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DEC 17 1986

In Reply Refer To:
Docket: 50-285/86-27

Omaha Public Power District
ATTN: R. L. Andrews, Division Manager-
Nuclear Production
1623 Harney Street
Omaha, Nebraska 68102

Gentlemen:

This forwards an analysis of your LERs for the SALP period which ended September 30, 1986. It is forwarded for your information and to provide you with data which you may wish to use for training or improvement in your event reporting process.

No response to this letter is requested.

Sincerely,

Handwritten signature

J. E. Gagliardo, Chief
Reactor Projects Branch

Enclosure:
as stated

cc w/enclosure:
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bcc: (see next page)

RIV:RPB
MEMurphy:cs
12/17/86

C:RPB
DRHunter
12/1/86

C:RPB
JEGagliardo
12/17/86

12

Omaha Public Power District

-2-

bcc to DMB (IE01)

bcc distrib. by RIV:

RPB

R&SPB

RIV File

RSB

RRI

Section Chief (RPB/B)

DRSP

Project Inspector

R.D. Martin, RA

MIS System

RSTS Operator

SUMMARY

An evaluation of the content and quality of a representative sample of the Licensee Event Reports (LERs) submitted by Fort Calhoun during the March 1, 1985 to September 30, 1986 Systematic Assessment of Licensee Performance (SALP) period was performed using a refinement of the basic methodology presented in a report entitled "An Evaluation of Selected Licensee Event Reports Prepared Pursuant to 10 CFR 50.73 (DRAFT)", NUREG/CR-4178, March 1985. The results of this evaluation indicate that Fort Calhoun LERs have an overall average LER score of 8.2 out of a possible 10 points, compared to a current industry average score of 8.0 for those unit/stations that have been evaluated to date using this methodology.

The principle weakness identified in the Fort Calhoun LERs, in terms of safety significance, involves the requirement to adequately identify failed components in the text. The failure to adequately identify each component that fails prompts concern that possible generic problems may go unnoticed for too long a time period by others in the industry.

A strong point for the Fort Calhoun LERs is the discussion of the requirement to provide the failure mode, mechanism, and effect of each failed component in the event.

AEOD INPUT TO SALP REVIEW FOR FORT CALHOUN

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Fort Calhoun during the March 1, 1985 to September 30, 1986 Systematic Assessment of Licensee Performance (SALP) assessment period, a representative sample of the unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178.¹ The sample consists of 10 of the 14 LERs that were on file 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 10 CFR 50.73(b), NUREG-1022², and Supplements 1³ and 2⁴ to NUREG-1022.

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

The LER specific comments serve two purposes: (1) they point out what the analysts considered to be the specific deficiencies or observations concerning the information pertaining to the event, and (2) they provide a basis for a count of general deficiencies for the overall sample of LERs

that was reviewed. Likewise, the scores serve two purposes: (1) they serve to illustrate in numerical terms how the analysts perceived the content of the information that was presented, and (2) they provide a basis for determining an overall score for each LER. The overall score for each LER is the result of combining the scores for the text, abstract, and coded fields (i.e., $0.6 \times \text{text score} + 0.3 \times \text{abstract score} + 0.1 \times \text{coded fields score} = \text{overall LER score}$).

The results of the LER quality evaluation are divided into two categories: (1) detailed information and (2) summary information. The detailed information, presented in Appendices A through D, consists of LER sample information (Appendix A), a table of the scores for each sample LER (Appendix B), tables of the number of deficiencies and observations for the text, abstract and coded fields (Appendix C), and comment sheets containing narrative statements concerning the contents of each LER (Appendix D). When referring to 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 analysts has flexibility to consider the magnitude of a deficiency when assigning scores.

