the information tag was removed?
	3.	Some ideas are not presented clearly (hard to follow). Is there a difference between "blocked out-of-service" and "bypassed" and if so, does the proposed corrective action apply to both?
	4.	The outline format is good.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. The removal of the information tag is not mentioned in the abstract.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The interim actions are not mentioned.
Coded Fields	1.	Item (4)--Title: Root cause and result (i.e., technical specification violation) are not included.
	2.	Item (7)--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
3. LER Number:	85-006-00
Scores:	Text = 8.3 Abstract = 5.9 Coded Fields = 7.9 Overall = 7.5
Text	1. 50.73(b)(2)(ii)(C)--Include the time of the scram.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not given.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	4. 50.73(b)(4)--The long term corrective actions to prevent recurrence were not discussed. Will a warning for future personnel be posted or will a procedural step be added?
	5. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. The abstract should include how bumping the cable caused the scram.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.
	2. Item (11)--OBSERVATION: It appears it would have been more appropriate to report this event under paragraph(s) 50.73(a)(2)(iv).
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
4. LER Number: 85-007-00	
Scores: Text = 8.2 Abstract = 6.0 Coded Fields = 8.5 Overall = 7.5	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the backfill operation is inadequate. More details are needed concerning how the backfilling caused the false signal.
	2. 50.73(b)(2)(ii)(J)(2)--It appears that personnel error is involved in this event, but it is not discussed. Was the error in operation of the portable device caused by personnel or procedural deficiency?
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Could this event have happened when the unit was not in cold shutdown? OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed If the event occurred under what are considered the most severe conditions, the text should so state.
	4. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. No permanent corrective actions are discussed.
	5. A supplemental report appears to be needed to describe any permanent corrective actions.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The times for the two occurrences should have been provided given the similarity to LER 85-009-00 and others.
	2. 50.73(b)(1)--Summary of root cause is inadequate. See text comment No. 1.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
4. LER Number:	85-007-00 (continued)
	4. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause is not included.
	2. Item (14)--The block checked is inconsistent with information in the text.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
5. LER Number:	85-008-01
Scores:	Text = 7.2 Abstract = 8.1 Coded Fields = 8.5 Overall = 7.6
Text	1. Use of vertical lines to indicate the additions in the revision is good.
	2. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	3. 50.73(b)(2)(ii)(D)--The text does not explain why almost 21 months passed before the integrity of the fire barriers were verified.
	4. 50.73(b)(2)(ii)(H)--A time estimate of the unavailability of the failed system is not included. Need to include the date that faulty barriers were installed.
	5. 50.73(b)(3)--Should discuss consequences of a fire burning through the barriers.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The abstract should state that the barriers are being replaced.
Coded Fields	1. Item (4)--Title: Root cause is not included.
	2. Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(vii).

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
6. LER Number: 85-010-00	
Scores: Text = 8.2 Abstract = 6.5 Coded Fields = 9.2 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the backfill operation is inadequate. More details are needed concerning how the backfilling operation caused the false signal.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included. The codes given are the same ones given in an earlier report for the reactor protection system and primary containment isolation system.
	3. 50.73(b)(2)(ii)(J)(2)--It appears that personnel error is involved in this event, but it is not discussed. Was the error in operation of the portable device caused by personnel or procedural deficiency?
	4. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. No permanent corrective actions are discussed?
	6. A supplemental report appears to be needed to describe any permanent corrective actions.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The ECCS that actuated should be named. The E-2 and E-4 diesel generator starts should have been mentioned.
	2. 50.73(b)(1)--Summary of root cause is inadequate. See text comment No. 1.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
6. LER Number:	85-010-00 (continued)
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. See text comment No. 5.
	4. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section		Comments
7. LER Number: 85-014-00		
Scores: Text = 8.4 Abstract = 8.5 Coded Fields = 8.9 Overall = 8.5		
Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2.	50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses is inadequate. The discussion should be more specific about what is involved in Group II and III isolations.
	3.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	4.	The text contradicts itself. The first sentence under Description of the Event and the second sentence under Consequences of the Event appear to be contradictory.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. The summary should indicate that the operator's attention was erroneously redirected to another task before recovering the reactor water level.
Coded Fields	1.	Item (4)--Title: Root cause is not included.
	2.	Item (7)--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).
	3.	Item (13)--Component failure field contains data when no component failure occurred. The text does not indicate that the level controller actually failed.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
8. LER Number: 85-017-00	
Scores: Text = 8.4 Abstract = 6.3 Coded Fields = 8.5 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. At what time did the operator receive the torus low level alarm? 2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the low level alarm setpoint drifting up is not included. 3. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error is inadequate. 4. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural is not included. 5. Who made the decision to continue pumping after the alarm was received? 6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components are available, the text should so state. 7. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. The corrective actions listed may not prevent recurrence in the long term. How will other operators be made aware of the problem? Should the setpoint be checked more often? Are there any procedures that need revision?

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section		Comments
8. LER Number:		85-017-00 (continued)
Abstract	1.	50.73(b)(1)--Summary of root and intermediate causes is not included.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Actions necessary to prevent recurrence are not mentioned.
	3.	Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4)--Title: Root cause and result (T.S. violation) are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section	Comments
9. LER Number: 85-018-00	
Scores: Text = 6.2 Abstract = 7.2 Coded Fields = 9.0 Overall = 6.8	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifiers for each component referred to in the LER were not included.
	2. 50.73(b)(2)(ii)(I)--How was it determined that the valve was opened too quickly?
	3. 50.73(b)(2)(ii)(J)(2)(ii)--The text is not clear about whether or not the operator was following the approved procedure or not.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The text should be more specific as to why there were no safety consequences.
	5. 50.73(b)(4)--What will be done to insure that other operators will not make the same mistake in the future?
Abstract	1. The root cause and corrective actions do not indicate that personnel error was involved, nor that the person was instructed on the proper procedure.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 2 (277)

