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

OCT 18 1985

50-373
50-374

MEMORANDUM FOR: Charles E. Norelius, Director
Division of Reactor Projects, Region III

FROM: Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

SUBJECT: SALP ASSESSMENT INPUT FOR LASALLE, UNITS 1 AND 2

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 C) is the assessment of the LERs from LaSalle Units 1 and 2. In general, we find these LERs to be of above average 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.

In addition, we recently completed a study (AEOD/P504) of unplanned reactor trips that occurred in 1984. A summary table of reactor trip frequencies from that study is provided in Attachment A. As part of the study of reactor trip experience, we noted that the trip experience from a number of plants, including LaSalle 2, was relatively poor, considering the amount of time (e.g., critical hours) that the plants were in operation during 1984. The trip experience of LaSalle 2 was reviewed in detail to determine if any unique factors were responsible for the relatively high trip rates. In general, LaSalle 2 fit the profile of balance-of-plant hardware failure as the dominant cause of the reactor trips, with a variety of root causes and equipment involved.

Finally, we also recently completed a study (AEOD/P503) of ESF actuation that occurred during the first half of 1984. Several summary tables from that study are provided in Attachment B. As part of the study of ESF actuations, we noted the following specific problems associated with LaSalle.

1. Nine units, two of which are LaSalle 1 and 2, were of potential concern because they appear to have been experiencing repeated unresolved actuations which could ultimately challenge continued equipment operability and proper personnel response.

2. LaSalle 1 and 2 have experienced relatively high frequencies of valid (non-design basis) actuations (see Attachment 2 for definitions) of of the Reactor Water Cleanup System. These isolations were generally the consequence of the setpoints being reached on instrumentation designed to sense RWCU pressure boundary failures. Such detection is based on RWCU flow or environment temperatures in areas where the RWCU system is located. The principal reason for the actuations based on flow was the detector location and its resultant sensitivity to fluid density and reactor flow oscillations during various unit operational conditions. Isolations were also due to temperature variations associated with room ventilation system problems or conservative setpoints. To help prevent recurrences of these RWCU isolations various modifications have been implemented. Included in these were re-evaluation of monitor setpoints and modifications to procedures. Based on the limited data available, these changes appear to have resolved the RWCU isolation problems at some plants, but those at LaSalle 1 and 2 continue.

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

Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

Enclosures:
As Stated

cc: E. Schweibinz, RIII
M. Pearson, RIII
C. Miller, INEL

TABLE A.1
NUMBER OF ESF ACTUATIONS REPORTED BY
COMMERCIAL U. S. NUCLEAR POWER PLANTS
JANUARY 1, 1984 THROUGH JUNE 30, 1984

UNIT	ESF ACTUATIONS
SAN ONOFRE 2	82
SEQUOYAH 1	51
WASHINGTON NUCLEAR 2	37
MONTICELLO	26
D. C. COOK 2	25
DUANE ARNOLD	25
SEQUOYAH 2	21
LA SALLE 2	20
FORT CALHOUN	20
GRAND GULF 1	19
LA SALLE 1	17
SAN ONOFRE 3	14
BRUNSWICK 1	10
SUSQUEHANNA 1	10
DIABLO CANYON 1	9
MCGUIRE 1	7
BRUNSWICK 2	6
KEWAUNEE	6
MAINE YANKEE	6
PALISADES	6
SUMMER 1	6
ARKANSAS NUCLEAR ONE 2	5
BROWNS FERRY 1	4
PEACH BOTTOM 2	4
BROWNS FERRY 3	3
D. C. COOK 1	3
CRYSTAL RIVER 3	3
TROJAN	3
TURKEY POINT 3	3
TURKEY POINT 4	3
YANKEE ROWE	3
BEAVER VALLEY	2
BROWNS FERRY 2	2
CALLAWAY	2
FITZPATRICK	2
INDIAN POINT 3	2
LACROSSE	2
MILLSTONE 2	2
NINE MILE POINT	2
SALEM 1	2
SAN ONOFRE 1	2
SUSQUEHANNA 2	2
THREE MILE ISLAND 1	2
VERMONT YANKEE	2
ZION 1	2