Discussion of Results

A discussion of the analysts' conclusions concerning LER quality is presented below. These conclusions are based solely on the results of the evaluation of the contents of the LERs selected for review and as such represent the analysts' assessment of the unit's 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 Fort Calhoun. 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 distribution of the overall average score for all units/stations that have been evaluated using the current methodology is provided in Figure 1. Additional scores are added to Figure 1 each month as other units/stations

TABLE 1. SUMMARY OF SCORES^a FOR FORT CALHOUN

	<u>Average</u>	<u>High</u>	<u>Low</u>
Text	8.3	9.5	7.0
Abstract	7.9	9.4	4.0
Coded Fields	8.5	9.3	7.0
Overall	8.2	9.1	7.2

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

Figure 1. Distribution of overall average LER scores

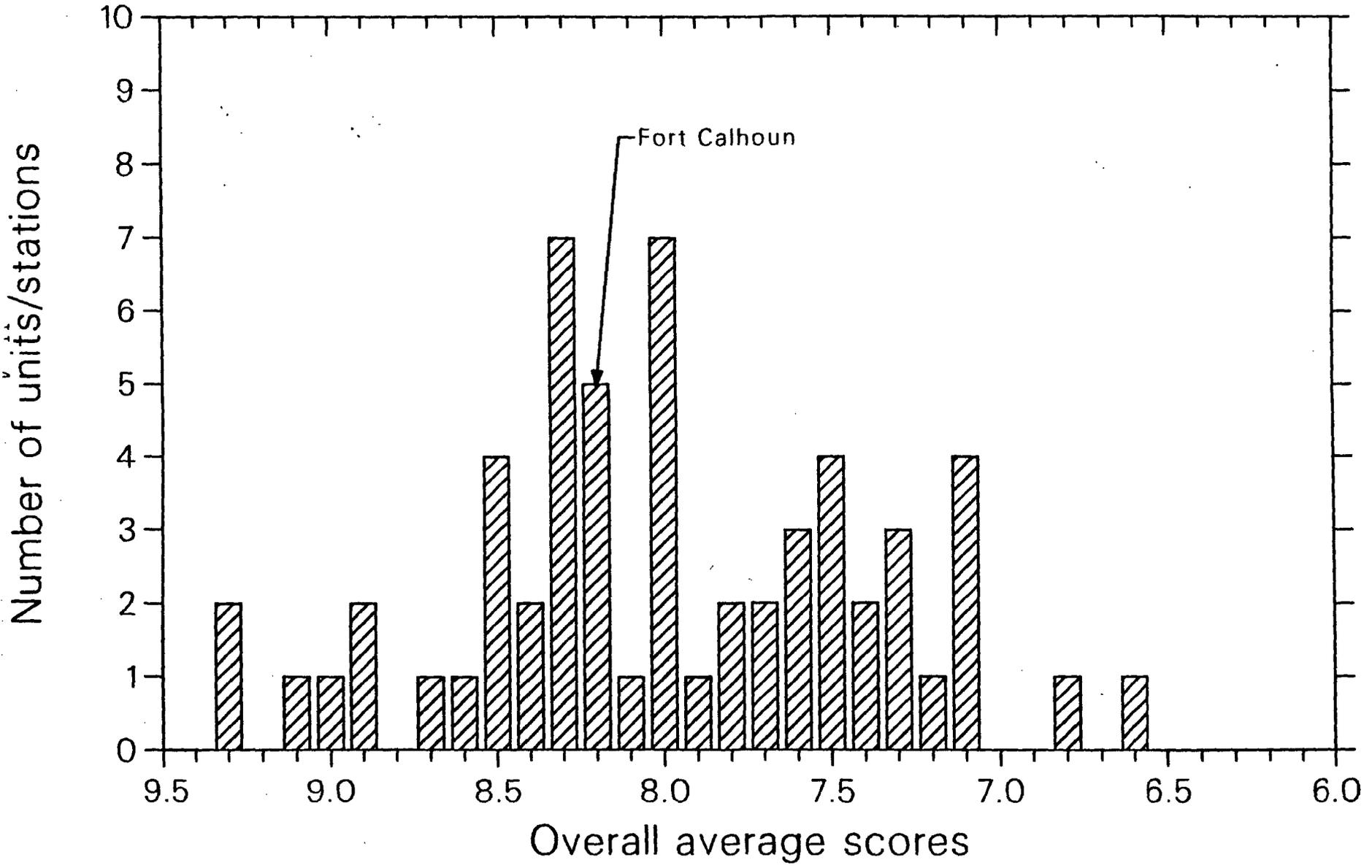


TABLE 2. LER REQUIREMENT PERCENTAGE SCORES FOR FORT CALHOUN

TEXT

<u>Requirements [50.73(b)] - Descriptions</u>	<u>Percentage Scores ()^a</u>
(2)(11)(A) - - Plant condition prior to event	80 (10)
(2)(11)(B) - - Inoperable equipment that contributed	b
(2)(11)(C) - - Date(s) and approximate times	77 (10)
(2)(11)(D) - - Root cause and intermediate cause(s)	90 (10)
(2)(11)(E) - - Mode, mechanism, and effect	100 (4)
(2)(11)(F) - - EIIS Codes	10 (10)
(2)(11)(G) - - Secondary function affected	b
(2)(11)(H) - - Estimate of unavailability	80 (5)
(2)(11)(I) - - Method of discovery	90 (10)
(2)(11)(J)(1) - Operator actions affecting course	100 (5)
(2)(11)(J)(2) - Personnel error (procedural deficiency)	85 (6)
(2)(11)(K) - - Safety system responses	100 (5)
(2)(11)(L) - - Manufacturer and model no. information	50 (4)
(3) - - - Assessment of safety consequences	80 (10)
(4) - - - - Corrective actions	87 (10)
(5) - - - - Previous similar event information	80 (10)
(2)(1) - - - - Text presentation	81 (10)

ABSTRACT

<u>Requirements [50.73(b)(1)] - Descriptions</u>	<u>Percentage Scores ()^a</u>
- Major occurrences (Immediate cause and effect information)	100 (10)
- Description of plant, system, component, and/or personnel responses	100 (4)
- Root cause information	75 (10)
- Corrective Action information	61 (10)
- Abstract presentation	74 (10)

TABLE 2. (continued)

CODED FIELDS

<u>Item Number(s) - Description</u>	<u>Percentage Scores ()^a</u>
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	100 (10)
4 - - - - - Title	53 (10)
5, 6, and 7 - Event date, LER No., and report date	91 (10)
8 - - - - - Other facilities involved	100 (10)
9 and 10 - - Operating mode and power level	96 (10)
11 - - - - - Reporting requirements	100 (10)
12 - - - - - Licensee contact information	100 (10)