Section		Comments
10. LER Number: 85-019-00		
Scores: Text = 9.0 Abstract = 8.9 Coded Fields = 9.0 Overall = 8.9		
Text	1.	50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
	2.	It is not clear whether the pump was declared inoperable because "flow was lower than previously measured" or because it did not satisfy the minimum flow requirements of Specification 4.5.A.3.d.
	3.	50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. It appears that there must be some operability test procedure that requires revision as a result of the reassessment concluded on October 3, 1985. OBSERVATION: Scores for this LER are based on the assumption that the supplemental report will contain all the necessary information.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. The follow-up report should be mentioned. See text comment No. 3.
Coded Fields	1.	Item (4)--Title: Root cause and result are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
11. LER Number: 85-010-00	
Scores: Text = 8.2	Abstract = 7.6 Coded Fields = 9.0 Overall = 8.1
Text	1. 50.73(b)(2)(ii)(D)--Why was the wire insulation frayed and why was the frayed wire not noticed before use?
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The text should be specific as to why there were no adverse consequences. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. The abstract should indicate that the test equipment had a frayed wire.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The abstract should give the long term corrective actions (i.e., increased inspection of test equipment).
Coded Fields	1. Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
12. LER Number: 85-011-02	
Scores: Text = 8.2 Abstract = 7.1 Coded Fields = 7.0 Overall = 7.7	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the unqualified penetration seals is not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	4. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error is inadequate. Who (title) was responsible for the unqualified penetration seals and the administrative oversight?
	5. 50.73(b)(3)--Are there any other systems or equipment (other than the smoke detectors) in the affected areas that could mitigate the consequences of a fire?
	6. Item (8)--Information in field is inconsistent with text and/or abstract. If there have been no previous events, state none.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. See text comment No. 2.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Abstract does not include summary of steps to prevent recurrence.
	3. 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. Specifically, the fact that the floor was not identified as a fire barrier at the completion of the fire barrier upgrade program.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
12. LER Number:	85-011-02 (continued)
Coded Fields	1. Item (4)--Title: Root cause and result (T.S. violation) are not included.
	2. Event date appears to be in error: Information in text and on previous revision indicates a date of 6/21/85.
	3. The power level (Item 10) is different on all three reports. This power level should be the power when the event occurred or was discovered. All revisions should retain original information.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
13. LER Number: 85-012-00	
Scores: Text = 7.8 Abstract = 6.9 Coded Fields = 8.9 Overall = 7.6	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error is inadequate. Be more specific as to how it became apparent that one fuel bundle had not been removed.
	3. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error is inadequate.
	4. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural is not included.
	5. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. The summary should indicate that personnel error was involved.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
	3. 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. Time of event given in abstract but not text.
Coded Fields	1. Item (4)--Title: Root cause is not included.
	2. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
14. LER Number: 85-013-00	
Scores: Text = 7.6 Abstract = 6.6 Coded Fields = 7.4 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included. Pipe size and material should be provided.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The consequences of one or more of these pipes rupturing should be discussed.
	3. 50.73(b)(4)--Are there any corrective actions designed to try to prevent recurrence of this event or at least discover the problem earlier?
Abstract	1. 50.73(b)(1)--Summary of root cause is not included.
	2. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
	3. 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. The abstract indicates that the testing was performed to comply with NRC Generic Letter 84-11. This fact was not pointed out in the text.
Coded Fields	1. Item (4)--Title: Root cause and (possible) result are not included.
	2. Item (11)--OBSERVATION: It appears it would have been more appropriate to report this event under paragraph(s) 50.73(a)(2)(ii) and (v).
	3. Item (13)--One or more component failure sub-fields are blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR PEACH BOTTOM 3 (278)

Section	Comments
15. LER Number: 85-015-00	
Scores: Text = 8.7 Abstract = 7.5 Coded Fields = 8.8 Overall = 8.3	
Text	OBSERVATION: Scores for this LER are based on the assumption that the supplemental report will contain all the necessary information.
	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifiers for each component referred to in the LER were not included.
	2. 50.73(b)(2)(ii)(H)--A time estimate of the unavailability of the failed system is not included.
	3. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
Abstract	1. 50.73(b)(1)--Summary of root cause is not included. Indicate that further investigation will be made to determine cause.
Coded Fields	1. Item (4)--Title: Root cause is not included.
	2. Item (15)--The "Cause Section" should give at least an expected date. The date listed in Item (15) need not be exact.

AEOD INPUT TO SALP REVIEW FOR LIMERICK 1

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Limerick 1 during the December 1, 1984 to January 31, 1986 Systematic Assessment of Licensee Performance (SALP) assessment period, a representative sample of the unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178[1]. The sample consists of 30 LERs. Thirty is considered to be the maximum number of LERs required to be evaluated for each licensee during an assessment period. See Appendix A for a list of the LER numbers in the sample.

It was necessary to start the evaluation before the end of the SALP assessment period because the input was due such a short time after the end of the SALP period. Therefore, not all of the LERs prepared during the SALP assessment period were available for review.

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 requirements of NUREG-1022[2], and Supplements 1[3] and 2[4] to NUREG-1022.

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 reviewed. 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 the overall score determined 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 x text score + 0.3 x abstract score + 0.1 x coded fields score = 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 these appendices, the reader is cautioned not to try to directly correlate the number of comments on a comment sheet with the LER scores, as the analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

Although the purpose of this evaluation was to assess the content of the individual LERs selected for review, the analysts often make other observations which they believe should be brought to the attention of the licensee. The following discussion addresses a general observation that was noted during the evaluation.

General Observation

Several recurring problems were noted when reviewing titles for the sample selection. A review of two of the more prevalent problems (chlorine analyzer failures and Reactor Water Cleanup System isolations) revealed that the root cause was not known so that proper corrective actions could not be taken to prevent recurrence. Since it was not possible to determine the root cause immediately, the need for further investigation was

indicated in most of these LERs. None of these LERs, however, ever committed to a supplemental report (Items 14 and 15 of the Coded Fields) to discuss the findings of the investigation and the final corrective actions to prevent recurrence. The need for further investigation almost always implies the need for a supplemental report. In fact, an LER with a need for future investigation without a commitment to a supplemental report is considered to be incomplete.

