

Official
File
copy

OCT 29 1985

✓ Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, NC 28242

Gentlemen:

SUBJECT: CATAWBA LICENSE EVENT REPORTS
DOCKET NO. 50-413

Enclosed is an assessment of the Licensee Event Report (LERs) from Catawba prepared by our Office for Analysis and Evaluation of Operational Data. In general, the LERs were found to be of acceptable quality based on the requirements contained in 10 CFR 50.73. This assessment is provided to you so that the specific deficiencies noted can be corrected in future LERs.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Virgil L. Brownlee, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Enclosure:
AEOD Input to SALP Review for Catawba

cc w/encl:

✓ R. L. Dick, Vice President - Construction
✓ J. W. Hampton, Station Manager

bcc: ✓ NRC Resident Inspector
Document Control Desk
State of South Carolina
✓ K. N. Jabbour, NRR
✓ G. Johnson, ELD
H. Dance, DRP

RII
HDance
10/1/85

8511040316 851029
PDR ADOCK 05000413
PDR
Q

11
IE01

AEOD INPUT TO SALP REVIEW FOR CATAWBA 1

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Catawba 1 during the March 1, 1984 to September 30, 1985 Systematic Assessment of Licensee Performance (SALP) assessment period, a sample of the unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178¹. The sample consisted of 30 LERs^a for Catawba 1. Catawba 2 was not addressed as there were no LERs in the file for Catawba 2 at the time the evaluation was started. 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-1022², and Supplements 1³ and 2⁴ to NUREG-1022.

The evaluation process for each LER was 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.

a. Thirty is considered to be the maximum number of LERs required to be evaluated for each unit during an assessment period.

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 were 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. $0.6 \times \text{text score} + 0.3 \times \text{abstract score} + 0.1 \times \text{coded fields score} = \text{overall LER score}$).

Evaluation Results

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 observation 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.

Discussion of Results

Although the purpose of this evaluation was to assess the quality of the contents of the individual LERs selected for review, the analysts often make other observations which they believe should be brought to the attention of the reader. The following discussion addresses a general observation that was noticed for Catawba 1 during the evaluation of the unit's LERs.

General Observation

Many of the LERs contain background information such as how the system or component discussed in the event functions. Inclusion of this kind of information is useful and encouraged; however, the presentation of this information is sometimes confusing because it is not easily distinguished from the information describing the event. Catawba presently labels the corrective action and safety analysis sections of the text presentation. The background information, description of event, and cause of event sections should also be labelled. This would aid the readers understanding of the LERs and eliminate the concern expressed in this paragraph.

Overall, Catawba LERs are above average compared to other units that have been evaluated using this methodology.

LER Quality Results

A discussion of the analysts' conclusions concerning LER quality are 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 Catawba 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. In order to place the scores provided in Table 1 in perspective, the scores from other units that have been evaluated using this methodology are provided in Table 2. Additional units will be added to Table 2 as they are evaluated. 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, Catawba's average score for the text of the LERs that were evaluated is 8.0 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

TABLE 1. SUMMARY OF SCORES^a FOR CATAWBA 1

	<u>Average</u>	<u>High</u>	<u>Low</u>
Text	8.0	9.8	5.7
Abstract	7.4	10.0	4.0
Coded Fields	8.6	9.4	6.9
Overall	7.9 ^b	9.8	5.6

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 2. COMPARISON OF AVERAGE SCORES FROM OTHER UNITS

<u>Unit Name^a</u>	<u>End SALP Period</u>	<u>Text Average</u>	<u>Abstract Average</u>	<u>Coded Fields Average</u>	<u>Overall Average ()^b</u>
Salem 2	9-30-85	8.9	8.9	8.6	8.9 (0.7)
Salem 1	9-30-85	8.6	9.0	8.9	8.8 (0.9)
LaSalle 1	9-30-85	7.9	8.1	8.6	8.0 (1.2)
LaSalle 2	9-30-85	8.0	7.7	8.6	8.0 (1.3)
Catawba 1	9-30-85	8.0	7.4	8.6	7.9 (1.0)
Beaver Valley 1	9-30-85	7.2	8.3	8.8	7.7 (1.2)
Quad Cities 2	9-30-85	7.9	6.4	8.6	7.5 (0.9)
Quad Cities 1	9-30-85	7.9	6.5	8.4	7.5 (1.1)
Cook 2	9-30-85	6.7	8.3	8.4	7.3 (0.8)
Dresden 3	9-30-85	7.2	7.3	8.0	7.3 (1.4)
Palo Verde 1	9-30-85	6.8	7.7	8.4	7.3 (1.7)
Cook 1	9-30-85	6.4	8.3	8.4	7.2 (1.3)
Zion 2	9-30-85	7.2	6.7	8.2	7.1 (1.0)
Dresden 2	9-30-85	6.9	7.3	7.9	7.1 (1.4)
Zion 1	9-30-85	6.0	7.5	7.9	6.6 (1.0)

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3. LER REQUIREMENT PERCENTAGE SCORES FOR CATAWBA 1

TEXT

<u>Requirements [50.73(b)] - Descriptions</u>	<u>Percentage Scores ()^a</u>
(2)(11)(A) - - Plant condition prior to event	58 (30)
(2)(11)(B) - - Inoperable equipment that contributed	b
(2)(11)(C) - - Date(s) and approximate time(s)	88 (30)
(2)(11)(D) - - Root cause and intermediate cause(s)	84 (30)
(2)(11)(E) - - Mode, mechanism, and effect	96 (16)
(2)(11)(F) - - EIIIS Codes	7 (30)
(2)(11)(G) - - Secondary function affected	b
(2)(11)(H) - - Estimate of unavailability	88 (16)
(2)(11)(I) - - Method of discovery	97 (30)
(2)(11)(J)(1) - Operator actions affecting course	100 (29)
(2)(11)(J)(2) - Personnel error (procedural deficiency)	78 (22)
(2)(11)(K) - - Safety system responses	100 (17)
(2)(11)(L) - - Manufacturer and model no. information	61 (16)
(3) - - - - - Assessment of safety consequences	88 (30)
(4) - - - - - Corrective actions	84 (30)
(5) - - - - - Previous similar event information	29 (29)
(2)(1) - - - - Text presentation	82 (30)

