

MAR 05 1986

In Reply Refer To:
Docket: 50-382/86-02

Louisiana Power & Light Company
ATTN: R. S. Leddick, Sr. Vice President
Nuclear Operations
142 Delaronde Street
New Orleans, Louisiana 70174

The attached report issued by our Office for Analysis and Evaluation of Operational Data (AEOD) is an evaluation of your performance in preparing Licensee Event Reports (LERs) during the period of December 19, 1984, to December 31, 1985. The draft Systematic Assessment of Licensee Performance (SALP) input (referred to as Attachment A) is not included with this letter. We have incorporated it in the SALP report which should be issued in the near future.

This report is provided for your information to assist you in correcting the specific deficiencies cited in future LERs.

Should you have any questions concerning this report, we will be pleased to discuss them with you.

Sincerely,

Original Signed By
J. E. Gagliardo

J. E. Gagliardo, Chief
Reactor Projects Branch

Enclosure:
AEOD Input to SALP Review
for Waterford 3

cc w/enclosure:
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Louisiana Power & Light Company
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(cont. on next page)

RIV:RPB/C
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GL Constable
3/4/86

RPB
JEGagliardo
3/5/86

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Louisiana Power & Light Company

-2-

Middle South Services
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Louisiana Radiation Control Program Director

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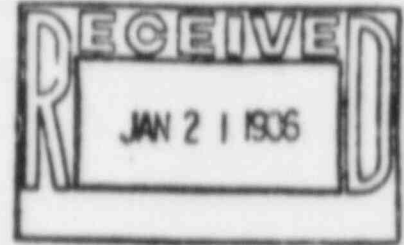
D. Weiss, LFMB (AR-2015)
R. D. Martin, RA
DRSP
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ATTACHMENT 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555



JAN 17 1986



MEMORANDUM FOR: Richard P. Denise, Director
Division of Reactor Safety and Projects
Region IV

FROM: Frederick J. Hebdon, Deputy Director
Office for Analysis and Evaluation
of Operational Data

SUBJECT: SALP ASSESSMENT INPUT FOR WATERFORD 3

In his memos dated July 1, 1985 and July 24, 1985, Jack Heltemes described a new methodology that we are using to assess the quality of LERs submitted by licensees. This assessment would then serve as an input to the SALP evaluation of the subject facility.

Enclosed (Attachment B) is the assessment of the LERs from Waterford 3. Attachment A is a brief summary of the results of this assessment. You may find this summary useful as a direct input into the SALP report.

In general, we find these LERs to be of marginally acceptable quality based on the requirements contained in 10 CFR 50.73. The enclosed report provides the basis for this finding. We believe that it would be helpful if a copy of the enclosed report were provided to the licensee so that the specific deficiencies noted can be corrected in future LERs.

Please call me on (FTS 492-4480) if you have any questions concerning this matter.

Frederick J. Hebdon
Frederick J. Hebdon, Deputy Director
Office for Analysis and Evaluation
of Operational Data

Enclosures:
As Stated

~~860-280061~~

cc: C. Miller, INEL (w/o encl.)

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AEOD INPUT TO SALP REVIEW FOR WATERFORD 3

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Waterford 3 during the December 19, 1984 to December 31, 1985 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-4178¹. The sample consists of 20 LERs, which is half of the LERs that were in the file for Waterford 3 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 is divided into two parts. The first part of the evaluation consists of documenting comments specific to the content and presentation of each LER. The second part consists of determining a score (0-10 points) for the text, abstract, and coded fields of each LER.

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

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

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 analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

Discussion of 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 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 Waterford 3. 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 the current methodology are provided in Table 2. Additional units are 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, Waterford 3's average scores for the text of the LERs that were evaluated was 7.8 out of a possible 10 points. From Table 3 it can be seen that a 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 3 provide an indication of how well each text requirement was addressed by the licensee for the 20 LERs that were evaluated.

Discussion of Specific Deficiencies

A review of the percentage scores presented in Table 3 will quickly point out where the licensee is experiencing the most difficulty in preparing LERs. For example, requirement percentage scores of less than 75 indicate that the licensee probably needs additional guidance concerning these requirements. Scores of 75 or above, but less than 100, indicate that the licensee understands the basic requirement but has either (1) excluded certain less significant information from many of the discussions concerning that requirement [e.g., Requirement 50.73(b)(3)] or (2) totally failed to address the requirement in a few of the selected LERs [e.g., Requirement 50.73(b)(2)(11)(1)]. The licensee should review the LER specific comments presented in Appendix D in order to determine why he received less than a perfect score for certain requirements. The text requirements with a score of less than 75 are discussed below in their order of importance. In addition, the primary deficiencies in the abstracts and coded fields are discussed.