Discussion of 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 each units performance (on a scale of 0 to 10) in submitting LERs that meet the requirements of 10 CFR 50.73(b).

Table 1 presents the average scores for the sample of LERs evaluated for Limerick 1. The reader is cautioned that the scores resulting from the methodology used for this evaluation are not directly comparable to the scores contained in NUREG/CR-4178 due to refinements in the methodology.

(Table 2 Deleted)

Table 3 and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1. For example, Limerick's average score for the text of the LERs that were evaluated was 8.3 out of a possible 10 points. From Table 3 it can be seen that the text score actually resulted from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions before the event [10 CFR 50.73(b)(2)(ii)(A)] to text presentation. The percentage scores in the text summary section of Table 3 provide an indication of how well each text requirement was addressed by the licensee for the 30 LERs that were evaluated.

Discussion of Specific Deficiencies

A review of the percentage scores presented in Table 3 will quickly point out where the licensee is experiencing the most difficulty in preparing LERs. For example, requirement percentage scores of less than 75 indicate that the licensee probably needs additional guidance concerning these requirements. Scores of 75 or above, but less than 100, indicate that the licensee probably understands the basic requirement but has either: (1) excluded certain less significant information from a large number of the discussions concerning that requirement or (2) totally failed to address the requirement in one or two of the selected LERs. The licensee should review the LER specific comments presented in Appendix D in order to determine why he received less than a perfect score for certain requirements. The text requirements with a score of less than 75 are discussed below in their order of importance. In addition, the primary deficiencies in the abstract and coded fields are discussed.

Although the first requirement to be discussed had an acceptable score of 80 percent, some problems were noticed in the safety assessments [Requirement 50.73(b)(3)]. Sixteen of the safety assessments were found to have some deficiency. A safety assessment is supposed to include three items as follows:

1. An assessment of the event including specifics as to why there was no safety problem. It is inadequate to state "this event had no safety consequences or implications" without explanation as to why.

2. A safety assessment should indicate whether or not other systems were available to perform the function of the system which was lost. Seven LERs were found to be deficient in this area.

3. Finally a safety assessment should consider whether the event could have occurred under more severe conditions where the safety implications would have been more severe. If the conditions during the event are considered the worst probable then the LER should state so. Seven LERs were found to be deficient in this area.

Five of the nine LERs involving component failures failed to adequately identify the failed component in the text [Requirement 50.73(b)(2)(ii)(L)]. Adequate identification is usually considered to be manufacturer name and model number. This information is important for the identification of possible generic problems in the nuclear industry.

Information concerning previous similar events [Requirement 50.73(b)(5)] was generally included. Six of the thirty LERs reviewed, however, had no section in the outline for previous similar events, and therefore, failed to satisfy this requirement. Previous similar events should be referenced appropriately (LER number if possible), and if there are none, the text should state this.

Finally, 24 of the LERs reviewed failed to include the Energy Industry Identification System (EIIS) codes for each component and system referred to in the LER. Towards the end of the SALP period, however, six LERs included the EIIS codes for each system referred to in the LER. Requirement 50.73(b)(2)(ii)(F) requires inclusion of the appropriate EIIS code for each system and component referred to in the text.

The root cause summary in the abstract (score = 75%) was marginally adequate and the corrective action summary (score = 57%) was unacceptable. While the abstract is not supposed to be as detailed as the text, root cause and corrective actions are important and should be included. Since the root cause and corrective action discussions in the text received good scores, the short comings in the abstract could probably be overcome by including the major points from the text discussion.

The abstract presentations (score = 77%), although acceptable, could be improved by making sure that all information in the abstract is also discussed in the text. Eight of the LERs reviewed contained information in the abstract which was not discussed in the text. If it is necessary to include such information, the text should be revised to adequately discuss it. During sample selection it was noticed that several LER abstracts were continued onto the text form. This practice should be avoided. Abstracts are limited to 1400 characters which will easily fit in the space provided on page 1 of the forms.

The main deficiency in the area of coded fields involves the title, Item (4). Twenty-eight of the titles did not indicate root cause, eight failed to include the link (i.e., circumstances or conditions which tie the root cause to the result), and thirteen failed to provide information concerning the result of the event (i.e., why the event was required to be reported). While result is considered the most important part of the title, cause and link must be included to make the title complete. An example of a title that only addresses the result might be "Reactor Scram". This is inadequate in that the cause and link are not provided. A more appropriate title might be "Inadvertent Relay Actuation During Surveillance Test LOP-1 Causes Reactor Scram". From this title the reader knows the cause was either personnel or procedural and testing contributed to the event.

Table 4 provides a summary of the areas that need improvement for Limerick 1 LERs. For more specific information concerning deficiencies the reader should refer to the information presented in Appendices C and D. General guidance concerning these requirements can be found in NUREG-1022, Supplement No. 2^4.

TABLE 1. SUMMARY OF SCORES[a] FOR LIMERICK 1

	Average	High	Low
Text	8.3	9.7	6.5
Abstract	8.0	10.0	5.5
Coded Fields	8.6	9.5	7.0
Overall	8.2[b]	9.7	7.1

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

b. Overall Average = 60% Text Average + 30% Abstract Average + 10% Coded Fields Average.