ABSTRACT

<u>Requirements [50.73(b)(1)] - Descriptions</u>	<u>Percentage Scores ()^a</u>
- Major occurrences (Immediate cause and effect information)	93 (30)
- Description of plant, system, component, and/or personnel responses	87 (30)
- Root cause information	71 (30)
- Corrective Action information	47 (30)
- Abstract presentation	73 (30)

TABLE 3. (continued)

<u>CODED FIELDS</u>		Percentage
	<u>Item Number(s) - Description</u>	<u>Scores ()^a</u>
1, 2, and 3	Facility name (unit no.), docket no. and page number(s)	100 (30)
4 - - - - -	Title	63 (30)
5, 6, and 7	Event date, LER No., and report date	96 (30)
8 - - - - -	Other facilities involved	84 (30)
9 and 10 - -	Operating mode and power level	100 (30)
11 - - - - -	Reporting requirements	93 (30)
12 - - - - -	Licensee contact information	100 (30)
13 - - - - -	Coded component failure information	63 (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.

different requirements ranging from the discussion of plant operating conditions before the event [10 CFR 50.73(b)(2)(11)(A)] to text presentation. The percent 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, the first deficiency that stands out involves text requirement 50.73(b)(2)(11)(F)-Energy Industry Identification System (EIIS) Codes. All thirty (30) of the licensee's LERs which were reviewed did not contain any EIIS codes as required. The four other requirements with relatively low percentage scores will be discussed in their order of importance.

Discussion of personnel errors [Requirement 50.73(b)(2)(11)(J)(2)] has a percentage of score (78%) which is marginal. It appears that two items, if corrected, would greatly improve performance in this area. First a reluctance to actually state that a personnel error occurred was observed, and second, where personnel error was given as the cause, the discussion did not always indicate whether the error was cognitive or procedural. For LERs involving personnel error, it is imperative that personnel error be specifically stated in the text and that all of the appropriate sections of Requirement 50.73(b)(2)(11)(J)(2) are discussed.

Seven LERs of the sixteen involving component failures, failed to adequately identify the failed component [Requirement 50.73(b)(2)(11)(L)]. Of these seven, six gave neither the manufacturer nor the model number nor any other appropriate identification. This information is important for the identification of possible generic problems in the nuclear industry.

Many of the LERs (17) failed to provide adequate information in the text concerning plant operating conditions prior to the event [Requirement 50.73(b)(2)(11)(A)]. Information was provided in the abstract

but not the text. An abstract is supposed to be a summary of the text; therefore, all information contained in the abstract should also appear in the text. Mode numbers without a corresponding power level or mode numbers without a designation such as hot shutdown or cold shutdown are inadequate. For certain events, it may be necessary to provide even more details such as temperature and pressure.

Information concerning previous similar events was generally lacking. Twenty-one (21) had no reference to previous similar events and in these (3) the reference was considered inadequate. Previous similar events should be reference appropriately (LER number if possible), and if there are none, the text should state this.

Five other areas (requirements) had acceptable scores of 82% or above, but had relatively large numbers of LERs with deficiencies that did not reduce the overall requirement scores significantly. These areas are: Requirement 50.73(b)(2)(11)(C) with 11 deficiencies out of 30 LERs, Requirement 50.73(b)(2)(11)(D) with 12 deficiencies out of 30 LERs, Requirement 50.73(b)(3) with 16 deficiencies out of 30 LERs, Requirement 50.73(b)(4) with 15 deficiencies out of 30 LERs and the text presentation with 8 deficiencies out of 30 LERs. Improvements needed to correct these deficiencies can be obtained by reviewing the specific comments for each LER in Appendix D. In particular, pay attention to comments concerning paragraphs 50.73(b)(2)(11)(D) and 50.73(b)(4). These two paragraphs go hand in hand, because it is necessary to know the root cause of an event in order to take appropriate corrective actions to prevent recurrence. Many of the corrective action discussions addressed only immediate actions and not the long term actions necessary to fix the root cause or prevent the occurrence of similar events.

The abstract percentage score (47%) for corrective actions is quite low. While the abstract is not supposed to be as detailed as the text, corrective actions are an important item which should be included in the abstract. The root cause summary in the abstract (score = 71%) also needs some improvement. The abstracts root cause and corrective actions scores probably reflect to a certain extent the short comings in root cause and

corrective action discussions in the text. Finally, as mentioned in the text discussions for Requirement 50.73(b)(92)(ii)(A), the abstract contains information not that is included in the text. Since the abstract is supposed to be a summary, all information in the abstract should also be discussed in the text.

The main deficiency in the area of coded fields involve the title. Twenty-six of the thirty titles did not indicate root cause. Most did provide information concerning the result of the event (i.e., why the event was required to be reported) and the link (i.e., circumstances or conditions which tie the root cause to the result). An example of a title that only addressed 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 was either personnel or procedural and testing contributed to the event.

The remaining deficiencies concerning the coded fields involve Items (13) (14) and (15). Five LERs involved failure of a component(s) but all fields were not completed for Item (13). In two of these five LERs, more than one component failed but only one line was completed. Concerning Items (14) and (15), five LERs appear to need supplemental reports. Supplemental reports are usually indicated when root cause and/or corrective actions are unknown, but still under investigation.

Table 4 provides a summary of the areas that need improvement for Catawba 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.

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR CATAWBA 1

Areas	Comments
Personnel error	While marginally adequate, some LERs exhibited a need to be more direct in stating that a personnel error had occurred. By doing this and discussing the details surrounding the error, the requirements for personnel error are more likely to be met.
Manufacturer and model number information	Detailed information is needed in the text concerning failed (not faulted) components so that possible generic problems can be identified.
Operating conditions prior to the event	Details such as power levels, mode names and in some cases temperature and pressure are required in the text.
Previous similar events	Previous similar events need to be referenced (LER number) or the text should state that there are none.
EIIIS codes	All LERs are required to have EIIIS component function and system identifier codes for each component or system discussed in the text.
Text presentation consistency	While most presentations were quite good, the inclusion of background information without labelling it so, caused some confusion in reading the LERs.
Abstracts	Corrective action and root cause information was often inadequate or was not included. Many LERs contained information in the abstract which was not discussed in the text.
Coded fields	
a. Titles	Titles should be written such that they better describe the event. In particular, include the root cause of the event in the title.