Eleven of the twenty LERs failed to provide adequate root cause information, Requirement 50.73(b)(2)(11)(D). Root cause information is very useful to the analyst who uses LER data for the purpose of looking for generic problems, but it is even more important to the licensee that has experienced the event. It is only through adequate determination of root cause that implementation of the necessary corrective actions can be

accomplished, thereby preventing recurrence of the event or similar events. In most cases, a more detailed cause investigation would solve this deficiency. For example, a valve stem may break preventing the valve from operating, but the valve stem failure is not the root cause. Questions should be asked as to why the stem broke, so that the source of the breakage (e.g., vibration) can be corrected thereby preventing failure of the replacement stem. Similarly for personnel error, questions should be asked as to why the error occurred (e.g., was training inadequate, was there a procedural deficiency, or was a special problem such as fatigue involved?). Note that the corrective action requirement score (75%) reflects the deficiencies involving the root cause discussions.

Although the requirement score for the safety assessment was above 75%, there are some deficiencies involving this requirement that should be discussed. A safety assessment should be specific as to whether or not a more severe problem could have occurred as a result of the event. For example, it is inadequate to state that "there were no safety consequences because the reactor was shutdown" if it is possible to have the same scenario happen during power operation. The assessment should indicate what could have happened if the problem had not been identified in a timely manner or had occurred at a less opportune time. The assessment should also indicate whether or not other systems were available to mitigate the consequences of the event.

Six of the ten LERs involving personnel error were deficient, Requirement 50.73(b)(2)(11)(J)(2). The primary deficiency concerning these LERs was that the text discussion did not allow the reader to determine whether or not the personnel error was cognitive or procedural. It should be noted that one of the requirements of 50.73(b)(2)(11)(D) is to state the cause of each personnel error. It is not enough to just attribute an event to personnel error without discussing the cause of that error. Requirement 50.73(b)(2)(11)(J)(2)(i) through (iv) should be thought of as a subset of Requirement 50.73(b)(2)(11)(D) whenever personnel error is involved in an event.

All eleven of the LERs involving component failures, failed to adequately identify the failed component, Requirement 50.73(b)(2)(ii)(L). Nine gave neither the manufacturer nor the model number nor any other appropriate identification of the failed component. The other two gave manufacturer, but failed to specifically identify the component as to model number or some other unique identification. This information is important for the identification of possible generic problems in the nuclear industry.

Nine of the 20 LERs did not provide adequate information concerning the operating conditions just prior to the event, Requirement 50.73(b)(2)(ii)(A). Three LERs failed to provide any information concerning operating conditions. The remaining six LERs did not provide adequate information. The most common deficiency was the failure to define the operating mode that was provided. Mode definitions are not standardized to the point that a definition would be redundant to the reader. Sufficient information should be provided early in the discussion so that the reader has a reference point in terms of the possible effects of the event on the plant.

Five of the seven LERs involving safety system train failures did not provide adequate dates and/or times so that the unavailability time of the train could be determined, Requirement 50.73(b)(2)(ii)(H). This kind of information is required as it becomes part of the generic data necessary to perform probabilistic risk assessments (PRAs). Adequate attention paid to Requirement 50.73(b)(2)(ii)(C), which requires dates and times of major occurrences, will usually ensure that this requirement is met.

All twenty of the Waterford 3 LERs failed to include the Energy Industry Identification System (EIIS) codes for each system or component referred to in the text. These codes are required by Requirement 50.73(b)(2)(ii)(F).

The text presentation score of 82% is generally good, however, two points should be discussed concerning presentation. The outline format being used should be expanded (see Appendix C and D of NUREG-1022,

Supplement No. 2). Specifically, an additional outline category is needed to discuss the root and intermediate causes for each component or system failure and/or personnel error that is mentioned in the NARRATIVE section.

The second concern involves LER 85-005-00. The occurrences discussed in this LER should probably have been submitted in the form of two LERs as they are two different events. The only common element between the events is that the result of the different initiating events (i.e., the electrical spikes and the heavy fog) produced the same effect; namely, actuation of the Control Room Ventilation System. Events are not always categorized by result; often root cause information is just as important an aspect of the event to the analyst using LER data. This is one reason why separate events should always be submitted in separate LERs.

The abstracts for Waterford 3 are generally too short; therefore, the necessary information, which is available in the texts, did not get adequately summarized in most abstracts. Information concerning root cause and corrective actions was most frequently omitted as can be seen from the percentage scores for these requirements (i.e., 42% and 26% respectively). There is space available in most of the abstracts to include this information but it was not utilized. More information pertaining to abstracts can be found in 10 CFR 50.73(b)(1), and Sections 2.2.2 and 3.2 of NUREG-1022, Supplement No. 2 (pages 17 and 28 respectively).

The main deficiency in the area of coded fields involves the title, Item (4). All twenty of the titles did not indicate root cause and nine failed to include the link (i.e., circumstances or conditions which tie the root cause to the result). All but four of the LERs provided information concerning the result of the event (i.e., why the event was required to be reported). An example of a title that only addresses result might be "Reactor Scram". This is inadequate in that the cause and link are not provided. A more appropriate title might be "Inadvertent Relay Actuation

During Surveillance Test LOP-1 Causes Reactor Scram". From this title the reader knows the cause was either personnel or procedural and testing contributed to the event.