UNIT	ESF ACTUATIONS
ARKANSAS NUCLEAR ONE 1	1
BIG ROCK POINT	1
CALVERT CLIFFS 2	1
COOPER	1
DAVIS BESSE 1	1
FT. ST. VRAIN	1
GINNA	1
E. I. HATCH 2	1
NORTH ANNA 1	1
OYSTER CREEK	1
POINT BEACH 2	1
PRAIRIE ISLAND 2	1
QUAD CITIES 2	1
RANCHO SECO	1
ROBINSON 2	1
SURRY 1	1
CALVERT CLIFFS 1	0
CONNECTICUT YANKEE	0
DRESDEN 2	0
DRESDEN 3	0
FARLEY 1	0
FARLEY 2	0
E. I. HATCH 1	0
HUMBOLDT BAY	0
INDIAN POINT 2	0
MCGUIRE 2	0
MILLSTONE 1	0
NORTH ANNA 2	0
OCONEE 1	0
OCONEE 2	0
OCONEE 3	0
PEACH BOTTOM 3	0
PILGRIM 1	0
POINT BEACH 1	0
PRAIRIE ISLAND 1	0
QUAD CITIES 1	0
SALEM 2	0
ST. LUCIE 1	0
ST. LUCIE 2	0
SURRY 2	0
THREE MILE ISLAND 2	0
ZION 2	0

Definitions

1. Valid (design basis) actuation: the measured parameter actually reached the intended actuation setpoint and the condition that the ESF was intended to mitigate actually existed.

2. Valid (non-design basis) actuation: the measured parameter actually reached the intended actuation setpoint but the condition that the ESF was intended to mitigate did not exist. These ESF actuations resulted primarily because the actuation setpoints, as governed by the technical specification, were set very close to the parameter background levels experienced during various unit operational modes. These ESF actuations were considered to be valid but did not represent a required response to a design basis event. Rather, they were actuations resulting from non-design basis conditions, such as a accumulation of radioactive trash in front of a radiation monitor during refueling operations. These valid but non-design basis actuations were primarily associated with either toxic gas monitors or radiation-related monitors. The ESF actuations which resulted from these setpoints being reached were principally associated with isolation of the containment or auxiliary building, or with isolation of the control room emergency ventilation.

3. False actuation: the measured parameter did not reach the intended actuation setpoint. These actuations were a result of something other than the measured parameter reaching its intended setpoints. They were caused fairly equally by spurious signals, equipment failures, or problems related to personnel. These false ESF actuations principally affected systems whose functions were associated with either isolation or ventilation. The main parameters involved with these false actuations were radiation and loss of power.