TABLE 4. (continued)

Areas	Comments
b. Failed component information	Coded should be provided for each failed component, and if more than one component fails, fill in a line for each failure (except for identical component failures).
c. Supplemental reports	A supplement report is required if continued investigation is indicated in the LER, especially for such items as root cause and corrective actions.

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 CATAWBA 1

TABLE A-1. LER SAMPLE SELECTION FOR CATAWBA 1 (413)

<u>Sample Number</u>	<u>LER Number</u>	<u>Comments</u>
1	84-001-00	
2	84-002-00	
3	84-005-00	
4	84-008-00	ESF
5	84-012-00	
6	84-015-00	
7	84-017-02	ESF
8	84-018-00	
9	84-021-00	ESF
10	84-022-00	
11	84-025-00	ESF
12	84-028-00	ESF
13	84-029-00	
14	85-001-00	ESF
15	85-002-00	
16	85-004-00	RX TRIP
17	85-006-00	
18	85-008-00	RX TRIP
19	85-009-00	ESF
20	85-011-00	
21	85-012-00	ESF
22	85-013-01	
23	85-017-01	ESF

TABLE A-1. (continued)

<u>Sample Number</u>	<u>LER Number</u>	<u>Comments</u>
24	85-020-00	RX TRIP
25	85-024-00	
26	85-025-01	RX TRIP
27	85-030-00	ESF
28	85-032-00	ESF
29	85-038-00	
30	85-040-00	

APPENDIX B

EVALUATION SCORES OF
INDIVIDUAL LERs FOR CATAWBA 1

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL FOR CATAWBA 1

	LER Sample Number ^a															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	7.8	9.3	7.2	6.8	6.9	7.6	5.7	7.3	6.0	8.1	9.4	8.3	5.8	8.4	8.8	8.1
Abstract	6.5	6.5	8.0	8.7	7.5	7.3	7.0	8.5	4.0	7.7	8.5	9.3	9.1	8.3	7.0	5.0
Coded Fields	8.9	8.9	7.8	8.7	8.4	9.4	6.9	8.2	8.3	8.7	8.9	9.1	9.2	7.9	8.0	8.0
Overall	7.5	8.4	7.5	7.6	7.2	7.7	6.2	7.8	5.6	8.0	9.1	8.7	7.1	8.3	8.2	7.2

	LER Sample Number															AVERAGE
	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Text	6.2	9.5	8.6	9.8	6.9	8.8	9.1	7.7	8.9	9.5	7.6	9.1	8.6	8.2	8.0	
Abstract	6.0	5.0	8.3	10.0	4.5	9.8	6.5	4.2	9.3	8.0	8.0	9.8	7.2	6.8	7.4	
Coded Fields	8.3	8.4	9.3	8.9	8.2	8.8	7.9	8.9	8.4	8.9	9.2	8.9	8.9	9.1	8.6	
Overall	6.4	8.0	8.7	9.8	6.3	9.1	8.2	6.8	9.0	9.0	7.9	9.3	8.2	7.9	7.9	

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

APPENDIX C

DEFICIENCY AND OBSERVATION
COUNTS FOR CATAWBA 1

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
<u>50.73(b)(2)(11)(A)</u> --Plant operating conditions before the event were not included or were inadequate.		17 (30)
<u>50.73(b)(2)(11)(B)</u> --Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (16)
<u>50.73(b)(2)(11)(C)</u> --Failure to include sufficient date and/or time information.		11 (30)
a. Date information was insufficient.	9	
b. Time information was insufficient.	8	
<u>50.73(b)(2)(11)(D)</u> --The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		12 (30)
a. Cause of component failure was not included or was inadequate	7	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	5	
<u>50.73(b)(2)(11)(E)</u> --The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		2 (16)
a. Failure mode was not included or was inadequate	0	
b. Mechanism (immediate cause) was not included or was inadequate	2	
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	Paragraph Totals () ^b
<u>50.73(b)(2)(ii)(F)</u> --The Energy Industry Identification System component function identifier for each component or system was not included.		30 (30)
<u>50.73(b)(2)(ii)(G)</u> --For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (6)
<u>50.73(b)(2)(ii)(H)</u> --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 (16)
<u>50.73(b)(2)(ii)(I)</u> --The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		1 (30)
a. Method of discovery for each component failure was not included or was inadequate	0	
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	Paragraph Totals () ^b
<u>50.73(b)(2)(ii)(J)(1)</u> --Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		0 (29)
<u>50.73(b)(2)(ii)(J)(2)</u> --The discussion of each personnel error was not included or was inadequate.		12 (22)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	5	
b. <u>50.73(b)(2)(ii)(J)(2)(i)</u> --Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	6	
c. <u>50.73(b)(2)(ii)(J)(2)(ii)</u> --Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	3	
d. <u>50.73(b)(2)(ii)(J)(2)(iii)</u> --Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	0	
e. <u>50.73(b)(2)(ii)(J)(2)(iv)</u> --Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	2	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
<u>50.73(b)(2)(ii)(K)</u> --Automatic and/or manual safety system responses were not included or were inadequate.		0 (17)
<u>50.73(b)(2)(ii)(L)</u> --The manufacturer and/or model number of each failed component was not included or was inadequate.		7 (16)
<u>50.73(b)(3)</u> --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.	4	
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.	11	
<u>50.73(b)(4)</u> --A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		15 (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.	2	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		24 (29)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
<u>50.73(b)(2)(1)</u> --Text presentation inadequacies.		8 (30)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	2	
b. Text contained undefined acronyms and/or plant specific designators.	4	
c. The text contains other specific deficiencies relating to the readability.	5	

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 applicable.

TABLE C-2. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR CATAWBA 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
A summary of occurrences (immediate cause and effect) was not included or was inadequate		5 (30)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		7 (30)
a. Summary of plant responses was not included or was inadequate.	4	
b. Summary of system responses was not included or was inadequate.	6	
c. Summary of personnel responses was not included or was inadequate.	2	
A summary of the root cause of the event was not included or was inadequate.		14 (30)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		24 (30)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Abstract presentation inadequacies		24 (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.	20	
b. The abstract contains undefined acronyms and/or plant specific designators.	0	
c. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	10	

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 applicable.