Another deficiency involves Item 13--information concerning failed components. Seven of the eleven LERs that described a component failure did not provide the coded information required in Item 13.

The final deficiency in the area of coded fields involves Item 14--supplemental report. The text of four of the LERs provided information that indicated that a supplemental report was needed, but no commitment to provide one was made. Whenever an event is still under investigation at the time the original report is submitted, it may be appropriate to submit a supplemental report describing the result of this investigation.

Table 4 provides a summary of the areas that need improvement for Waterford 3 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. 2⁴.

TABLE 1. SUMMARY OF SCORES FOR WATERFORD 3

	<u>Average</u>	<u>High</u>	<u>Low</u>
Text	7.8	9.3	6.1
Abstract	5.9	8.5	2.5
Coded Fields	8.2	9.0	7.0
Overall	7.3 ^b	8.3	5.8

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

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

TABLE 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</u>
1.	Salem 2	9-30-85	8.9	8.9	8.6	8.9
2.	Salem 1	9-30-85	8.6	9.0	8.9	8.8
3.	Palisades	10-31-85	8.4	8.3	8.5	8.4
4.	Washington Nuclear 2	1-31-86	8.9	6.2	8.2	8.0
5.	LaSalle 2	9-30-85	8.0	7.7	8.6	8.0
6.	LaSalle 1	9-30-85	7.9	8.1	8.6	8.0
7.	Browns Ferry 3	11-30-85	7.8	8.1	8.5	8.0
8.	Catawba 1	9-30-85	8.0	7.4	8.6	7.9
9.	Trojan	10-31-85	7.8	7.6	8.9	7.8
10.	Browns Ferry 1	11-30-85	7.8	7.6	8.3	7.8
11.	Pilgrim 1	10-31-85	7.6	7.8	8.1	7.7
12.	Beaver Valley 1	9-30-85	7.2	8.3	8.8	7.7
13.	Kewaunee	12-31-85	7.3	7.8	8.7	7.6
14.	Quad Cities 1	9-30-85	7.9	6.5	8.4	7.5
15.	Quad Cities 2	9-30-85	7.9	6.4	8.6	7.5
16.	Maine Yankee	10-31-85	7.5	7.3	8.5	7.5
17.	Byron 1	10-31-85	7.5	7.3	8.3	7.5
18.	Browns Ferry-2	11-30-85	7.3	7.7	8.5	7.5
19.	Indian Point 3	11-30-85	7.1	7.7	8.5	7.5
20.	Brunswick 1	10-31-85	6.8	8.5	8.5	7.5
21.	Summer	12-31-85	7.1	7.7	8.3	7.4
22.	Sequoyah 1	11-30-85	7.8	5.9	8.3	7.3

TABLE 2. (continued)

	<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</u>
23.	Waterford 3	12-31-85	7.8	5.9	8.2	7.3
24.	Dresden 3	9-30-85	7.2	7.3	8.0	7.3
25.	Palo Verde 1	9-30-85	6.8	7.7	8.4	7.3
26.	D. C. Cook 2	9-30-85	6.7	8.3	8.4	7.3
27.	D. C. Cook 1	9-30-85	6.4	8.3	8.4	7.2
28.	Sequoyah 2	11-30-85	8.0	4.6	8.9	7.1
29.	Zion 2	9-30-85	7.2	6.7	8.2	7.1
30.	Robinson 2	10-31-85	7.1	6.9	7.8	7.1
31.	Vermont Yankee	10-18-85	7.0	7.0	8.2	7.1
32.	Dresden 2	9-30-85	6.9	7.3	7.9	7.1
33.	Fitzpatrick	11-30-85	6.2	8.5	8.7	7.1
34.	Brunswick 2	10-31-85	6.0	7.9	8.8	6.8
35.	Zion 1	9-30-85	6.0	7.5	7.9	6.6

a. Units are ordered by overall average score.

TABLE 3. LER REQUIREMENT PERCENTAGE SCORES FOR WATERFORD 3

<u>TEXT</u>		Percentage
<u>Requirements [50.73(b)] - Descriptions</u>		<u>Scores ()^a</u>
(2)(ii)(A) - -	Plant condition prior to event	70 (20)
(2)(ii)(B) - -	Inoperable equipment that contributed	b
(2)(ii)(C) - -	Date(s) and approximate times	86 (20)
(2)(ii)(D) - -	Root cause and intermediate cause(s)	74 (20)
(2)(ii)(E) - -	Mode, mechanism, and effect	100 (11)
(2)(ii)(F) - -	EIIS Codes	0 (20)
(2)(ii)(G) - -	Secondary function affected	b
(2)(ii)(H) - -	Estimate of unavailability	29 (7)
(2)(ii)(I) - -	Method of discovery	77 (20)
(2)(ii)(J)(1) -	Operator actions affecting course	88 (17)
(2)(ii)(J)(2) -	Personnel error (procedural deficiency)	65 (10)
(2)(ii)(K) - -	Safety system responses	100 (13)
(2)(ii)(L) - -	Manufacturer and model no. information	7 (11)
(3) - - - - -	Assessment of safety consequences	85 (20)
(4) - - - - -	Corrective actions	75 (20)
(5) - - - - -	Previous similar event information	100 (20)
(2)(i) - - - -	Text presentation	82 (20)