TABLE 3. LER REQUIREMENT PERCENTAGE SCORES FOR LIMERICK 1

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	83 (30)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	90 (30)
(2)(ii)(D) - - Root cause and intermediate cause(s)	86 (30)
(2)(ii)(E) - - Mode, mechanism, and effect	94 (9)
(2)(ii)(F) - - EIIS Codes	12 (30)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	82 (14)
(2)(ii)(I) - - Method of discovery	78 (30)
(2)(ii)(J)(1) - Operator actions affecting course	87 (9)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	86 (22)
(2)(ii)(K) - - Safety system responses	100 (17)
(2)(ii)(L) - - Manufacturer and model no. information	50 (9)
(3) - - - - - Assessment of safety consequences	80 (30)
(4) - - - - - Corrective actions	87 (30)
(5) - - - - - Previous similar event information	80 (30)
(2)(i) - - - - Text presentation	83 (30)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	98 (30)
- Description of plant, system, component, and/or personnel responses	99 (20)
- Root cause information	75 (30)
- Corrective Action information	57 (30)
- Abstract presentation	77 (30)

TABLE 3. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	100 (30)
4 - - - - - - Title	56 (30)
5, 6, and 7 - Event date, LER No., and report date	97 (30)
8 - - - - - - Other facilities involved	100 (30)
9 and 10 - - Operating mode and power level	99 (30)
11 - - - - - Reporting requirements	93 (30)
12 - - - - - Licensee contact information	100 (30)
13 - - - - - Coded component failure information	92 (30)
14 and 15 - - Supplemental report information	87 (30)

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.

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR LIMERICK 1 LERS

Areas	Comments
Safety assessment information	Be sure to include a complete safety assessment in all LERs. The text should discuss whether or not the event could have been worse under different circumstances and provide information concerning backup systems that could have limited the consequences of the event.
Manufacturer and model number information	Component identification information should be included in the text for each component failure or whenever a component is suspected of contributing to the event because of its design.
Previous similar events	Previous similar events should be referenced (LER Number) or the text should state there are none.
EIIS codes	Be sure to include the EIIS codes for all systems and components which are referred to in the text.
Abstracts	Root cause and corrective action information was often inadequate or was not included. Abstracts should not contain information which was not discussed in the text. If it is necessary to include this information, the text should be revised so as to discuss it.
Coded Fields a. Titles	Titles should be written such that they better describe the event. In particular, include the root cause and result of the event in all titles.

REFERENCES

1. B. S. Anderson, C. F. Miller, B. M. Valentine, An Evaluation of Selected Licensee Event Reports Prepared Pursuant to 10 CFR 50.73 (DRAFT), NUREG/CR-4178, March 1985.

2. Office for Analysis and Evaluation of Operational Data, Licensee Event Report System, NUREG-1022, U.S. Nuclear Regulatory Commission, September 1983.

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

4. 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 LIMERICK 1

TABLE A-1. LER SAMPLE SELECTION FOR LIMERICK 1

LER Number	LER Number	Comments
1	84-024-00	ESF
2	84-027-00	
3	84-036-00	ESF
4	84-039-00	SCRAM
5	84-042-00	
6	84-046-01	ESF
7	85-002-00	ESF
8	85-003-00	ESF
9	85-006-00	
10	85-007-00	SCRAM
11	85-013-00	
12	85-014-00	
13	85-017-00	
14	85-022-00	
15	85-028-00	
16	85-037-00	ESF
17	85-038-00	ESF
18	85-039-00	ESF
19	85-042-00	ESF
20	85-044-01	ESF
21	85-046-00	SCRAM
22	85-053-01	
23	85-055-00	ESF

TABLE A-1. (continued)

LER Number	LER Number	Comments
24	85-058-00	
25	85-060-00	
26	85-063-00	ESF
27	85-065-00	
28	85-073-00	SCRAM
29	85-077-01	ESF
30	85-078-00	

APPENDIX B

EVALUATION SCORES OF INDIVIDUAL LERS FOR LIMERICK 1

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR LIMERICK 1

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	9.0	8.2	8.0	8.7	9.0	6.7	7.6	6.6	7.8	6.5	7.6	7.6	8.0	9.6	8.6	7.3
Abstract	8.7	5.6	7.2	7.5	9.2	8.4	5.5	7.6	6.5	8.5	7.5	7.2	7.7	10.0	8.5	7.0
Coded Fields	9.1	9.0	8.3	8.5	9.0	8.0	8.9	8.5	8.4	8.5	8.5	8.0	8.3	8.0	9.1	9.5
Overall	8.9	7.5	7.8	8.3	9.0	7.3	7.1	7.1	7.5	7.3	7.7	7.6	8.0	9.5	8.6	7.4

	LER Sample Number[a]														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	8.6	9.2	8.2	8.1	7.9	8.5	7.8	9.7	9.2	8.5	9.3	9.3	8.6	9.3	8.3
Abstract	8.0	8.8	9.3	9.0	7.0	7.5	8.3	10.0	8.8	8.5	8.8	7.7	7.4	8.1	8.0
Coded Fields	9.0	8.5	7.5	8.0	9.1	7.0	8.0	9.0	9.0	9.0	9.1	8.5	8.5	9.0	8.6
Overall	8.4	9.0	8.5	8.4	7.8	8.0	8.0	9.7	9.0	8.6	9.1	8.7	8.2	8.9	8.2

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

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR LIMERICK 1

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	9.0	8.2	8.0	8.7	9.0	6.7	7.6	6.6	7.8	6.5	7.6	7.6	8.0	9.6	8.6	7.3
Abstract	8.7	5.6	7.2	7.5	9.2	8.4	5.5	7.6	6.5	8.5	7.5	7.2	7.7	10.0	8.5	7.0
Coded Fields	9.1	9.0	8.3	8.5	9.0	8.0	8.9	8.5	8.4	8.5	8.5	8.0	8.3	8.0	9.1	9.5
Overall	8.9	7.5	7.8	8.3	9.0	7.3	7.1	7.1	7.5	7.3	7.7	7.6	8.0	9.5	8.6	7.4

	LER Sample Number[a]														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	8.6	9.2	8.2	8.1	7.9	8.5	7.8	9.7	9.2	8.5	9.3	9.3	8.6	9.3	8.3
Abstract	8.0	8.8	9.3	9.0	7.0	7.5	8.3	10.0	8.8	8.5	8.8	7.7	7.4	8.1	8.0
Coded Fields	9.0	8.5	7.5	8.0	9.1	7.0	8.0	9.0	9.0	9.0	9.1	8.5	8.5	9.0	8.6
Overall	8.4	9.0	8.5	8.4	7.8	8.0	8.0	9.7	9.0	8.6	9.1	8.7	8.2	8.9	8.2