TABLE C-3. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR CATAWBA 1

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals^a</u>	<u>Paragraph Totals ()^b</u>
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 inadequate		30 (30)
a. Root cause was not given in title	26	
b. Result (effect) was not given in title	4	
c. Link was not given in title	6	
Event Date		0 (30)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		0 (30)
Report Date		2 (30)
a. Date not included		
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.		1 (30)
Operating Mode was not included or was inconsistent with text or abstract.		0 (30)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Power level was not included or was inconsistent with text or abstract		0 (30)
Reporting Requirements		7 (30)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	3	
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 paragraph(s).	3	
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		7 (30)
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.	0	
d. Component failure occurred but entire field left blank.	5	

TABLE C-3. (continued)

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals^a</u>	<u>Paragraph Totals ()^b</u>
Supplemental Report		5 (30)
a. Neither "Yes"/"No" block of the supplemental report field was checked.		
b. The block checked was inconsistent with the text.	5	
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 applicable.

APPENDIX D

LER COMMENT SHEETS FOR
CATAWBA 1

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
1. <u>LER Number:</u> 84-001-00	
Scores: Text = 7.8 Abstract = 6.5 Coded Fields = 8.9 Overall = 7.5	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(D)</u>--The root cause appears to be a personnel error (no R and R for the replacement of the 4-way valves), but the text discussion does not indicate why an R and R did not exist for this work. 2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 3. <u>50.73(b)(2)(11)(J)(2)(1)</u>--Discussion as to whether the personnel error was cognitive or procedural was not included. 4. <u>50.73(b)(2)(11)(J)(2)(11)</u>--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included. 5. <u>50.73(b)(4)</u>--Issuing R and R's for the remaining valves to be replaced solves the immediate problem, but the discussion should indicate actions needed to insure that R and R's are issued when ever they are needed. 6. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--The root cause (personnel error) was not summarized. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was not included. <p>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.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
1. <u>LER Number</u> :	84-001-00 (continued)
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause was not included. 2. <u>Item (7)</u>--OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate). 3. <u>Item (8)</u>--The field should be filled in with Not Applicable or NA.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
2. <u>LER Number:</u> 84-002-00	
Scores: Text = 9.3 Abstract = 6.5 Coded Fields = 8.9 Overall = 8.4	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 2. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned was inadequate. Was Ortec informed of their employee's error? 3. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 4. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. 2. <u>50.73(b)(1)</u>--Summary of system responses was not included, i.e., EMF49 radiation monitor response during discharge. 3. <u>50.73(b)(1)</u>--Summary of root cause was inadequate, i.e., personnel error discussion was not included. 4. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was inadequate. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
3. <u>LER Number:</u> 84-005-00	
Scores: Text = 7.2 Abstract = 8.0 Coded Fields = 7.8 Overall = 7.5	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(A)</u>--Discussion of plant operating conditions before the event was inadequate. 2. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for each procedural error was not included. 3. <u>50.73(b)(2)(ii)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. Why didn't the operator who performed the verification on 7-17-84 not notice the discrepancy? 5. As part of the corrective actions, the operator could be counseled to be aware to look for errors in relatively new procedures. 6. <u>50.73(b)(5)</u>--Information concerning previous similar events was inadequate. 7. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. A logical transition does not exist between all ideas.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of the root cause of the procedural error was not included. 2. Summary of corrective actions did not address prevention of similar events. <p>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, "Mode 6", "Administrative/Procedural Error" and reportability (tech spec violation) were not mentioned in the text.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
3. <u>LER Number:</u> 84-005-00 (continued)	
	3. The order of the presentation of ideas is much better than the text.
Coded Fields	1. <u>Item (4)</u> --Title: Result (technical specification violation) was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
4. <u>LER Number</u> : 84-008-00	
Scores: Text = 6.8 Abstract = 8.7 Coded Fields = 8.7 Overall = 7.6	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--A brief description of the operating mode number should be included. 2. <u>50.73(b)(2)(11)(C)</u>--Include a date and starting time for the event. 3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(3)</u>--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 5. <u>50.73(b)(4)</u>--The corrective actions should address prevention of future activations such as warnings on the relay panel. 6. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. Acronym(s) and/or plant specific designator(s) are undefined. OBSERVATION: A diagram or figure would have aided understanding. 7. <u>Item (11)</u>--The reason for checking the "other" requirement was not specified in the abstract and/or text.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--The abstract should indicate that the main response in this event was a loss coolant flow to the reactor coolant pump seals. 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.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
4. <u>LER Number:</u> 84-008-00 (continued)	
Coded Fields	<ol style="list-style-type: none"> <li data-bbox="455 465 1397 530">1. <u>Item (4)</u>--Be more specific about how the inadvertent repositioning occurred and the actual valve involved. <li data-bbox="455 562 1397 627">2. <u>Item (8)</u>--The field should be filled in with Not Applicable or NA.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
5. <u>LER Number</u> : 84-012-00	
Scores: Text = 6.9 Abstract = 7.5 Coded Fields = 8.4 Overall = 7.2	
Text	<ol style="list-style-type: none"> <li data-bbox="450 502 1394 627">1. <u>50.73(b)(2)(11)(C)</u>--Dates and approximate times information for occurrences was inadequate. There is no date or times included for some of the corrective actions. <li data-bbox="450 664 1394 827">2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for each component failure was inadequate. Did the process gauges used to establish baseline date drift out of calibration or were they calibrated incorrectly during their last calibration? <li data-bbox="450 864 1394 989">3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. <li data-bbox="450 1026 1394 1151">4. <u>50.73(b)(2)(11)(H)</u>--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included. <li data-bbox="450 1187 1394 1313">5. <u>50.73(b)(2)(11)(J)(2)(iv)</u>--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included. <li data-bbox="450 1349 1394 1453">6. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included, i.e., process gauges. <li data-bbox="450 1489 1394 1679">7. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event was inadequate. What if the calculation error was found before it was discovered that the process gauges were out of calibration and the pumps were declared operable? <li data-bbox="450 1716 1394 1776">8. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. <li data-bbox="450 1813 1394 1871">9. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
5. <u>LER Number:</u> 84-012-00 (continued)	
Abstract	<ol style="list-style-type: none">1. <u>50.73(b)(1)</u>--Summary of root cause was inadequate.2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	<ol style="list-style-type: none">1. <u>Item (4)</u>--Title: Root cause was not included.2. <u>Item (11)</u>--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) <u>50.73(a)(2)(1)</u>.3. <u>Item (13)</u>--Component failure occurred but entire field left blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
6. <u>LER Number:</u> 84-015-00	
Scores: Text = 7.6 Abstract = 7.3 Coded Fields = 9.4 Overall = 7.7	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was inadequate. It was not clear that the plant was in Mode 3 prior to the event. 2. <u>50.73(b)(2)(11)(C)</u>--Date information for occurrences was inadequate. Discovery date was not included. 3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(2)(11)(J)(2)</u>--OBSERVATION: Personnel error was implied but was not explicitly stated in the text. 5. <u>50.73(b)(2)(11)(J)(2)(1)</u>--Discussion as to whether the personnel error was cognitive or procedural was inadequate. 6. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event was inadequate in that it didn't speculate as to what could have been the consequences had the leak rate been greater than the limit for the 14 days. 7. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned was inadequate in that it was not made clear whether or not procedures were actually going to be revised. 8. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 9. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. 10. The distinction between the "Weld Leak Test" and the "Leak Rate Test" was not made clear.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