ABSTRACT

<u>Requirements [50.73(b)(1)] - Descriptions</u>		Percentage
		<u>Scores ()^a</u>
-	Major occurrences (Immediate cause and effect information)	95 (20)
-	Description of plant, system, component, and/or personnel responses	79 (19)
-	Root cause information	42 (20)
-	Corrective Action information	26 (20)
-	Abstract presentation	55 (20)

TABLE 3. (continued)

CODED FIELDS		Percentage
Item Number(s) - Description		Scores () ^a
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)		100 (20)
4 - - - - - Title		51 (20)
5, 6, and 7 - Event date, LER No., and report date		94 (20)
8 - - - - - Other facilities involved		100 (20)
9 and 10 - - Operating mode and power level		98 (20)
11 - - - - - Reporting requirements		95 (20)
12 - - - - - Licensee contact information		100 (20)
13 - - - - - Coded component failure information		66 (20)
14 and 15 - - Supplemental report information		82 (20)

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

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

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR WATERFORD 3 LERS

Areas	Comments
Root cause information	A better investigation into root cause is needed. Questions about why the failure occurred must be asked and answered if meaningful corrective actions are to result.
Personnel error	The cause for every personnel error must be discussed. Whenever personnel or procedural error is involved, be sure to discuss all applicable requirements listed under 50.73(b)(2)(ii)(J)(2).
Manufacturer and model number information	Component identification information (manufacturer and model number) should be included in the text for each failed component or whenever a component is suspected of contributing to the event because of its design.
Operating conditions prior to the event	Details such as power level, mode names and in some cases, temperatures and pressures are required in the text.
Safety train unavailability	Sufficient dates and times should be included in the text to enable the reader to determine the length of time that safety system trains or components were out of service.
EIIIS codes	Codes for each component and system involved in the event should be provided.
Text presentation	Improvement in text presentation would result from expanding the present outline format. A "CAUSE" section is needed.
Abstracts	Root cause and corrective action information was often not included. Most abstracts are too brief. The space available must be better utilized.

TABLE 4. (continued)

Areas	Comments
Coded fields	
a. Titles	Titles should be written such that they better describe the event. In particular, include the root cause of the event and the link between root cause and result in the title.
b. Failed component information	Whenever a component failure is described in the text, appropriate data must be entered into the fields in Item 13.
c. Supplemental reports	Commitments to submit supplemental reports should be made if all information is not available in the original report when it is submitted.

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 WATERFORD 3

TABLE A-1. LER SAMPLE SELECTION FOR WATERFORD 3

<u>LER Sample Number</u>	<u>LER Number</u>	<u>Comments</u>
1	84-001-00	ESF
2	84-002-00	ESF
3	85-005-00	ESF
4	85-006-00	ESF
5	85-007-00	SCRAM
6	85-008-00	SCRAM
7	85-011-00	
8	85-012-00	
9	85-017-00	SCRAM
10	85-018-00	SCRAM
11	85-019-00	
12	85-022-01	SCRAM
13	85-023-00	
14	85-025-00	
15	85-027-00	SCRAM
16	85-029-00	SCRAM
17	85-030-00	ESF
18	85-031-00	SCRAM
19	85-034-01	SCRAM
20	85-037-00	

APPENDIX B

EVALUATION SCORES OF
INDIVIDUAL LERS FOR WATERFORD 3

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR WATERFORD 3

	LER Sample Number ^a															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	9.0	7.8	7.2	8.8	7.6	7.3	7.7	7.1	8.0	6.9	8.0	7.7	8.2	8.3	6.8	6.1
Abstract	6.3	6.0	3.0	6.5	8.5	3.5	4.4	2.5	5.7	8.2	6.5	5.0	6.0	6.0	6.5	7.1
Coded Fields	8.5	7.3	8.0	8.0	9.0	8.5	8.0	7.5	7.6	8.5	9.0	7.3	7.0	9.0	8.0	8.5
Overall	8.1	7.2	6.0	8.0	8.0	6.3	6.7	5.8	7.3	7.4	7.7	6.8	7.4	7.7	6.8	6.6

	LER Sample Number ^a														AVERAGE
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Text	9.2	8.1	7.2	9.3	--	--	--	--	--	--	--	--	--	--	7.8
Abstract	6.0	7.5	6.3	6.5	--	--	--	--	--	--	--	--	--	--	5.9
Coded Fields	9.0	8.8	8.3	9.0	--	--	--	--	--	--	--	--	--	--	8.2
Overall	8.2	8.0	7.0	8.5	--	--	--	--	--	--	--	--	--	--	7.3