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

APPENDIX C

DEFICIENCY AND OBSERVATION COUNTS FOR LIMERICK 1

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR LIMERICK 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		5 (30)
50.73(b)(2)(ii)(B)--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 (6)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		10 (30)
a. Date information was insufficient.	2	
b. Time information was insufficient.	8	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		10 (30)
a. Cause of component failure was not included or was inadequate	6	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	4	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		1 (9)
a. Failure mode was not included or was inadequate	0	
b. Mechanism (immediate cause) was not included or was inadequate	0	
c. Effect (consequence) was not included or was inadequate.	1	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		30 (30)
50.73(b)(2)(ii)(G)--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 (0)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		3 (14)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		7 (30)
a. Method of discovery for each component failure was not included or was inadequate	2	
b. Method of discovery for each system failure was not included or was inadequate	1	
c. Method of discovery for each personnel error was not included or was inadequate	3	
d. Method of discovery for each procedural error was not included or was inadequate.	1	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		2 (9)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		9 (22)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	4	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	3	
c. 50.73(b)(2)(ii)(J)(2)(ii)--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.	1	
d. 50.73(b)(2)(ii)(J)(2)(iii)--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.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--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.	0	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		0 (17)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		5 (9)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		16 (30)
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.	7	
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.	7	
50.73(b)(4)--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.		10 (30)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
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.	1	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		6 (30)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		8 (30)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	1	
b. Text contained undefined acronyms and/or plant specific designators.	4	
c. The text contains other specific deficiencies relating to the readability.	3	

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 LIMERICK 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		2 (30)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		1 (20)
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.		19 (30)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		25 (30)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		14 (30)
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.	8	
b. The abstract was greater than 1400 characters	1	
c. The abstract contains undefined acronyms and/or plant specific designators.	0	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	9	

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 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 LIMERICK 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		0 (30)
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 (30)
Page Number was not included or was incorrect.		0 (30)
Title was left blank or was inadequate		30 (30)
a. Root cause was not given in title	28	
b. Result (effect) was not given in title	8	
c. Link was not given in title	13	
Event Date		1 (30)
a. Date not included or was incorrect.	1	
b. Discovery date given instead of event date.	0	
LER Number was not included or was incorrect		0 (30)
Report Date		2 (30)
a. Date not included	0	
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).	2	
Other Facilities information in field is inconsistent with text and/or abstract.		0 (30)
Operating Mode was not included or was inconsistent with text or abstract.		1 (30)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		0 (30)
Reporting Requirements		5 (30)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	1	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	4	
Licensee Contact		0 (30)
a. Field left blank		
b. Position title was not included		
c. Name was not included		
d. Phone number was not included.		
Coded Component Failure Information		4 (30)
a. One or more component failure sub-fields were left blank.	0	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	2	
d. Component failure occurred but entire field left blank.	2	

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		5 (30)
a. Neither "Yes"/"No" block of the supplemental report field was checked.	0	
b. The block checked was inconsistent with the text.	3	
Expected submission date information is inconsistent with the block checked in Item (14).		0 (30)

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 a certain requirement was considered applicable.