13 - - - - - Coded component failure information	88 (10)
14 and 15 - - Supplemental report information	100 (10)

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.

are evaluated. Table 2 and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1. For example, Fort Calhoun's average score for the text of the LERs that were evaluated is 8.3 out of a possible 10 points. From Table 2 it can be seen that the text score actually results from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions before the event [10 CFR 50.73(b)(2)(11)(A)] to text presentation. The percentage scores in the text summary section of Table 2 provide an indication of how well each text requirement was addressed by the licensee for the 10 LERs that were evaluated.

Discussion of Specific Deficiencies

A review of the percentage scores presented in Table 2 will quickly point out where the licensee is experiencing the most difficulty in preparing LERs. For example, requirement percentage scores of less than 75 indicate that the unit probably needs additional guidance concerning these requirements. Scores of 75 or above, but less than 100, indicate that the unit probably understands the basic requirement but has either:

- (1) excluded certain less significant information from most of the discussion concerning that requirement or
- (2) totally failed to address the requirement in one or two of the selected LERs.

The unit should review the LER specific comments presented in Appendix D in order to determine why it received less than a perfect score for certain requirements. The text requirements with a score of less than 75 or those with numerous deficiencies are discussed below in their order of importance. In addition, the primary deficiencies in the abstract and coded fields are discussed.

The safety assessments for six of the LERs were considered to be marginal, Requirement 50.73(b)(3). A detailed safety assessment is required in all LERs and should include information such as:

1. An assessment of the consequences and implications of the event including specifics as to why it was concluded that there were "no safety consequences", if applicable. It is inadequate to state "this event had no safety consequences or implications" without explaining how that conclusion was reached.
2. A safety assessment should discuss whether the event could have occurred under a different set of conditions where the safety implications would have been more severe. If the conditions during the event are considered the worst probable, the LER should state so.
3. Finally, a safety assessment should name other systems (if any) that were available to perform the function of the safety systems that were unavailable during the event.