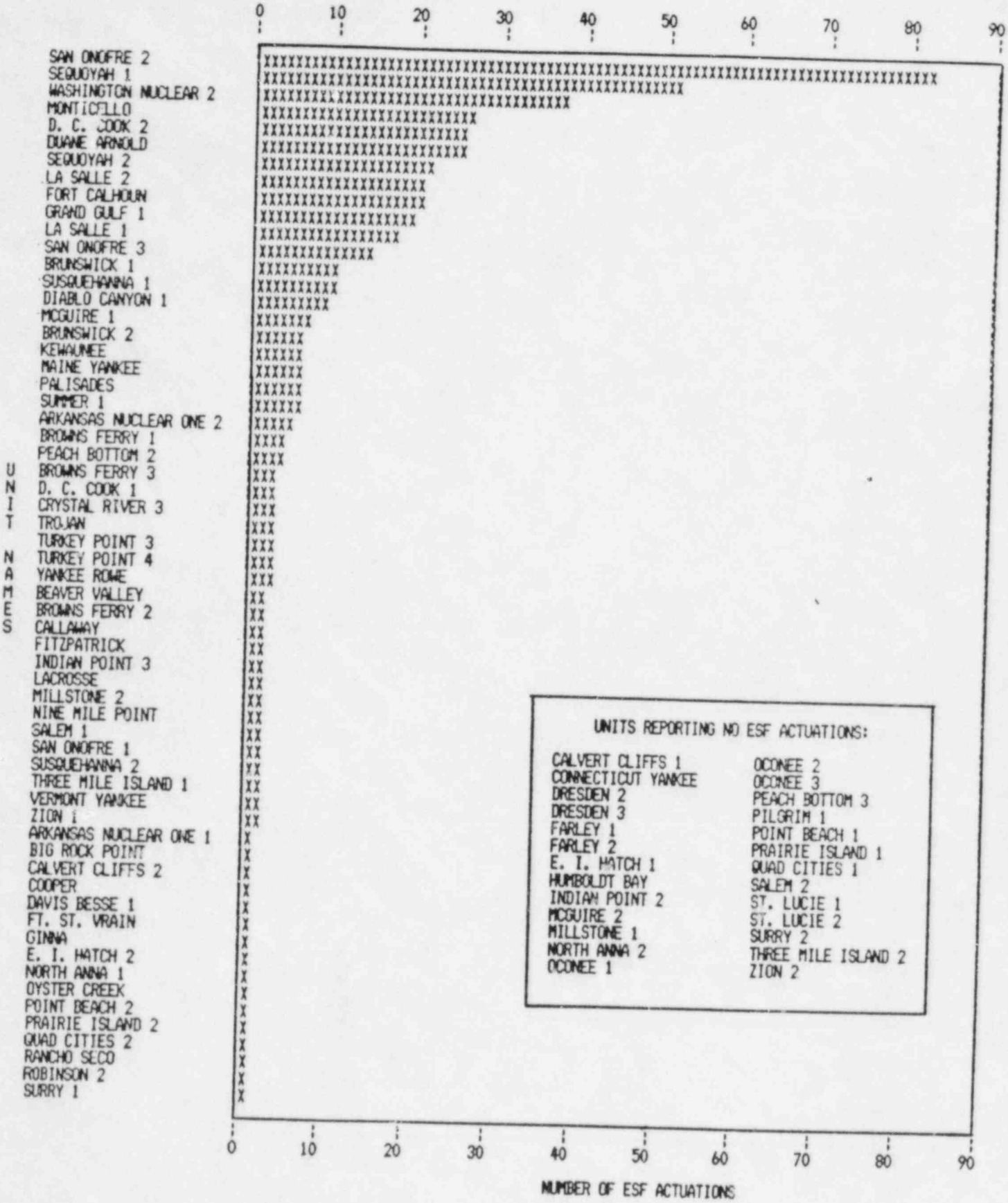
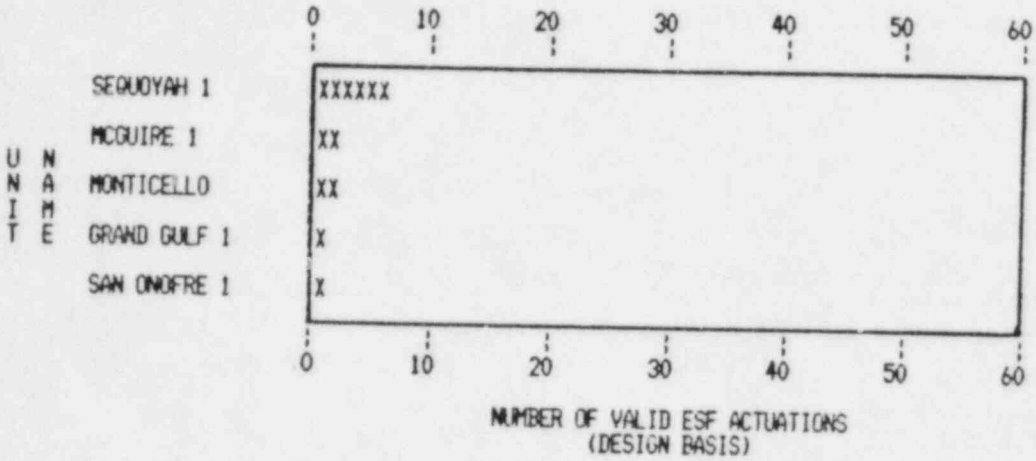


Figure 1: Unit Distribution of Engineered Safety Features Actuations (January - June 1984)