6. <u>LER Number:</u> 84-015-00 (continued)	
	<p>11. The corrective action that mentions "re-entering Mode 4" is not clear in that the exit from Mode 4 was not discussed.</p> <p>12. Some information concerning the cracked valve (cause) or a reference to another report would have made this a better package.</p>
Abstract	<p>1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was inadequate.</p> <p>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.</p> <p>2. Abstract contradicts the text, concerning the date work was completed on replacement of the valve.</p>
Coded Fields	<p>1. <u>Item (4)</u>--Title: Result (technical specification violation) was not included.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
7. <u>LER Number:</u> 84-017-02	
Scores: Text = 5.7 Abstract = 7.0 Coded Fields = 6.9 Overall = 6.2	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(A)</u>--Include a brief description of the operating mode number give for initial conditions. 2. <u>50.73(b)(2)(ii)(C)</u>--Date and approximate time information for occurrences was inadequate. 3. <u>50.73(b)(2)(ii)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(2)(ii)(J)(2)(ii)</u>--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included. 5. <u>50.73(b)(3)</u>--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 6. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned was inadequate. The following appear to point that the corrective actions should address: <ol style="list-style-type: none"> a. Instrument air supply to Valve 1CA-151 is being modified, but the text does not indicate if this valve problem could exist on the other steam generators or in other plant system, therefore, requiring the same fix. b. The corrective actions for the personnel error address short term actions, but state anything about long term actions, such as, revised training to emphasize the point or warnings in the procedures. c. The last two corrective actions imply the need for an additional supplemental LER to report the results of these actions.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
7. <u>LER Number:</u> 84-017-02 (continued)	
	d. The corrective actions first mention of Event Recorder Prints 415 and 416, and a reader has no idea what they are.
	7. <u>50.73(b)(5)</u> --Information concerning previous similar events was not included.
	8. Some ideas were not presented clearly (hard to follow).
	OBSERVATION: A diagram or figure would have aided understanding.
Abstract	1. <u>50.73(b)(1)</u> --The root cause summary should also indicate the personnel error and faulty valve.
	2. <u>50.73(b)(1)</u> --Summary of corrective actions taken or planned as a result of the event was inadequate.
	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. <u>Item (4)</u> --Title: Root cause and link were not included.
	2. <u>Item (7)</u> --Revision 0 report date has not within thirty days if the event date given in Item (5).
	3. <u>Item (8)</u> --The field should be filled in with Not Applicable or NA.
	4. <u>Item (14)</u> --As noted in Comment 6C a supplemental report appears to be appropriate.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
8. <u>LER Number</u> : 84-018-00	
Scores: Text = 7.3 Abstract = 8.5 Coded Fields = 8.2 Overall = 7.8	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was not included. 2. <u>50.73(b)(2)(11)(C)</u>--Dates and approximate time information for occurrences was inadequate. 3. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for each component failure was inadequate, i.e., personnel error, why? 4. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 5. <u>50.73(b)(2)(11)(J)(2)</u>--OBSERVATION: Personnel error was implied but was not explicitly stated in the text. 6. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of personnel error was not included.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause was inadequate. 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link were not included. 2. <u>Item (13)</u>--One or more component failure sub-fields were left blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
9. <u>LER Number:</u> 84-021-00	
Scores: Text = 6.0 Abstract = 4.0 Coded Fields = 8.3 Overall = 5.6	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was not included. By reading only the text, it would appear that the plant was at power when this event occurred. 2. The root cause of the "miscommunication" (personnel error) was not discussed. 3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(2)(11)(J)(2)</u>--OBSERVATION: Personnel error was implied but was not explicitly stated in the text. 5. <u>50.73(b)(2)(11)(J)(2)(i)</u>--Discussion as to whether the personnel error was cognitive or procedural was not included. 6. <u>50.73(b)(2)(11)(J)(2)(iv)</u>--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included. 7. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 9. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned was inadequate. What will be done to ensure that a "miscommunication" does not happen again? Are there any plans to continue the investigation on the Channel T problem? 10. <u>50.73(b)(5)</u>--Information concerning previous similar events was inadequate.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
9. <u>LER Number</u> : 84-021-00 (continued)	
Abstract	<p>11. Some conclusions reached are inconsistent with the facts presented, mainly due to not telling the reader that the plan was in Mode 5 at the time of the test.</p> <p>1. <u>50.73(b)(1)</u>--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.</p> <p>2. <u>50.73(b)(1)</u>--Summary of personnel error root cause was not included.</p> <p>3. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was not included.</p> <p>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. Abstract does not adequately summarize the text.</p>
Coded Fields	<p>1. <u>Item (4)</u>--Title: Root cause and link were not included.</p> <p>2. <u>Item (14)</u>--The block checked was inconsistent with information in the text. It appears that a supplemental report detailing the cause of the Channel I actuation would be appropriate.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
10. <u>LER Number:</u> 84-022-00	
Scores: Text = 8.1 Abstract = 7.7 Coded Fields = 8.7 Overall = 8.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(A)</u>--A brief description of the operating mode numbers should be included. 2. <u>50.73(b)(2)(ii)(C)</u>--The text should include the starting date and time of the event. 3. <u>50.73(b)(2)(ii)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(2)(ii)(J)(2)</u>--It is not clear from the discussion if a procedure existed or not for the cleaning of the pipe chase nor is it clear if there is a procedure whether or not a warning exists in it to alert workers to the limitations on opening the screen doors. 5. <u>50.73(b)(3)</u>--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 6. 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.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was not included. 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link were not included. 2. <u>Item (8)</u>--Field should be filled in with Not Applicable or NA.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
11. <u>LER Number</u> : 84-025-00	
Scores: Text = 9.4 Abstract = 8.5 Coded Fields = 8.9 Overall = 9.1	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was inadequate. 2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 3. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 4. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
12. <u>LER Number:</u> 84-028-00	
Scores: Text = 8.3 Abstract = 9.3 Coded Fields = 9.1 Overall = 8.7	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was not included. 2. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 3. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included. Because the cause of the breaker trip could not be determined, it may have been a problem within the breaker itself and therefore information concerning the breaker might be of interest. Maybe others have experienced "random" trips on this same kind of breaker. 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 were available the text should so state. 4. Two of the corrective actions listed are really cause determination. 5. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 6. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. 7. Background information is an excellent idea but it should be labelled as such or placed in context so the reader knows where to start reading about the event (sequence of occurrences).
Abstract	<ol style="list-style-type: none"> 1. No comments.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause was not included. 2. A supplemental report would be appropriate if a cause is ever determined.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
13. <u>LER Number:</u> 84-029-00	
Scores: Text = 5.8 Abstract = 9.1 Coded Fields = 9.2 Overall = 7.1	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event was not included. 2. <u>50.73(b)(2)(11)(C)</u>--The text should include additional dates for the corrective actions, and should indicate the event date. 3. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included. 5. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 6. <u>50.73(b)(4)</u>--The discussion should indicate what will be done to prevent future occurrences. For example, 14 screws were already found unacceptable, but the text does not indicate whether the remaining rods have the potential for future failures and if they do what will be done to prevent them. 7. <u>50.73(b)(5)</u>--Information about previous similar events was not included, if none have occurred state so. 8. It was difficult to determine which plant was being discussed. The first page gives background information on Korean Unit 5, and without reading the abstract it was not clear that the discussion switched to Catawba 1 when corrective actions were discussed.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