Date and time information was considered inadequate in five LERs, Requirement 50.73(b)(2)(ii)(C). This information should be included for all major occurrences, so that the reader can visualize a time history for the event.

The manufacturer and/or model number (or other unique identification) was not provided in the text of two of the four LERs that involved a component failure, Requirement 50.73(b)(2)(ii)(L). Components that fail should be identified in the text so that others in the industry can be made aware of potential problems. In addition, although not specifically required by the current regulation, it would be helpful to identify components whose design contributed to an event. An event at one station can often lead to the identification of a generic problem that can be corrected at other plants or stations before they experience a similar problem.

Nine of the eleven LERs reviewed failed to include the Energy Industry Identification System (EIIS) codes. Requirement 50.73(b)(2)(11)(F) requires inclusion of the appropriate EIIS code for each system and component referred to in the text.

The text presentations received an overall score of 81%. This score can be improved upon by the use of a consistent text outline (see NUREG-1022, Supplement No. 2, Appendices C and D). For example, every text should include outline headings such as: Event Description, Reportability, Cause, Safety Assessment, Corrective Actions, and Similar Occurrences. If applicable, other headings such as: Background, Time Sequences, Plant and/or System Responses, System Descriptions or Generic Implications can be added. Once a basic outline is adopted by all those responsible for writing LERs, the overall quality of the reports will improve, based simply on the fact that every LER will contain at least some information concerning each requirement applicable to the event.

While there are no specific requirements for an abstract, other than those given in 10 CFR 50.73(b)(1), an abstract should, as a minimum, summarize the following information from the text:

- | | | |
|----|--------------------------|--|
| 1. | Cause/Effect | What happened that made the event reportable. |
| 2. | Responses | Major plant, system, and personnel responses as a result of the event. |
| 3. | Root/Intermediate Causes | The underlying cause of the event. What caused the component and/or system failure or the personnel error. |

4. Corrective Actions

What was done immediately to restore the plant to a safe and stable condition and what was done or planned to prevent recurrence.

Fort Calhoun had good discussions of item numbers 1 and 2. Item numbers 3 and 4 could use some improvement however. Abstract scores for these items should improve if the root cause and corrective action information contained in the text is summarized in the abstract.

The main deficiency in the area of coded fields involves the title, Item(4). Seven of the titles failed to indicate the root cause, three failed to indicate the result (i.e., why the event was required to be reported), and four failed to include the link between the cause and the result. One LER had no title, both in the original and its subsequent revision. While result is considered the most important part of the title, cause information (and link, if necessary) must be included to make a title complete. An example of a title that only addresses the result might be "Reactor Scram". This is inadequate in that the cause and link are not provided. A more appropriate title might be "Inadvertent Relay Actuation During Surveillance Test LOP-1 Causes Reactor Scram". From this title, the reader knows the cause was either personnel or procedural and surveillance testing was the link between the cause and the result. Example titles are provided in Appendix D (Coded Fields section), for some of the titles that are considered to be deficient.

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

TABLE 3. AREAS MOST NEEDING IMPROVEMENT FOR FORT CALHOUN LERs

Areas	Comments
Safety assessment information	All LERs should include a detailed safety assessment. The text should discuss whether or not the event could have been worse had it occurred under different, yet probable circumstances and provide information concerning backup systems that were available to mitigate the consequences of the event.
Date and approximate time(s)	Sufficient dates and times need to be included in the text to enable the reader to have a time history of the occurrences within the event.
Manufacturer and model number information	Component identification information should be included in the text whenever a component fails. Likewise, (although not specifically required by the current regulation) it would also be helpful to provide identification information whenever a component is suspected of contributing to the event because of its design.
EIIIS codes	Codes for each component and system referred to in the text should be provided.
Text presentation	An outline format is recommended for the text of all LERs.
Abstract	Root cause and corrective action information is not being adequately summarized in the abstracts. Each abstract should contain a good summary of the information that is discussed in the text.