APPENDIX D

LER COMMENT SHEETS FOR
LIMERICK 1

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
1. LER Number: 84-024-00	
Scores: Text = 9.0 Abstract = 8.7 Coded Fields = 9.1 Overall = 8.9	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	3. 50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The abstract should indicate that lack of communication between the midnight and day shifts was a factor contributing to this event.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The abstract should indicate that the procedure was being changed to prevent recurrence.
Text	1. Item (4)--Title: Root cause is not included.
	2. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
2. LER Number: 84-027-00		
Scores: Text = 8.2 Abstract = 5.6 Coded Fields = 9.0 Overall = 7.5		
Text	1.	50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the "failure to arrange for a sample to be taken" is not included.
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3.	50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error is not included.
	4.	50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural is not included.
	5.	50.73(b)(4)--Will the corrective action discussed prevent recurrence of the problem by future (or other) supervisors or are additional actions necessary (e.g., actions that will place some of the burden of responsibility on those that take the sample)?
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate.
	3.	Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4)--Title: Root cause and result (T.S. violation) are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
3. LER Number: 84-036-00	
Scores: Text = 8.0 Abstract = 7.2 Coded Fields = 8.3 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the component failure is inadequate. More details about the defective switch should be included (e.g., how the switch was defective).
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure is not included.
	4. 50.73(b)(2)(ii)(J)(2)(ii)--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 is inadequate.
	5. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
	6. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Long term corrective actions were not given.
	2. 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.
Coded Fields	1. Item (4)--Title: Root cause and link are not included. The title is misleading, since it implies that a high temperature actually occurred.
	2. Item (14)--The block checked is inconsistent with information in the text. The last sentence of page two implies the need for a revision in order to report the modification mode to the system.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
4. LER Number: 84-039-00		
Scores: Text = 8.7 Abstract = 7.5 Coded Fields = 8.5 Overall = 8.3		
Text	1.	50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the static inverter overvoltage condition is inadequate. Is the voltage regulator board failure considered a random failure?
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3.	50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
	4.	50.73(b)(4)--Given that the root cause of the voltage regulator board failure is not given, it is not possible to determine whether or not the corrective actions address the problem of recurrence.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. See text comment No. 1.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Replacement of the voltage regulator board is not mentioned.
	3.	Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4)--Title: Root cause and link (concurrent testing) are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
5. LER Number: 84-042-00		
Scores: Text = 9.0 Abstract = 9.2 Coded Fields = 9.0 Overall = 9.0		
Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2.	50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural is not included.
	3.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. Be more specific about the error made by the field engineer.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Include the fact that other isolation valves were checked.
Coded Fields	1.	Item (4)--Title: Root cause and link are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
6. LER Number: 84-046-01	
Scores: Text = 6.7 Abstract = 8.4 Coded Fields = 8.0 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant op rating conditions before the event is not included. It is required in the text and optional in the abstract.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the broken sample tape is not included. A supplemental report appears to be needed to describe the root cause. Without a commitment to submit a supplemental report, this LER must be considered incomplete.
	3. 50.73(b)(2)(ii)(E)--The effect discussion of each failed component is not included.
	4. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Was the Control Room Emergency Fresh Air System left running until the analyzer was returned to service? If not, was there another analyzer capable of detecting chlorine and initiating emergency ventilation?
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. A supplemental report appears to be needed to describe the corrective actions resulting from the investigation into the cause of the tape breakage. Without a commitment to submit a supplemental report, this LER must be considered incomplete.
	7. Some ideas are not presented clearly (hard to follow). See text comment No. 5 and the reference to Technical Specification 3.3.7.8.1a permitting operation in the normal ventilation mode (second paragraph, page 2).
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. See text comment No. 2.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
6. LER Number:	84-046-01 (continued)
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. See text comment No. 6.
	3. The continuing investigation should have been mentioned in the abstract.
	4. 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. See text comment No. 1.
	5. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and result are not included.
	2. Item (14)--The block checked is inconsistent with information in the text.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
7. LER Number: 85-002-00		
Scores: Text = 7.6 Abstract = 5.5 Coded Fields = 8.9 Overall = 7.1		
Text	1.	50.73(b)(2)(ii)(D)--The text should be more specific as to how the procedure could cause insufficient venting.
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	4.	50.73(b)(4)--The corrective actions concerning the procedure should be more specific.
	5.	Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1.	50.73(b)(1)--Summary of root cause is inadequate. The abstract should indicate that the event was caused by a deficient procedure for venting the demineralizer return header.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
	3.	Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4)--Title: Root cause and link are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
8. LER Number: 85-003-00	
Scores: Text = 6.6	Abstract = 7.6 Coded Fields = 8.5 Overall = 7.1
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. When was the isolation reset?
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the misunderstanding between the technician and the operator is not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	4. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error is inadequate.
	5. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural is not included.
	6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. "Short duration" should be defined. See text Comment No. 1.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. Didn't the technician have written procedures or instructions concerning the testing of the Reactor Water Cleanup system return line flow transmitter? If so, is a caution notice needed in the procedure or instruction to reduce the probability of recurrence?
	8. 50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. See text Comment No. 2.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The "instruction letters" are not mentioned.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
8. LER Number:	85-003-00 (continued)
	3. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link (testing) are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
9. LER Number: 85-006-00	
Scores: Text = 7.8 Abstract = 6.5 Coded Fields = 8.4 Overall = 7.5	
Text	1. 50.73(b)(2)(ii)(D)--More information should be included concerning the faulty "READ" switch.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the procedural error is not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components are available, the text should so state. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	5. 50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. The abstract should indicate that miscommunication between operators and misunderstandings of the technical specifications were the main contributing factors in the event.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Long term corrective actions to prevent recurrence were not summarized.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
9. LER Number:	85-006-00 (continued)
Coded Fields	1. Item (4)--Title: Root cause and link are not included.
	2. Item (7)--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
10. LER Number: 85-007-00	
Scores: Text = 6.5 Abstract = 8.5 Coded Fields = 8.5 Overall = 7.3	
Text	1. There is a fundamental problem with this LER (and LER 84-039-00) in that information that was known to the licensee as early as December of 1984 concerning the suspected root cause of this event was not included in either 84-039-00 or 85-007-00 (i.e., the high ambient room and cabinet temperature, see LER 85-024-00).
	2. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. When was the bad voltage regulator board replaced?
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the failed regulator board is not included. See comment No. 1.
	4. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	5. 50.73(b)(2)(ii)(H)--A time estimate of the unavailability of the failed system is not included. See comment No. 2.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. The modifications to the inverter cabinets (discussed in LER 85-024-00) should have been discussed in this LER.
	8. In the "Cause of the Event" section and the first sentence of the "Corrective Actions", the panel number appears to be wrong. Shouldn't it be 1BY160? If not, the relationship between these different panels is not explained.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
10. LER Number:	85-007-00 (continued)
	9. Additional background information should have been provided for this LER, given the corrective action listed in 84-039-00 and 85-007-00 appear to be one in the same. (Note the date of the corrective actior in 84-039-00.)
	10. LERs should be stand alone documents. The reader should not have to read three different LERs to gain a perspective on the overall problem.
Abstract	1. 50.73(b)(1)--Summary of cause information is inadequate. See text comment Nos. 1 and 3.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Why did it take two separate occurrences (8:21 a.m. and 8:58 a.m.) before the faulty regulator card was replaced? Also, see text comment No. 7.
Coded Fields	1. Item (4)--Title: Root cause and result are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
11. LER Number: 85-013-00		
Scores: Text = 7.6	Abstract = 7.5	Coded Fields = 8.5 Overall = 7.7
Text	1.	50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3.	50.73(b)(2)(ii)(H)--A time is needed to indicate when the transmitter was returned to service.
	4.	50.73(b)(2)(ii)(J)(2)--More detail is needed as to how personnel overlooked the technical specification requirement.
	5.	50.73(b)(4)--It is not possible to know how effective the long term corrective actions will be without knowing why the personnel made the mistake (see text comment No. 4).
	6.	50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	1.	The abstract summary is deficient in discussing the personnel error and long term corrective actions.
Coded Fields	1.	Item (4)--Title: Root cause is not included.