13. <u>LER Number</u> : 84-029-00 (continued)	
Abstract	<p>1. <u>50.73(b)(1)</u>--The corrective actions summary is deficient for the same reason as the text discussion of corrective actions.</p> <p>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.</p>
Coded Fields	<p>1. <u>Item (4)</u>--Title: Root cause was not included.</p> <p>2. <u>Item (8)</u>--The field should be filled in with Not Applicable or NA.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
14. <u>LER Number:</u> 85-001-00	
Scores: Text = 8.4 Abstract = 8.3 Coded Fields = 7.9 Overall = 8.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(C)</u>--Dates and approximate times information for occurrences was inadequate. 2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for each component failure was not included, i.e., main feedwater discharge valves root cause of failure. 3. <u>50.73(b)(2)(11)(E)</u>--The mechanism discussion of each failed component was not included. 4. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 5. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included. 6. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 7. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause was inadequate. 2. <u>50.73(b)(2)(11)(J)(1)</u>--Discussion of operator actions that affected the course of the event was inadequate. Abstract does not adequately summarize the text.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause was not included. 2. <u>Item (11)</u>--The reason for checking the "other" requirement was not specified in the abstract and/or text. 3. <u>Item (13)</u>--Component failure occurred but entire field left blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
15. <u>LER Number:</u> 85-002-00	
Scores: Text = 8.8 Abstract = 7.0 Coded Fields = 8.0 Overall = 8.2	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(F)</u>--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 2. Under Corrective Action 6 on page 3, should Electrical and Instrument Maintenance do the same? 3. <u>50.73(b)(5)</u>--Information concerning previous similar events was not included. 4. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. 5. The figures (enclosures 1 and 2) are good and should be provided when necessary. The preferred method is to put them on a Form 366A however, so that they are labeled as to facility name, docket number, etc. This will ensure that they don't get separated from the package.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event was inadequate. 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 Technical Specification Violation and the fact that the unit was in Mode 2 at the time of discovery should have been included in the text. 2. Abstract contradicts the text; (discovery time).
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and result was not included. 2. <u>Item (11)</u>--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) <u>50.73(a)(2)(1)</u>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
16. <u>LER Number:</u> 85-004-00	
Scores: Text = 8.1 Abstract = 5.0 Coded Fields = 8.0 Overall = 7.2	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(C)</u>--Approximate time information for occurrences is inadequate. 2. <u>50.73(b)(2)(11)(D)</u>--No root cause was given for the overtravel of the actuator on Valve IRN-A83. 3. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(H)</u>--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service is not included. 5. <u>50.73(b)(2)(11)(J)(2)</u>--Two personal errors (the drill operator rupturing the air line and the crane operator parking on the flexible air hose) occurred in this LER. The error by the drill operator was discussed adequately with only one question coming to mind. Was the drill site double checked to see if it was accurately located? The discussion of the error by the crane operator is inadequate and needs to be expanded. For example, was the operator aware of the location of the flexible line and if not, why? 6. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is inadequate. Include the model number of the valve. 7. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. <p>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.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
16. <u>LER Number:</u> 85-004-00 (continued)	
8.	<p><u>50.73(b)(4)</u>--The corrective actions must address three items; (a) the actions taken the drill operating error (including the broken air line), (b) the actions taken for the failed valve, and (c) the actions taken for the crane operator error.</p> <p>(a) Actions taken to keep track of the underground equipment appear to be okay, but no mention was found as to whether or not the broken line was repaired or was to be repaired. As for future drilling, was the location of the hole so important and the placement of underground equipment so close that a more suitable site with more margin for error not available?</p> <p>(b) The text should indicate whether or not actions (increase maintenance or surveillance) will be taken to prevent this and/or other actuators from becoming misadjusted. While further study is planned to determine the actions needed for the valve seat, this implies a need for a supplemental report to report the findings.</p> <p>(c) The text does not indicate if the crane operator was informed of the error, nor whether other operators were notified of the possible problem. The text should also discuss measures to prevent future occurrences, such as, blocks for equipment to roll over without flattening the flexible hose.</p>
9.	<p><u>50.73(b)(5)</u>--The text only implies similar events when indicating the check made of failures of this valve type in other areas of the plant. This type of check is encouraged, but be more specific about the occurrence of similar events.</p>
10.	<p>Acronym(s) and/or plant specific designator(s) are undefined.</p>
Abstract	<p>1. The abstract does not give the root cause (personnel errors) for either event (i.e., that is the air supply was cut off). In fact, the abstract does not indicate that it happened twice.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
16. <u>LER Number</u> : 85-004-00 (continued)	
	<p>2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included.</p> <p>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.</p>
Coded Fields	<p>1. <u>Item (4)</u>--Title: Root cause is not included.</p> <p>2. <u>Item (8)</u>--Field should be filled in with Not Applicable or NA.</p> <p>3. <u>Item (13)</u>--A line for the failed air line should be included.</p> <p>4. <u>Item (14) and (15)</u>--As noted in Comment 8(b) supplemental report would be appropriate.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
17. LER Number: 85-006-00	
Scores: Text = 6.2 Abstract = 6 Coded Fields = 8.3 Overall = 6.4	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for each personnel error is not included. 2. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(J)(2)</u>--OBSERVATION: Personnel error is implied but is not explicitly stated in the text. 4. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of personnel error is not included. 5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 6. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of personnel responses is inadequate. 2. <u>50.73(b)(1)</u>--Summary of root cause is not included. 3. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. Abstract does not adequately summarize the text.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. <u>Item (11)</u>--The reason for checking the "other" requirement is not specified in the abstract and/or text.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
18. <u>LER Number:</u> 85-008-00	
Scores: Text = 9.5 Abstract = 5.0 Coded Fields = 8.4 Overall = 8.0	
Text	<ol style="list-style-type: none"> 1. <u>Item (14)</u>--The block checked is inconsistent with information in the text. 2. Were there no alarms prior to the scram tht could have alerted the operator to take action? 3. Is it normal to have main steam isolated from the feed pump turbine at such times? Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of plant and system responses is inadequate. 2. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. The debris should have been mentioned as well as the fact that it might be a generic problem. 3. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. It would be appropriate to submit a supplemental report after the completion of corrective action Number 4.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
19. <u>LER Number:</u> 85-009-00	
Scores: Text = 8.6 Abstract = 5.0 Coded Fields = 8.4 Overall = 8.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(C)</u>--The time at which the valve became stock was not included. 2. <u>50.73(b)(2)(11)(D)</u>--Further investigation should be made to determine the root cause for the torque switch being out of adjustment. 3. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(L)</u>--The model number of torque switch was not included. 5. <u>50.73(b)(3)</u>--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. 6. <u>50.73(b)(4)</u>--The corrective actions are quite good, however, without knowing the root cause of the torque switch failure (text Comment 1), proper long term actions to prevent future failures cannot be taken. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--The root cause summary should include the failure of the torque switch. 2. <u>50.73(b)(1)</u>--Instead of using space for stating the reportability requirement, the space would have been better utilized by summarizing more of the corrective actions. <p>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.</p>