TABLE 3. (continued)

Areas	Comments
Coded fields	
a. Titles	Titles need to be written such that they better describe the event. This can be accomplished by including the root cause, result, and the link between them in each title.

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 FORT CALHOUN

TABLE A-1. LER SAMPLE SELECTION FOR FORT CALHOUN

<u>Sample Number</u>	<u>LER Number</u>	<u>Comments</u>
1	85-001-00	ESF
2	85-002-00	ESF
3	85-006-00	
4	85-008-00	ESF
5	85-009-01	
6	85-010-00	
7	85-011-00	ESF
8	85-012-00	ESF
9	86-002-00	
10	86-003-00	ESF

APPENDIX B
EVALUATION SCORES OF
INDIVIDUAL LERS FOR FORT CALHOUN

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

	LER Sample Number ^a															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	8.0	8.8	9.5	7.5	7.3	8.0	8.1	9.4	7.0	9.0	--	--	--	--	--	--
Abstract	8.7	8.7	4.0	8.8	9.4	5.4	9.2	7.1	8.1	9.2	--	--	--	--	--	--
Coded Fields	8.8	8.8	8.8	8.6	7.0	8.2	9.0	9.3	7.9	8.9	--	--	--	--	--	--
Overall	8.3	8.7	7.8	8.0	7.9	7.2	8.5	8.7	7.4	9.1	--	--	--	--	--	--

	LER Sample Number ^a														AVERAGE
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
11-8-11 Text	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.3
Abstract	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.9
Coded Fields	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5
Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.2

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

APPENDIX C
DEFICIENCY AND OBSERVATION
COUNTS FOR FORT CALHOUN

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR FORT CALHOUN

<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>
<u>50.73(b)(2)(ii)(A)</u> --Plant operating conditions before the event were not included or were inadequate.		1 (10)
<u>50.73(b)(2)(ii)(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 (2)
<u>50.73(b)(2)(ii)(C)</u> --Failure to include sufficient date and/or time information.		5 (10)
a. Date information was insufficient.	4	
b. Time information was insufficient.	4	
<u>50.73(b)(2)(ii)(D)</u> --The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		3 (10)
a. Cause of component failure was not included or was inadequate	2	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	1	
<u>50.73(b)(2)(ii)(E)</u> --The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		0 (4)
a. Failure mode was not included or was inadequate		
b. Mechanism (immediate cause) was not included or was inadequate		
c. Effect (consequence) was not included or was inadequate.		

TABLE C-1. (continued)

<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>
<u>50.73(b)(2)(11)(F)</u> --The Energy Industry Identification System component function identifier for each component or system was not included.		9 (10)
<u>50.73(b)(2)(11)(G)</u> --For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		-- (0)
<u>50.73(b)(2)(11)(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.		1 (5)
<u>50.73(b)(2)(11)(I)</u> --The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		1 (10)
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)

<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>
<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 (5)
<u>50.73(b)(2)(ii)(j)(2)</u> --The discussion of each personnel error was not included or was inadequate.		3 (6)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	0	
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.	1	
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.	0	
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.	1	

TABLE C-1. (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>
<u>50.73(b)(2)(11)(K)</u> --Automatic and/or manual safety system responses were not included or were inadequate.		0 (5)
<u>50.73(b)(2)(11)(L)</u> --The manufacturer and/or model number of each failed component was not included or was inadequate.		2 (4)
<u>50.73(b)(3)</u> --An assessment of the safety consequences and implications of the event was not included or was inadequate.		6 (10)
a. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event was not discussed. If no other systems or components were available, the text should state that none existed.	2	
b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state.	1	
<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.		6 (10)

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 an operational condition or correct the personnel error) was not included or was inadequate.	0	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	2	
c. OBSERVATION: A discussion of actions required to prevent similar failures in similar and/or other systems (e.g., correct the faulty part in all components with the same manufacturer and model number) was not included or was inadequate.	1	
<u>50.73(b)(5)</u> --Information concerning previous similar events was not included or was inadequate.		2 (10)

TABLE C-1. (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>
<u>50.73(b)(2)(i)--Text presentation inadequacies.</u>		4 (10)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	1	
c. The text contains other specific deficiencies relating to the readability.	3	