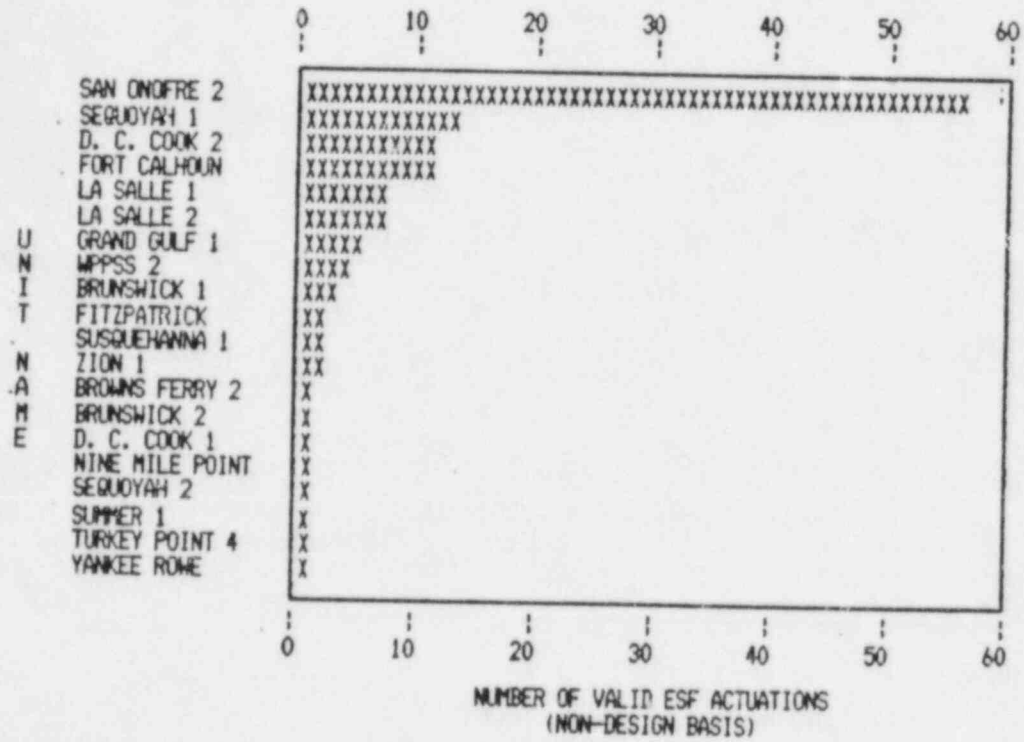


Figure 3: Unit Distribution of Valid ESF Actuations

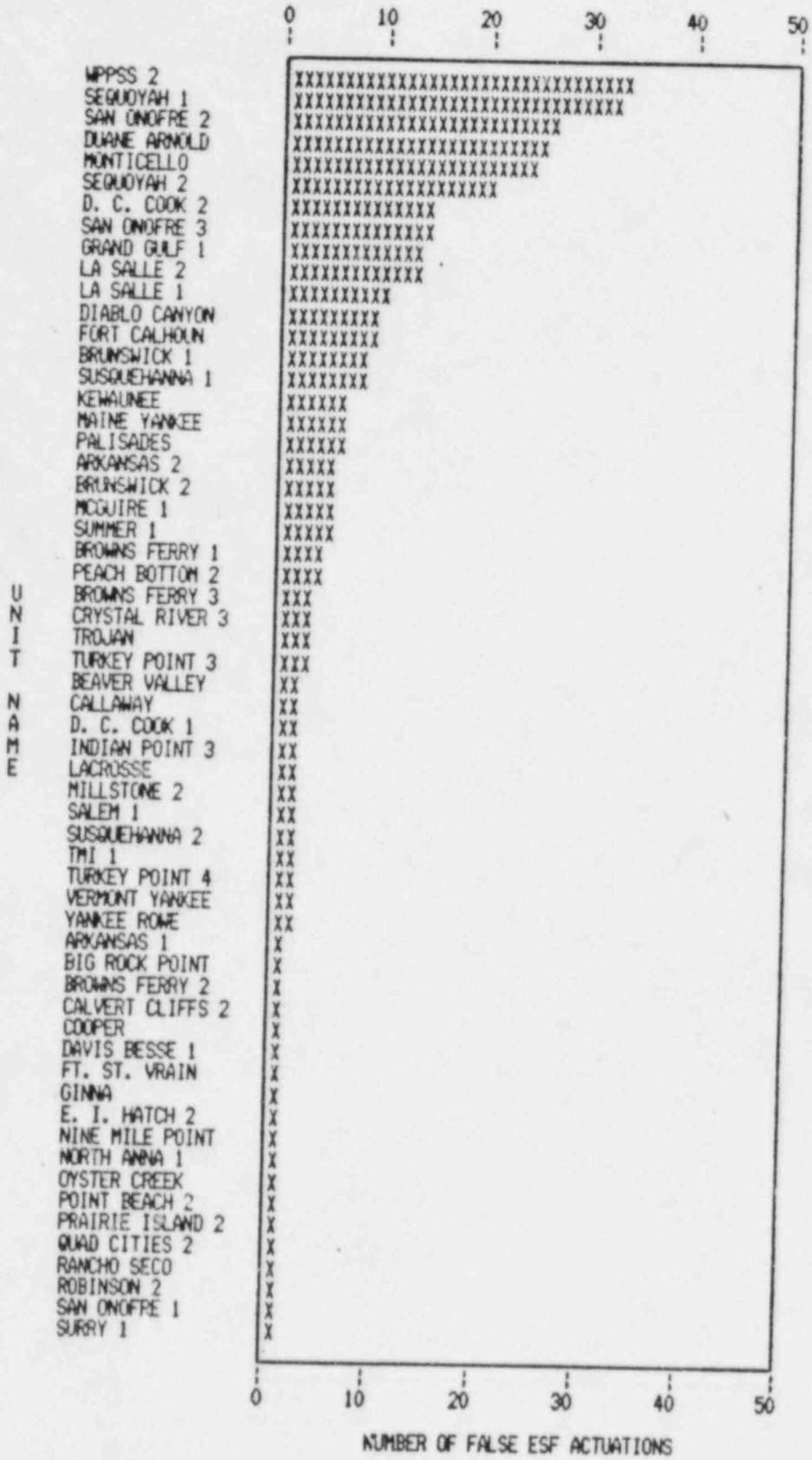


Figure 8: Unit Distribution of False ESF Actuations

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
WPPSS 2	4	20	7	17	2983.0	5.70	175.5
CALLAWAY 1	1	13	6	6	1131.5	5.30	188.6
GRAND GULF 1	2	6	3	4	1010.0	3.96	252.5
SUSQUEHANNA 2	2	8	1	7	2145.9	3.26	306.6
SALEM 1	0	10	3	7	2672.3	2.62	381.8
MCGUIRE 2	5	13	0	16	6138.3	2.61	383.6
SALEM 2	0	10	2	8	3386.0	2.36	423.3
HATCH 2	0	7	0	7	3108.7	2.25	444.1
DIABLO CANYON 1	0	7	3	2	967.1	2.07	483.6
LASALLE 2	3	[illegible]	2	9	4469.8	2.01	496.6
SURRY 2	2	13	2	12	7435.3	1.61	619.6
BROWNS FERRY 3	2	0	1	1	700.7	1.43	700.7
LASALLE 1	0	9	0	9	6280.0	1.43	697.8
SEQUOYAH 2	0	10	0	9	6334.0	1.42	703.8
NORTH ANNA 1	2	7	2	6	4759.9	1.26	793.3
ST LUCIE 2	1	9	0	9	7379.2	1.22	819.9