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
19. <u>LER Number</u> : 85-009-00 (continued)	
Coded Fields	<ol style="list-style-type: none"> <li data-bbox="447 463 1262 491">1. <u>Item (4)</u>--Title: Root cause is not included. <li data-bbox="447 527 1245 587">2. <u>Item (8)</u>--Field should be filled in with Not Applicable or NA. <li data-bbox="447 623 1394 785">3. <u>Item (13)</u>--Cause, system, and/or component code is inconsistent with text. From the text more appropriate codes for component and manufacturer would be WIS (Weight or force Indications Switch) and L2VV (Limiter torque), respectively.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
20. <u>LER Number</u> : 85-011-00	
Scores: Text = 9.8 Abstract = 10.0 Coded Fields = 8.9 Overall = 9.8	
Text	1. <u>50.73(b)(2)(11)(F)</u> --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. <u>Item (4)</u> --Title: Root cause is not included. 2. <u>Item (11)</u> --OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) <u>50.73(a)(2)(1)</u> .

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
21. <u>LER Number:</u> 85-012-00	
Scores: Text = 6.9 Abstract = 4.5 Coded Fields = 8.2 Overall = 6.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for each all of the failed components mentioned is not included. 3. <u>50.73(b)(2)(11)(E)</u>--The mechanism (immediate cause) and effect discussion of each failed component is not included. 4. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included. <p>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.</p> <ol style="list-style-type: none"> 6. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. What were the corrective actions for the other failed components? Will any more investigation be performed on the inverter problem? 7. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 8. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The test which contributed should have been mentioned.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
21. <u>LER Number:</u> 85-012-00 (continued)	
	<ol style="list-style-type: none"> 2. <u>50.73(b)(1)</u>--Summary of plant and system responses is inadequate. 3. <u>50.73(b)(1)</u>--Summary of root causes is inadequate. 4. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. 5. 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. (Mode 1 at 12%.)
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause information (unknown) is not included. 2. <u>Item (13)</u>--Component failure occurred but entire field is blank. 3. A supplemental report which addresses causes (root) and corrective actions might be appropriate.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
22. <u>LER Number:</u> 85-013-01	
Scores: Text = 8.8 Abstract = 9.8 Coded Fields = 8.8 Overall = 9.1	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(ii)(D)</u>--It is not clear why the QA personnel were unaware of the pertinent specifications. The corrective actions imply improper training. 3. <u>50.73(b)(2)(ii)(F)</u>--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. <u>50.73(b)(3)</u>--The safety assessment should indicate if any fire suppression systems were available or not in the affected area. 5. <u>50.73(b)(4)</u>--Two questions about the corrective actions appear to be unanswered. <ol style="list-style-type: none"> 1. If training for the QA personnel was inadequate (text Comment 2), then should other training programs be examined for possible deficiencies? 2. Will the additional training be incorporated permanently to aid new employees as they come in?
Abstract	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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. <u>Item (8)</u>--Field should be filled in with Not Applicable or NA.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
23. <u>LER Number</u> : 85-017-01	
Scores: Text = 9.1 Abstract = 6.5 Coded Fields = 7.9 Overall = 8.2	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is _____ 3. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 4. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. 2. <u>50.73(b)(1)</u>--Summary of system/plant/personnel is inadequate. 3. <u>50.73(b)(2)(11)(J)(1)</u>--Discussion of operator actions that affected the course of the event is inadequate. 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. Some ideas are not presented clearly (hard to follow). 3. <u>Item (13)</u>--Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
24. <u>LER Number:</u> 85-020-00	
Scores: Text = 7.7 Abstract = 4.2 Coded Fields = 8.9 Overall = 6.8	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. The root cause of the loose clamp nut was not included. 3. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(J)(2)</u>--OBSERVATION: Personnel error is implied but is not explicitly stated in the text. From the text discussion it appears the clamp nut may have been left loose after troubleshooting. If this was the case, this is not a component malfunction incident. 5. <u>50.73(b)(3)</u>--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. 6. What corrective actions were taken or planned to prevent this and other cable clamp nuts from "becoming" loose again? 7. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 8. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The implication involving the troubleshooting should have been mentioned.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
24. <u>LER Number:</u> 85-020-00 (continued)	
	<ol style="list-style-type: none"> 2. <u>50.73(b)(1)</u>--Summary of plant and system responses is inadequate. 3. <u>50.73(b)(1)</u>--Summary of root cause is not included. 4. <u>50.73(b)(2)(ii)(J)(1)</u>--Discussion of operator actions that affected the course of the event is inadequate.
	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.
	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link information is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
25. <u>LER Number:</u> 85-024-00	
Scores: Text = 8.9 Abstract = 9.3 Coded Fields = 8.4 Overall = 9.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(3)</u>--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. 4. Since the reference tube of the transmitter has drained 13 times, a supplemental report would appear appropriate when the cause is found.
Abstract	<ol style="list-style-type: none"> 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. 2. The beginning time for incident 1 appears to be a typographical error.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. <u>Item (8)</u>--Field should be filled in with Not Applicable or NA. 3. The text contradicts itself. <u>50.73(a)(2)(v)</u>. 4. <u>Item (14)</u>--As mentioned in text comment 4 a supplemental report appears appropriate.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
26. <u>LER Number:</u> 85-025-01	
Scores: Text = 9.5 Abstract = 8.0 Coded Fields = 8.9 Overall = 9.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(F)</u>--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. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 3. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(J)(1)</u>--Discussion of operator actions that affected the course of the event is inadequate. 2. Abstract contradicts the text, i.e. periodic test number differs. <p>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, i.e., main steam flow mismatch.</p> <p>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.</p>
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
27. <u>LER Number:</u> 85-030-00	
Scores: Text = 7.6 Abstract = 8.0 Coded Fields = 9.2 Overall = 7.9	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(J)(2)(1)</u>--Discussion as to whether the personnel error was cognitive or procedural is not included. 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. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) is not included or is inadequate. 5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 6. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. 7. The enclosure is good, however it should be put on a Form 366A so that it does not become separated from its applicable LER number and plant information.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(J)(1)</u>--Discussion of operator actions that affected the course of the event is inadequate. Prevention of recurrence should be mentioned.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
27. <u>LER Number</u> : 85-030-00 (continued)	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; (mode and reporting requirement information).
Coded Fields	1. <u>Item (4)</u> --Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
28. <u>LER Number</u> : 85-032-00	
Scores: Text = 9.1 Abstract = 9.8 Coded Fields = 8.9 Overall = 9.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(4)</u>--The discussion should address long term corrective actions to prevent recurrence such as warnings on the load switches or emphasize the procedure in training program. This would help assure that other employees and new employees would not make the same mistake. 4. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 5. Use of the diagram was very good.
Abstract	<ol style="list-style-type: none"> 1. Corrective actions summary should indicate that the personnel involved were counseled.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Link is not included. 2. <u>Item (7)</u>--OBSERVATION: Report date is not within thirty days of event date (or discovery date if appropriate).