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

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

TABLE C-2. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR FORT CALHOUN

<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>
A summary of occurrences (immediate cause and effect) was not included or was inadequate		0 (10)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		0 (4)
<ul style="list-style-type: none"> a. Summary of plant responses was not included or was inadequate. b. Summary of system responses was not included or was inadequate. c. Summary of personnel responses was not included or was inadequate. 		
A summary of the root cause of the event was not included or was inadequate.		3 (10)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		5 (10)

TABLE C-2. (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>
Abstract presentation inadequacies		7 (10)
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.	5	
b. The abstract was greater than 1400 characters	1	
c. The abstract contains undefined acronyms and/or plant specific designators.	0	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	3	

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

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

TABLE C-3. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR FORT CALHOUN

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Facility Name		0 (10)
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 (10)
Page Number was not included or was incorrect.		0 (10)
Title was left blank or was inadequate		9 (10)
a. Root cause was not given in title	7	
b. Result (effect) was not given in title	3	
c. Link was not given in title	4	
Event Date		0 (10)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		1 (10)
Report Date		2 (10)
a. Date not included	2	
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).	0	
Other Facilities information in field is inconsistent with text and/or abstract.		0 (10)
Operating Mode was not included or was inconsistent with text or abstract.		1 (10)

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>
Power level was not included or was inconsistent with text or abstract		0 (10)
Reporting Requirements		1 (10)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It may have been more appropriate to report the event under a different paragraph.	0	
c. OBSERVATION: It may have been appropriate to report this event under an additional unchecked paragraph.	1	
Licensee Contact		0 (10)
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		2 (10)
a. One or more component failure sub-fields were left blank.	0	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	1	
d. Component failure occurred but entire field left blank.	1	

TABLE C-3. (continued)

<u>Description of Deficiencies and Observations</u>	<u>Number of LERs with Deficiencies and Observations</u>	
	<u>Sub-paragraph Totals^a</u>	<u>Paragraph Totals ()^b</u>
Supplemental Report		1 (10)
a. Neither "Yes"/"No" block of the supplemental report field was checked.	0	
b. The block checked was inconsistent with the text.	1	
Expected submission date information is inconsistent with the block checked in Item (14).		0 (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, the sub-paragraph totals do not necessarily add up to the paragraph total.

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

APPENDIX D
LER COMMENT SHEETS FOR
FORT CALHOUN

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
1. LER Number: 85-001-00	
Scores: Text = 8.0 Abstract = 8.7 Coded Fields = 8.8 Overall = 8.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(i)(D)</u>--Is it normal for the alarm to actuate the VIAS during sampling? If not, and a procedural or personnel error occurred, what was the root cause? 2. <u>50.73(b)(2)(i)(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)(i)(J)(2)(1)</u>--Discussion as to whether the personnel error was cognitive or procedural is inadequate. It is not clear from the discussion if the technician was following the procedure or not. 4. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The discussion should be more specific about the release being within Technical Specification limits. A comparison between the calculated amount of gas released and the amount allowed by the Technical Specifications would be useful and appropriate. 5. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Does the procedure need to be changed so that sampling is not done when excessive noble gases are dissolved in the water? 6. Acronym(s) and/or plant specific designator(s) are undefined. USAR should be defined.
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 is inadequate. Review of the incident with the technician and chemistry staff should be mentioned in the abstract.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
1. LER Number: (continued)	
	2. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract. The fact that no procedural or personnel error was made is specifically stated in the abstract but not the text (see text comments 1 and 3).
Coded Fields	1. <u>Item (4)</u> --Title: Root cause (excessive noble gas release) and link (sampling) are not included. Acronyms should be avoided in titles unless space is a consideration. A more appropriate title might be "Ventilation Isolation Actuation During Reactor Coolant Sampling Due To Excessive Noble Gas Release From The Sample".