	2.	Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(i).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
12. LER Number: 85-014-00	
Scores: Text = 7.6 Abstract = 7.2 Coded Fields = 8.0 Overall = 7.6	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error is not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. What were the consequences of having the channel inoperable for approximately four and one half hours? Were other channels or systems available to provide a scram if one was needed?
	4. 50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
	5. A logical transition does not exist between all ideas.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
Coded Fields	1. Item (4)--Title: Root cause and result are not included.
	2. Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(i).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
13. LER Number: 85-017-00	
Scores: Text = 8.0 Abstract = 7.7 Coded Fields = 8.3 Overall = 8.0	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the negative differential pressure is not included.
	3. 50.73(b)(2)(ii)(J)(2)--It appears that personnel error is involved in this event, but it is not discussed.
	4. 50.73(b)(3)--OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components are available, the text should so state.
	5. 50.73(b)(5)--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The long term corrective actions should be summarized.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.
	2. Item (11)--This event also sounds like a technical specification violation and if so should also be reported under requirement 50.73(a)(2)(i).
	3. Item (14)--The block checked is inconsistent with information in the text. Need to report results of the blocking sequence review (last paragraph).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
14. LER Number: 85-022-00	
Scores: Text = 9.6 Abstract = 10.0 Coded Fields = 8.0 Overall = 9.5	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. This is a well written report. Only two questions remained after reading it. From what location (e.g., the control room) is the operator expected to manually initiate the MSIV-LCS system following a LOCA? If it is the control room, and time is critical, the breaker being open would, from a practical standpoint, render the system inoperable. What are system procedures S40.3.A and S40.3.B?
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.
	2. Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(i).
	3. Item (7)--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
15. LER Number: 85-028-00		
Scores: Text = 8.6 Abstract = 8.5 Coded Fields = 9.1 Overall = 8.6		
Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2.	50.73(b)(3)--Other systems available to mitigate an accident should be listed. If no other systems exists the text shall state so.
Abstract	1.	The fact that the design drawing was wrong and was corrected should be mentioned.
Coded Fields	1.	Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
16. LER Number: 85-037-00	
Scores: Text = 7.3 Abstract = 7.0 Coded Fields = 9.5 Overall = 7.4	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. When was the "B" LPCI pump secured the first time? After the second LOCA signal was received, when were all affected systems returned to normal?
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the draining of the condensate storage tank is not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	4. 50.73(b)(2)(ii)(J)(2)--It appears that personnel error is involved in this event, but it is not discussed (i.e., the draining of the condensate storage tank).
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. What were (or could have been) the consequences or implications of draining the condensate storage tank and tripping the CRD pumps?
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. What was done to prevent recurrence of draining the condensate storage tank?
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The CST problem is not mentioned.
	2. 50.73(b)(1)--Summary of system responses is inadequate. The CRD pumps tripping is not mentioned.
	3. 50.73(b)(1)--Summary of root cause of CST problem is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
16. LER Number:	85-037-00 (continued)
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Actions to prevent recurrence of improper valve operation are not summarized.
Coded Fields	1. Item (4)--Title: Link (procedure 57-2-036-630-1) is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
17. LER Number: 85-038-00	
Scores: Text = 8.6	Abstract = 8.0 Coded Fields = 9.0 Overall = 8.4
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The text should be specific as to why an isolation of the Residual Heat Removal (RHR) System had no adverse affects. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components are available, the text should so state. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	3. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The long term corrective actions should be summarized (i.e., the procedure was changed). 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.
Coded Fields	1. Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
18. LER Number: 85-039-00	
Scores: Text = 9.2 Abstract = 8.8 Coded Fields = 8.5 Overall = 9.0	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Could this event have happened in an operating condition during which sampling valve operability was required? If so, these safety implications should be discussed.
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. How the test engineers "initiated a spurious NSSSS isolation signal" should have been mentioned.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. The meetings called to review the proper method of performing the check-off list are not mentioned.
	3. 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. The text should have contained the sentence indicating why the "check-off list is performed periodically". In addition, "periodically" should be defined as to the specific interval.
	4. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link (performing check-off list) are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
19. LER Number: 85-042-00		
Scores: Text = 8.2 Abstract = 9.3 Coded Fields = 7.5 Overall = 8.5		
Text	1.	50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	2.	50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. Include a time for returning the systems to service.
	3.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	4.	A supplemental report appears to be needed to describe the cause of the tape failure when found and the corrective actions. Without a commitment to submit a supplemental report, this LER must be considered incomplete.
Abstract	1.	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. The operating conditions are given in the abstract, but not the text.
Coded Fields	1.	Item (4)--Title: Root cause is not included.
	2.	Item (9)--Operating mode is not included.
	3.	Item (14)--A supplemental report appears to be needed (see text comment No. 4).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
20. LER Number: 85-044-01	
Scores: Text = 8.1 Abstract = 9.0 Coded Fields = 8.0 Overall = 8.4	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. What was the time of the 'A' supply fan trip? When was the "chlorine isolation" reset?
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. It is not clear from the discussion whether or not the auxiliary equipment room return fan was supposed to be shutdown given the circumstances.
	4. 50.73(b)(2)(ii)(J)(2)--It appears that the event may involve personnel error, but it is not discussed. (See comment No. 3.) Was it permissible, prior to this event, to use radio transmitter/receiver units within an electrical cabinet?
	5. 50.73(b)(2)(ii)(L)--Manufacturer and model number of the rate-of-rise heat detector should be provided. Its design contributed to this event.
	6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Are there any personnel related consequences from having detectable levels of Halon in the main control room?
	7. Item (13)--Cause, system, and/or component code is inconsistent with text.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Actions concerning the use of the transmitter/receiver units was not mentioned.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
20. LER Number:	85-044-01 (continued)
	2. 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. The abstract contains greater than 1400 characters.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.
	2. Item (13)--Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
21. LER Number: 85-046-00	
Scores: Text = 7.9	Abstract = 7.0 Coded Fields = 9.1 Overall = 7.8
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	2. 50.73(b)(2)(ii)(I)--The text should be more specific as to how the improper valve configuration was discovered.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The text should give specific reasons why there were no adverse consequences.
Abstract	1. The root cause summary should indicate that deficiencies in preparing the blocking permit lead to the problem.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
Coded Fields	1. Item (4)--Title: Root cause is not included.
	2. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
22. LER Number: 85-053-01	
Scores: Text = 8.5 Abstract = 7.5 Coded Fields = 7.0 Overall = 8.0	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	2. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. At precisely what time was the security force personnel notified by the fire watch personnel of the need to enter certain areas?
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
	4. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event is inadequate. If security was not notified in a timely manner this would have contributed to the event. See comment No. 2.
	5. Could fire watch personnel be issued master keys while they are on watch?
Abstract	1. 50.73(b)(1)--Summary of root cause is inadequate. Cause can only be inferred from the corrective actions (last sentence of abstract).
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. A few more details concerning the content of the June 27, 1985 memorandum should be provided.
	3. 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; for example, "unit in cold shutdown", "(Area 8 elevation 239)", "security" computer, and "while closing a Maintenance Request Form".
Coded Fields	1. Item (4)--Title: Root cause and result are not included.
	2. Item (5)--Event date is incorrect.
	3. Item (11)--OBSERVATION: It appears it would have been more appropriate to report this event under paragraph(s) 50.73(a)(2)(i).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
23. LER Number: 85-055-00	
Scores: Text = 7.8 Abstract = 8.3 Coded Fields = 8.0 Overall = 8.0	
Text	1. A supplemental report appears to be needed to describe the root cause and additional corrective actions, if any. Without a commitment to submit a supplemental report, this LER must be considered incomplete.
	2. 50.73(b)(2)(ii)(D)--See text Comment 1.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER is not included.
	4. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what are considered the most severe conditions, the text should so state.
	5. 50.73(b)(4)--See text Comment 1.
Abstract	1. Include a summary of the actions tried (e.g., looking for loose wires and retesting).
	2. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link are not included. The title should indicate that the cause is presently unknown or spurious, and that it was linked to maintenance work.
	2. Item (14)--See text Comment 1.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
24. LER Number: 85-058-00		
Scores: Text = 9.7	Abstract = 10.0	Coded Fields = 9.0 Overall = 9.7
Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
Abstract	1.	No comments.
Coded Fields	1.	Item (4)--Title: Result (technical specification violation) is not included.
General Comment	1.	This is a well written LER that addresses all but one of the content requirements of 50.73(b).