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
29. <u>LER Number:</u> 85-038-00	
Scores: Text = 8.6 Abstract = 7.2 Coded Fields = 8.9 Overall = 8.2	
Text	<ol style="list-style-type: none"> 2. <u>50.73(b)(2)(ii)(F)</u>--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. <u>50.73(b)(2)(ii)(I)</u>--Discussion of the method of discovery of the personnel error is not included. 4. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 5. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state. 1. <u>50.73(b)(2)(ii)(C)</u>--Date information for occurrences is inadequate, i.e., date of discovery of personnel error.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(J)(1)</u>--Discussion of operator actions that affected the course of the event is not included. <p>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, i.e., date of discovery of personnel error.</p>
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
30. <u>LER Number:</u> 84-040-00	
Scores: Text = 8.2 Abstract = 6.8 Coded Fields = 9.1 Overall = 7.9	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(11)(F)</u>--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. <u>50.73(b)(2)(11)(J)(2)(1)</u>--Discussion as to whether the personnel error was cognitive or procedural is not included. 4. <u>50.73(b)(3)</u>--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. 5. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Does the procedure (PT/1/A/4350/02C) have a notice or caution concerning the one hour time concern? If not, a change in the procedure might be appropriate. 6. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. 7. <u>50.73(b)(5)</u>--If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(J)(1)</u>--Discussion of operator actions that affected the course of the event is not included. 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.

TABLE D-1. SPECIFIC LER COMMENTS FOR CATAWBA 1 (413)

Section	Comments
30. <u>LER Number:</u> 84-040-00 (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. <u>Item (4)</u> --Title: Result (technical specification violation) is not included.