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
2. LER Number: 85-002-00	
Scores: Text = 8.8 Abstract = 8.7 Coded Fields = 8.8 Overall = 8.7	
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)(2)(ii)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included. Information such as pipe size and weld type would be appropriate. 3. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. The abstract should mention that the cause of the leak was a failed weld.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause is not included. 2. Undefined acronyms should not be used in the title unless space is a consideration.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
3. LER Number: 85-006-00	
Scores: Text = 9.5 Abstract = 4.0 Coded Fields = 8.8 Overall = 7.8	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. If there are not actions that can be taken to reduce the probability of this event recurring, the text should state this. 2. A logical transition does not exist between all ideas. See the third sentence in the next to last paragraph.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of cause information is not included. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 3. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract. 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 and result are not included. A better title might be "Setpoint Drift Caused Three of Ten Main Steam Safety Valves To Be Out-of-Tolerance - Technical Specification Violation". 2. <u>Item (6)</u>--LER Revision number is not included (page 2 of 2).

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
4. LER Number: 85-008-00	
Scores: Text = 7.5 Abstract = 8.8 Coded Fields = 8.6 Overall = 8.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(C)</u>--Date/time information for major occurrences is inadequate. When was monitor RM-061 returned to service? 2. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion concerning the torn filter is 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)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included. 5. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Listing of systems which actuated is good. A safety assessment should also include specific reasons why the torn filter caused no safety problems (e.g., the amount of radioactive contamination released, if any, was insignificant and well within technical specification limits). 6. <u>50.73(b)(4)</u>--A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) is not included or is inadequate (see text comment 2).
Abstract	<ol style="list-style-type: none"> 1. <u>OBSERVATION</u>: 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 fact that no release occurred is specifically stated in the abstract but not the text (see text comment 5).
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause (torn filter) is not included. 2. <u>Item (13)</u>--Component failure occurred but entire field is blank. A line for the filter should be filled in.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
5. LER Number: 85-009-01	
Scores: Text = 7.3 Abstract = 9.4 Coded Fields = 7.0 Overall = 7.9	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(i)(A)</u>--Discussion of plant operating conditions before the event is not included. 2. <u>50.73(b)(2)(i)(C)</u>--Date information for major occurrences is inadequate. An appropriate date should be provided for the installation of this modification. The approximate date of discovery of this deficiency should also be provided. 3. <u>50.73(b)(2)(i)(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>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Since the design change made was outside the bounds of the Ft. Calhoun Safety Analysis for a Main Steamline Break Event, the possibility of the main steam isolation valves not automatically closing if required should be discussed. 5. <u>50.73(b)(5)</u>--Information concerning previous similar events is not included. If no previous similar events are known, the text should so state. 6. Some conclusions reached are inconsistent with the facts presented. The first sentence of the last paragraph. There are some requirements that are not applicable to this LER, but not the "majority of the items". (Note: An "event" is a problem that is reportable and does not imply a failure.) 7. The use of revision bars is good.
Abstract	<ol style="list-style-type: none"> 1. <u>OBSERVATION</u>: 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 is not included. 2. <u>Item (5)</u>--Discovery date is given instead of event date.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
6. LER Number: 85-010-00	
Scores: Text = 8.0 Abstract = 5.4 Coded Fields = 8.2 Overall = 7.2	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Date/time information for major occurrences is inadequate. The time the test was completed (fourth paragraph) and the time (date) of the "subsequent retest" (fifth paragraph) should have been provided. 2. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion concerning the back contact on the lockout relay is inadequate. The seventh paragraph states that the failure will be investigated. The results of this investigation should probably be submitted in a supplemental report. 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)(2)(ii)(H)</u>--A time estimate of the unavailability of the failed system is not included. See text comment number 1. 5. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The sixth paragraph contains safety assessment information but no conclusions are stated.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is not included. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 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	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Link and result are not included. A better title might be "Lockout Relay Contact Failure Causes Low Pressure Safety Injection Pump to Fail To Start During A Surveillance Test".