TURKEY POINT 4	0	11	3	6	5079.8	1.18	846.6
SURRY 1	1	7	2	6	5293.7	1.13	882.3
D C COOK 2	2	6	1	6	5294.8	1.13	882.5
SEQUOYAH 1	1	12	4	7	6206.1	1.13	886.6
SUMMER	0	12	5	6	5553.4	1.08	925.6
SUSQUEHANNA 1	1	6	0	7	6549.3	1.07	935.6
DRESDEN 3	0	9	4	4	3889.0	1.03	972.3
TROJAN	0	7	2	5	4895.4	1.02	979.1
INDIAN POINT 3	0	9	0	7	6941.6	1.01	991.7
TURKEY POINT 3	1	8	1	7	7366.6	0.95	1052.4
LA CROSSE	1	8	0	7	7437.0	0.94	1062.4
ST LUCIE 1	2	4	1	5	5555.2	0.90	1111.0
HATCH 1	3	7	3	5	5638.7	0.89	1127.7
MCGUIRE 1	0	5	0	5	6090.8	0.82	1218.2
SAN ONOFRE 3	0	9	3	4	5070.7	0.79	1267.7
ARKANSAS 2	0	15	6	6	7631.9	0.79	1272.0
YANKEE ROWE	2	3	0	5	6398.6	0.78	1279.7
RANCHO SECO 1	0	4	0	4	5338.8	0.75	1334.7
BRUNSWICK 2	0	3	1	2	2650.1	0.75	1325.1
DUANE ARNOLD	0	6	1	5	6627.1	0.75	1325.4
DAVIS-BESSE 1	1	4	0	4	5529.0	0.72	1382.3
FARLEY 2	1	5	0	6	8375.7	0.72	1396.0