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
25. LER Number: 85-060-00		
Scores: Text = 9.2 Abstract = 8.8 Coded Fields = 9.0 Overall = 9.0		
Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2.	50.73(b)(4)--Should something more permanent than a memorandum be considered to implement the corrective actions so that future employees will also be aware of the problem?
Abstract	1.	The root cause summary should also include the miscommunication between the fire patrol and security personnel.
Coded Fields	1.	Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
26. LER Number: 85-063-00		
Scores: Text = 8.5 Abstract = 8.5 Coded Fields = 9.0 Overall = 8.6		
Text	1.	50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event is not included.
	2.	50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. When was the analyzer returned to service?
	3.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included. Component code is not provided.
	4.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate. What if the system had not responded in accordance with the design? Are there other systems or procedures in place as a backup?
	5.	When will the study of an alternate type of detection be completed?
Abstract	1.	50.73(b)(1)--Summary of root cause (design problem) is inadequate.
Coded Fields	1.	Item (4)--Title: Root cause and result are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section		Comments
27. LER Number: 85-065-00		
Scores: Text = 9.3 Abstract = 8.8 Coded Fields = 9.1 Overall = 9.1		
Text	1.	50.73(b)(2)(ii)(C)--Date information for occurrences is inadequate. Include dates for corrective actions.
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER is not included.
	3.	50.73(b)(2)(ii)(H)--A time estimate of the unavailability of the failed system is not included.
Abstract	1.	The cause summary should indicate that the erroneous setting was supplied by the manufacturer.
	2.	The corrective actions summary should indicate that zero calibration will be checked by the manufacturer.
Coded Fields	1.	Item (4)--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
28. LER Number: 85-073-00	
Scores: Text = 9.3 Abstract = 7.7 Coded Fields = 8.5 Overall = 8.7	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences is inadequate. The time the plant was stabilized in hot shutdown should be provided in the text.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included. Component codes are not provided.
	3. 50.73(b)(2)(ii)(J)(?)--It appears that personnel error may be involved in this event, but it is not discussed. Could the operator who was placing the 'C' condensate pump in service have contributed to the sudden pressure disturbance by opening the suction valve too fast?
	4. Are there procedures in place to tell the operators what to do after receiving a suction strainer alarm?
Abstract	1. 50.73(b)(1)--Summary of root cause is not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Actions taken to prevent recurrence are not mentioned. 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; (e.g., two times, 0147 and 0600).
	3. Abstract describes the text as opposed to summarizing it.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
29. LER Number: 85-077-01	
Scores: Text = 8.6 Abstract = 7.4 Coded Fields = 8.5 Overall = 8.2	
Text	1. 50.73(b)(2)(ii)(D)--Some attempt would be appropriate to find out why the connection was loose (e.g., installation error or vibration), so that proper corrective actions could be taken to prevent recurrence.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System (EIIS) component function identifier for each component referred to in the LER was not included. The EIIS system identifiers should be defined by giving the appropriate system name.
	3. 50.73(b)(2)(ii)(L)--Identify the failed connector, if possible, with manufacturer name and model number.
	4. 50.73(b)(4)--Additional corrective actions maybe necessary (see text Comment 1).
	5. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is not included.
Coded Fields	1. Item (4) -Title: Root cause is not included.
	2. Item (13)--It would be appropriate to fill in a line for the failed connector.

TABLE D-1. SPECIFIC LER COMMENTS FOR LIMERICK 1 (352)

Section	Comments
30. LER Number: 85-078-00	
Scores: Text = 9.3	Abstract = 8.1 Coded Fields = 9.0 Overall = 8.9
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included. Component code is not provided (ROD).
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error is not included.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event is inadequate. Actions taken to prevent recurrence are not mentioned.
	2. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link are not included.