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
6. LER Number: (continued)	
	2. <u>Item (7)</u> --Report date is not included.
	3. <u>Item (14)</u> --A supplemental report appears to be appropriate given an investigation into the failure and its generic aspects will be performed.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
7. LER Number: 85-011-00	
Scores: Text = 8.1 Abstract = 9.2 Coded Fields = 9.0 Overall = 8.5	
Text	<ol style="list-style-type: none"> <li data-bbox="443 499 1372 625">1. <u>50.73(b)(2)(i)(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. <li data-bbox="443 657 1372 814">2. <u>50.73(b)(2)(i)(J)(2)</u>--Were any procedural deficiencies involved? An explanation of how the wrong breaker could be thrown should be provided (e.g., close proximity of switches and/or inadequate identification tags). <li data-bbox="443 846 1372 1323">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. The text should discuss whether or not loss of the shutdown cooling or turbine plant cooling water could have caused a problem. 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. <li data-bbox="443 1354 1372 1449">4. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. What will be done to prevent recurrence (see text comment 2).
Abstract	1. No comment.
Coded Fields	<ol style="list-style-type: none"> <li data-bbox="443 1543 1339 1606">1. <u>Item (4)</u>--Title: Root cause (personnel error) and link (maintenance testing) are not included. <li data-bbox="443 1638 1339 1732">2. <u>Item (9)</u>--It appears that the operating mode number maybe wrong, since the standard PWR mode number for refueling is "6".

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
8. LER Number: 85-012-00	
Scores: Text = 9.4 Abstract = 7.1 Coded Fields = 9.3 Overall = 8.7	
Text	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.
Abstract	1. <u>50.73(b)(1)</u> --Summary of corrective actions taken or planned as a result of the event is not included.
Coded Fields	1. <u>Item (9)</u> --Operating mode is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
9. LER Number: 86-002-00	
Scores: Text = 7.0 Abstract = 8.1 Coded Fields = 7.9 Overall = 7.4	
Text	<ol style="list-style-type: none"> <li data-bbox="442 506 1372 570">1. <u>50.73(b)(2)(ii)(A)</u>--Discussion of plant operating conditions before the event is not included. <li data-bbox="442 602 1372 751">2. <u>50.73(b)(2)(ii)(C)</u>--Date/time information for major occurrences is inadequate. When was the fact that the surveillance had been missed discovered? What was the date that the seven day extension was exceeded? <li data-bbox="442 793 1372 921">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. <li data-bbox="442 953 1372 1017">4. <u>50.73(b)(2)(ii)(I)</u>--Discussion of the method of discovery of the missed surveillance is not included. <li data-bbox="442 1049 1372 1112">5. <u>50.73(b)(2)(ii)(J)(2)</u>--Discussion of the personnel error is inadequate. <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) is not included. <li data-bbox="442 1304 1372 1453">6. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. Had any equipment been inoperable or out-of-tolerance during this time; was there other (backup) systems or equipment available? <li data-bbox="442 1495 1372 1751">7. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. It is not apparent from the corrective action discussion whether the "personnel involved in incident" include only those who failed to ensure this surveillance was done or <u>all</u> personnel that ever perform surveillances as well as those that check to verify that a surveillance is completed. <li data-bbox="442 1793 1372 1876">8. Some ideas are not presented clearly (hard to follow). Why were March tests scheduled to be performed in February?

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
9. LER Number: (continued)	
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of cause information is inadequate. The fact that this event was considered to be a personnel problem and not a procedural problem, should have been mentioned. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. The fact that the personnel involved (see text comment number 7) were reminded of the importance of prompt surveillance performance should have been mentioned. 3. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract. 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 and result are not included. A better title might be "Personnel Error Results in Monthly Containment Pressure Tests Not Being Performed Within The Required Technical Specification Time Frame". 2. <u>Item (7)</u>--Report date is not included. 3. <u>Item (11)</u>--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(1). 4. <u>Item (13)</u>--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR FORT CALHOUN (285)

Section	Comments
10. LER Number: 86-003-00	
Scores: Text = 9.0 Abstract = 9.2 Coded Fields = 8.9 Overall = 9.1	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--It is not clear from the text exactly when the chemistry technician mistakenly put the selector in position "A", nor is it clear how the two minute offsite release time was calculated. 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)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Will a "normal" position label be put on the selector switch?
Abstract	<ol style="list-style-type: none"> 1. The abstract contains greater than 1400 spaces.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause (defective procedure) and link (waste sampling) are not included.