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

APPENDIX C

DEFICIENCY AND OBSERVATION
COUNTS FOR WATERFORD 3

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR WATERFORD 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
<u>50.73(b)(2)(i)(A)</u> --Plant operating conditions before the event were not included or were inadequate.		9 (20)
<u>50.73(b)(2)(i)(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)(i)(C)</u> --Failure to include sufficient date and/or time information.		9 (20)
a. Date information was insufficient.	5	
b. Time information was insufficient.	8	
<u>50.73(b)(2)(i)(D)</u> --The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		11 (20)
a. Cause of component failure was not included or was inadequate	6	
b. Cause of system failure was not included or was inadequate	1	
c. Cause of personnel error was not included or was inadequate.	4	
<u>50.73(b)(2)(i)(E)</u> --The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		0 (11)
a. Failure mode was not included or was inadequate		
b. Mechanism (immediate cause) was not included or was inadequate		
c. Effect (consequence) was not included or was inadequate.		

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	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.		20 (20)
<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 (0)
<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.		5 (7)
<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.		5 (20)
a. Method of discovery for each component failure was not included or was inadequate	2	
b. Method of discovery for each system failure was not included or was inadequate	0	
c. Method of discovery for each personnel error was not included or was inadequate	3	
d. Method of discovery for each procedural error was not included or was inadequate.	1	

TABLE C-1. (continued)

<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.		3 (17)
<u>50.73(b)(2)(ii)(J)(2)</u> --The discussion of each personnel error was not included or was inadequate.		6 (10)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	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.	4	
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.	1	
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.	1	
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)

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 (13)
<u>50.73(b)(2)(ii)(L)</u> --The manufacturer and/or model number of each failed component was not included or was inadequate.		11 (11)
<u>50.73(b)(3)</u> --An assessment of the safety consequences and implications of the event was not included or was inadequate.		12 (20)
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state. 	7	
<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.		13 (20)

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>
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.	1	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	6	
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	
<u>50.73(b)(5)</u> --Information concerning previous similar events was not included or was inadequate.		0 (20)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
50.73(b)(2)(1)--Text presentation inadequacies.		3 (20)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	0	
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 WATERFORD 3

<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		2 (20)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		7 (19)
a. Summary of plant responses was not included or was inadequate.	1	
b. Summary of system responses was not included or was inadequate.	4	
c. Summary of personnel responses was not included or was inadequate.	6	
A summary of the root cause of the event was not included or was inadequate.		19 (20)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		18 (20)

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		17 (20)
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.	2	
b. The abstract was greater than 1400 characters	0	
c. The abstract contains undefined acronyms and/or plant specific designators.	0	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	17	

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

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

TABLE C-3. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR WATERFORD 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Facility Name		0 (20)
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 (20)
Page Number was not included or was incorrect.		0 (20)
Title was left blank or was inadequate		20 (20)
a. Root cause was not given in title	20	
b. Result (effect) was not given in title	4	
c. Link was not given in title	9	
Event Date		0 (20)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		0 (20)
Report Date		3 (20)
a. Date not included	2	
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).	1	
Other Facilities information in field is inconsistent with text and/or abstract.		0 (20)
Operating Mode was not included or was inconsistent with text or abstract.		1 (20)

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 (20)
Reporting Requirements		1 (20)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	0	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	1	
Licensee Contact		0 (20)
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 (20)
a. One or more component failure sub-fields were left blank.	0	
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.	6	

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations	
	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Supplemental Report		4 (20)
a. Neither "Yes"/"No" block of the supplemental report field was checked.	0	
b. The block checked was inconsistent with the text.	4	
Expected submission date information is inconsistent with the block checked in Item (14).		0 (20)

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

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

APPENDIX D

LER COMMENT SHEETS FOR
WATERFORD 3

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
1. <u>LER Number:</u> 84-001-00	
Scores: Text = 9.0 Abstract = 6.3 Coded Fields = 8.5 Overall = 8.1	
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. 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)(L)</u>--The problem equipment should be identified by manufacturer and model number.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. The summary should indicate that relay actuations in or near the monitors appears to be causing the spurious signals. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. The summary should indicate that investigation is ongoing and a filter has been installed on the monitors. 3. 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 are 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 WATERFORD 3 (382)

Section	Comments
2. <u>LER Number:</u> 84-002-00	
Scores: Text = 7.8 Abstract = 6.0 Coded Fields = 7.3 Overall = 7.2	
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 inadequate. Mode 6 is not defined. 2. <u>50.73(b)(2)(ii)(C)</u>--Approximate time information for occurrences is 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 is not included. 4. <u>50.73(b)(2)(ii)(I)</u>--Discussion of the method of discovery of the procedural error is not included. 5. <u>50.73(b)(2)(ii)(J)(2)</u>--Discussion of personnel error is inadequate. 6. <u>50.73(b)(2)(ii)(J)(2)(i)</u>--Discussion as to whether the personnel error was cognitive or procedural is not included. 7. <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. 8. <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. 9. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Those actions taken to eliminate the root cause of the error which caused procedure OP. 903-01 to be incorrect were not discussed.
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.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
2. <u>LER Number:</u>	84-002-00 (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: Root cause and result are not included. 2. <u>Item (7)</u> --Report date is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
3. <u>LER Number:</u> 85-005-00	
Scores: Text = 7.2 Abstract = 3.0 Coded Fields = 8.0 Overall = 6.0	
Text	<ol style="list-style-type: none"> <li>1. <u>50.73(b)(2)(ii)(A)</u>--Discussion of plant operating conditions before the event is inadequate. Mode 3 should be defined (e.g., hot standby). <li>2. <u>50.73(b)(2)(ii)(C)</u>--Time information for occurrences is inadequate. An approximate time should have been given in place of the phrase "cleared shortly" in the second paragraph. <li>3. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the dirty mirrors on the ammonia detectors is not included. <li>4. <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>5. <u>50.73(b)(2)(ii)(H)</u>--A time estimate of the unavailability of the failed system is not included. <li>6. <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. <li>7. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. How was it concluded that the toxic gas and radiation monitors "would have performed as designed?". <li>8. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. What was done to prevent recurrence of the ammonia detector problem? The phrase "will be monitored closely" should be expanded upon. <li>9. Although similar, these two events should probably have been separate LERs.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
3. <u>LER Number:</u> 85-005-00 (continued)	
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 and personnel responses is inadequate. 3. <u>50.73(b)(1)</u>--Summary of root cause is not included. 4. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 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 are not included. 2. <u>Item (13)</u>--Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
4. <u>LER Number:</u> 85-006-00	
Scores: Text = 8.8 Abstract = 6.5 Coded Fields = 8.0 Overall = 8.0	
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)(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)(L)</u>--The make and model of the failed seal should be given. 4. <u>50.73(b)(2)(ii)(H)</u>--A time estimate of the unavailability of the failed system is not included.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of plant response is inadequate. The summary should indicate that gagging of the primary pumps was necessary because component cooling water to the pump seals could not be restored. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 3. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link are not included. 2. <u>Item (14)</u>--The block checked is inconsistent with information in the text. In section <u>Safety Consequences and Implications</u> a future report is promised. 3. Information in letter W3P85-1242 A4.05 should be submitted in an LER revision.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
5. <u>LER Number:</u> 85-007-00	
Scores: Text = 7.6 Abstract = 8.5 Coded Fields = 9.0 Overall = 8.0	
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 inadequate. Mode 3 is not defined. 2. <u>50.73(b)(2)(ii)(D)</u>--How was it determined that electrical noise caused the momentary spike above 1.0E-4 percent power, and how was it determined that the electrical noise was within the Excore Nuclear Instrumentation? 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)(J)(1)</u>--Discussion of operator actions that affected the course of the event 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.
	<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>
	<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>
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of personnel responses is not included. 2. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. See text Comment Number 2.
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 WATERFORD 3 (382)

Section	Comments
6. LER Number: 85-008-00	
Scores: Text = 7.3 Abstract = 3.5 Coded Fields = 8.5 Overall = 6.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(A)</u>--Mode 2 should be defined (e.g., startup). 2. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the personnel errors is 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 is not included. 4. <u>50.73(b)(2)(ii)(J)(2)</u>--Discussion of personnel error is inadequate. 5. <u>50.73(b)(2)(ii)(J)(2)(i)</u>--Discussion as to whether the personnel error was cognitive or procedural is not included. 6. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. 7. A discussion of actions required to reduce the probability of recurrence (i.e., correction of the root cause) is not included or is inadequate.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of system and personnel responses is not included. 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 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 and link are not included. The term "uncomplicated scram" is apparently plant specific and should be defined in the text.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
7. <u>LER Number:</u> 85-011-00	
Scores: Text = 7.7 Abstract = 4.4 Coded Fields = 8.0 Overall = 6.7	
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. 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)(J)(2)</u>--Discussion of personnel error is inadequate. 4. <u>50.73(b)(2)(ii)(J)(2)(i)</u>--Discussion as to whether the personnel error was cognitive or procedural 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.
	<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>
	<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>--What will be done to make future employees aware of the problem?
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.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
7. <u>LER Number</u> : 85-011-00 (continued)	
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link are not included. The title does not even indicate the type of samples missed. 2. <u>Item (9)</u>--The operating mode in field differs from text or abstract.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
8. LER Number: 85-012-00	
Scores: Text = 7.1 Abstract = 2.5 Coded Fields = 7.5 Overall = 5.8	
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)(C)</u>--Dates and approximate times information for occurrences is inadequate. When was the detector installed? 3. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the personnel error is not included. 4. <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. 5. <u>50.73(b)(2)(ii)(I)</u>--Discussion of the method of discovery of the personnel/procedural error is not included. 6. <u>50.73(b)(2)(ii)(J)(2)</u>--Discussion of personnel error is not included. 7. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. What alternate methods of fire detection was available? 8. A discussion of actions required to reduce the probability of recurrence (i.e., correction of the root cause) is not included or is inadequate.
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 personnel responses is not included. 3. <u>50.73(b)(1)</u>--Summary of root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
8. <u>LER Number:</u> 85-012-00 (continued)	
	4. <u>50.73(b)(1)</u> --Summary of corrective actions taken or planned as a result of the event is not included.
	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. 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: Root cause and result are not included.
	2. <u>Item (11)</u> --OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(v).
	3. <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 WATERFORD 3 (382)

Section	Comments
9. <u>LER Number:</u> 85-017-00	
Scores: Text = 8.0 Abstract = 5.7 Coded Fields = 7.6 Overall = 7.3	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Time information for occurrences is inadequate. An approximate time for the initial discovery and the pressure transducer repair should have been provided. 2. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the transducer and check valve failure is inadequate. Heat is implied from the corrective action discussion but the mechanism is not obvious. 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)(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. What if the MSIV had not failed in the safest condition? 6. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. What was done to "repair" the faulty components? A supplemental report discussing the results of the evaluation (SMR-44) may be appropriate. Recurrence control needs to be addressed and documented.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of system and personnel responses not included. 2. <u>50.73(b)(1)</u>--Summary of root cause of transducer and check valve failure 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. See text comment 6.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
9. <u>LER Number:</u> 85-017-00 (continued)	
	4. Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	
	1. <u>Item (4)</u> --Title: Root cause is not included.
	2. Information should have been provided in Item 13 for the transducer and check valve. The MSIV was faulted, not failed.
	3. A supplemental report appears to be appropriate (see text comment 6).

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
10. <u>LER Number:</u> 85-018-00	
Scores: Text = 6.9 Abstract = 8.2 Coded Fields = 8.5 Overall = 7.4	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the component failure is not included. Why did the packing begin to leak? 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)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text 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.
	<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"> 5. <u>50.73(b)(4)</u>--Other systems with similar packing appear to need to be examined to see if all similar packing should be replaced.
Abstract	<ol style="list-style-type: none"> 1. The root cause summary is deficient for the same reason as the text discussion (see text comment 1).
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause and link are not included. 2. <u>Item (13)</u>--Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
11. <u>LER Number:</u> 85-019-00	
Scores: Text = 8.0 Abstract = 6.5 Coded Fields = 9.0 Overall = 7.7	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the personnel error is not included. 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)(2)(ii)(J)(2)</u>--Discussion of personnel error is inadequate. 5. <u>50.73(b)(2)(ii)(J)(2)(i)</u>--Discussion as to whether the personnel error was cognitive or procedural is not included. 6. <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.
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: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
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12. LER Number: 85-022-01

Scores: Text = 7.7 Abstract = 5.0 Coded Fields = 7.3 Overall = 6.8

Text

1. The operating mode would be appropriate in the text.
2. 50.73(b)(2)(i)(C)--Date and time information for occurrences is inadequate. The date and/or time when the plant conditions were stabilized should be provided.
3. The cause discussion is inadequate. Why was MS-320C found to have "no evidence of mechanical binding" in May and later found to have internal clearance problems? Why did the controller output "suddenly" increase to 60% demand? Apparent cause appears to be unknown.
4. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER is not included.
5. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included.
6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is inadequate.

OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components are available, the text should so state.

7. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. Because the cause is apparently unknown, what precautions will be taken in the future to try to prevent these valves from popping open again?
8. Some conclusions reached are inconsistent with the facts presented. A logical transition does not exist between all ideas.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
12. <u>LER Number</u> : 85-022-01 (continued)	
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause of MS-319A opening 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: Root cause and link are not included. 2. <u>Item (7)</u>--Report date is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
13. LER Number: 85-023-00	
Scores: Text = 8.2 Abstract = 6.0 Coded Fields = 7.0 Overall = 7.4	
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>--The model number of the faulty microswitch should be given. 3. <u>50.73(b)(3)</u>--Discussion of the assessment of the safety consequences and implications of the event is inadequate. The safety assessment should discuss probable consequences if the equipment did not operate when needed. 4. 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>--Corrective actions should address other systems where similar microswitches may cause problems.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. The summary should indicate that a microswitch malfunctioned and that the manufacturer is examining the problem. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is not included. 3. Additional space is available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root cause, link and result are not included. The title gives a reader very little information about the event.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
13. <u>LER Number:</u> 85-023-00 (continued)	
	2. <u>Item (13)</u> --Component failure occurred but entire field is blank.
	3. A supplement report appears to be necessary to report the findings of General Electric concerning the microswitch problem.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
14. <u>LER Number:</u> 85-025-00	
Scores: Text = 8.3 Abstract = 6.0 Coded Fields = 9.0 Overall = 7.7	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Dates and approximate time information for occurrences is inadequate. When was the S7X relay replaced? When was the out of spec tolerances discovered? 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)(H)</u>--A time estimate of the unavailability of the failed system is not included. 4. <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. 5. <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>
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is not included (i.e., personnel error). 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. Only half of the corrective actions were included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
14. <u>LER Number:</u> 85-025-00 (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: Root cause and result are not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
15. <u>LER Number:</u> 85-027-00	
Scores: Text = 6.8 Abstract = 6.5 Coded Fields = 8.0 Overall = 6.8	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(11)(D)</u>--The root and/or intermediate cause discussion for the personnel errors 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)(H)</u>--A time estimate of the unavailability of the failed system is not included. 4. <u>50.73(b)(2)(11)(J)(1)</u>--Discussion of operator actions that affected the course of the event is inadequate. Were procedures followed concerning the securing of the pumps and the turbine? 5. <u>50.73(b)(2)(11)(J)(2)</u>--Discussion of personnel error is inadequate. Why did two people identify the wrong pump as being on fire? 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 not included. What is the manufacturer and model number of the pump with the apparent design problem? 7. <u>50.73(b)(2)(11)(I)</u>--Discussion of the method of discovery of the fire by the electrician is inadequate. Did he happen upon it by chance? If yes, would the consequences have been more severe had it gone undetected for a longer time? 8. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. What was done (or will be done) to correct the problem of not properly identifying the involved equipment? 9. Some ideas are not presented clearly (hard to follow).
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause of oil leak is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
15. <u>LER Number:</u> 85-027-00 (continued)	
	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.
Coded Fields	1. <u>Item (4)</u> --Title: Root cause and link are not included.
	2. <u>Item (13)</u> --Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
16. LER Number: 85-029-00	
Scores: Text = 6.1 Abstract = 7.1 Coded Fields = 8.5 Overall = 6.6	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Time information for occurrences is inadequate. 2. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the component failure is not included. The discussion should indicate why the operators became misadjusted, or at least, tell what was done to determine the cause. Without a root cause, proper corrective actions for prevention cannot be taken. 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. 5. <u>50.73(b)(2)(ii)(I)</u>--Discussion of the method of discovery of the component failure is not included. 6. <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.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate.
Coded Fields	<ol style="list-style-type: none"> 1. <u>Item (4)</u>--Title: Root causes and link are not included. 2. <u>Item (13)</u>--Component failure occurred but entire field is blank. A line should be filled in for the microswitch.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
17. <u>LER Number:</u> 85-030-00	
Scores: Text = 9.2 Abstract = 6.0 Coded Fields = 9.0 Overall = 8.2	
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.
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: Root cause is not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
18. <u>LER Number:</u> 85-031-00	
Scores: Text = 8.1 Abstract = 7.5 Coded Fields = 8.8 Overall = 8.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Time information for occurrences is inadequate. When was the plant stabilized in Mode 3? When was the vibration trip changed? 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)(L)</u>--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text is not included. Even though the origin of the trip is unknown, the pump turbine should be identified as it is a possible contributor to the problem. 4. <u>50.73(b)(4)</u>--Discussion of corrective actions taken or planned is inadequate. Not enough details are provided in the CORRECTIVE ACTION section. Explain why the turbine vibration setpoint was changed to 7 mils? (Explain that it was changed from 3 to 7 mils.) What was the information provided by the manufacturer that prompted the elimination of the high vibration trip?
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of system and 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 lacking details. 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. <u>Item (13)</u>--Component failure occurred but entire field is blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
19. <u>LER Number:</u> 85-034-01	
Scores: Text = 7.2 Abstract = 6.3 Coded Fields = 8.3 Overall = 7.0	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(D)</u>--The root and/or intermediate cause discussion for the component failure is inadequate. Although personnel error initiated the event, the text should discuss why the valve stroke time was excessive and why the balance over-ride was misadjusted. 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)(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>
	<ol style="list-style-type: none"> 4. <u>50.73(b)(4)</u>--Without knowing the root cause (Text comment 1) corrective actions necessary to prevent recurrence cannot be taken.
Abstract	<ol style="list-style-type: none"> 1. <u>50.73(b)(1)</u>--Summary of root cause is inadequate. The abstract is lacking for the same reasons as the text (see text comment 1). 2. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result 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. The text does not indicate that preventative measures are being evaluated.</p> <ol style="list-style-type: none"> 3. Additional space is available within the abstract field to provide the necessary information but it was not utilized.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
19. <u>LER Number:</u> 85-034-01 (continued)	
Coded Fields	<ol style="list-style-type: none"><li>1. <u>Item (4)</u>--Title: Root cause is not included.<li>2. <u>Item (14)</u>--If the statement about the ongoing evaluation to prevent recurrence in the abstract is correct, then a supplemental report giving the preventative measures should be submitted.

TABLE D-1. SPECIFIC LER COMMENTS FOR WATERFORD 3 (382)

Section	Comments
20. <u>LER Number:</u> 85-037-00	
Scores: Text = 9.3 Abstract = 6.5 Coded Fields = 9.0 Overall = 8.5	
Text	<ol style="list-style-type: none"> 1. <u>50.73(b)(2)(ii)(C)</u>--Date and approximate time information for occurrences is inadequate. When were the fire seals replaced? 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.
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 inadequate. Not all of the corrective actions were summarized in the abstract. 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: Root cause is not included.