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
BRUNSWICK 1	0	7	2	5	7023.8	0.71	1404.8
CALVERT CLIFFS 1	4	1	0	5	7531.0	0.66	1506.2
PALISADES	0	1	0	1	1550.5	0.64	1550.5
PEACH BOTTOM 3	1	4	0	5	7757.7	0.64	1551.5
QUAD CITIES 1	1	3	0	3	4766.9	0.63	1589.0
ZION 1	0	6	2	4	6319.8	0.63	1579.9
BROWNS FERRY 1	4	4	3	5	8067.4	0.62	1613.5
BEAVER VALLEY 1	1	6	0	4	6476.3	0.62	1619.1
OCONEE 3	0	4	0	4	6520.7	0.61	1630.2
MAINE YANKEE	1	7	3	4	6688.8	0.60	1672.2
SAN ONOFRE 2	1	4	2	3	5272.4	0.57	1757.5
FITZPATRICK	0	4	0	4	7087.2	0.56	1771.8
ARKANSAS 1	0	3	0	3	6222.4	0.48	2074.1
DRESDEN 2	0	3	0	3	6511.4	0.46	2170.5
INDIAN POINT 2	1	5	2	2	4718.4	0.42	2359.2
OCONEE 1	0	3	0	3	7452.4	0.40	2484.1
D.C.COOK 1	0	3	0	3	8085.9	0.37	2695.3
PRAIRIE ISLAND 1	0	4	1	3	8321.3	0.36	2773.8
BROWNS FERRY 2	0	3	0	2	5895.7	0.34	2947.9
COOPER	0	3	1	2	5952.6	0.34	2976.3
NORTH ANNA 2	1	4	2	2	6136.0	0.33	3068.0
ZION 2	2	6	5	2	6285.2	0.32	3142.6
HADDAM NECK	1	3	1	2	6515.6	0.31	3257.8
CALVERT CLIFFS 2	0	2	0	2	6630.2	0.30	3315.1
QUAD CITIES 2	1	4	0	2	6988.6	0.29	3494.3
VERMONT YANKEE	0	2	0	2	7115.2	0.28	3557.6
KEWAUNEE	0	5	2	2	7570.5	0.26	3785.3
CRYSTAL RIVER 3	0	2	0	2	8346.5	0.24	4173.3
MILLSTONE 2	1	2	1	2	8596.8	0.23	4298.4
FORT CALHOUN 1	0	1	0	1	5386.3	0.19	5386.3
R.E.GINNA	0	1	0	1	6848.7	0.15	6848.7
FARLEY 1	0	2	1	1	7005.8	0.14	7005.8
BIG ROCK POINT	0	3	3	0	6981.9	0.00	.
SAN ONOFRE 1	0	0	0	0	888.6	0.00	.
OYSTER CREEK	0	2	2	0	1700.0	0.00	.
NINE MILE POINT 1	0	1	1	0	6414.0	0.00	.
MILLSTONE 1	0	0	0	0	6990.2	0.00	.
H.B.ROBINSON	0	1	0	0	616.1	0.00	.

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
MONTICELLO	0	0	0	0	810.6	0	.
POINT BEACH 1	1	1	0	0	6420.1	0	.
OCONEE 2	0	0	0	0	8784.0	0	.
PEACH BOTTOM 2	0	0	0	0	2583.9	0	.
PILGRIM	0	0	0	0	170.3	0	.
POINT BEACH 2	0	1	0	0	7544.2	0	.
PRAIRIE ISLAND 2	0	0	0	0	7844.0	0	.
BYRON 1	2	0	0	0	0.0	.	.

ENCLOSURE

AEOD INPUT TO SALP REVIEW FOR LASALLE 1 AND 2

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by LaSalle 1 and LaSalle 2 during the May 1, 1984 to September 30, 1985 Systematic Assessment of Licensee Performance (SALP) assessment period, a sample of each unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178[1]. The sample consisted of 30[a] LERs for both LaSalle 1 and LaSalle 2. 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 consisted of a detailed review of each selected LER to determine how well the content of its text, abstract, and coded fields met NUREG-1022[2], and Supplements 1[3] and 2[4] to NUREG-1022.

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

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

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

No attempt is made at this time to explain differences between results for multiple units beyond providing general comments, when applicable, in the Discussion of Results. However, as data is collected, scores for the units that have been evaluated will be presented for comparison purposes.

The results of the evaluation are presented by unit and 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 specific 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 for each LER (Appendix D). When referring to these appendices, the reader is cautioned not to try to directly correlate the number of comments on an individual comment sheet with the assigned scores, as the analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

In the case where multiple units are evaluated, the results are submitted in one enclosure and the summary tables are assigned an alphabetic character so that the different units can reference the same table numbers. For example, the letters A and B assigned to a table number correspond to Unit 1 and 2, respectively for this enclosure.

Discussion of Results

Although the purpose of this evaluation was to assess the quality of the contents of the individual LERs selected for review, the analysis often make other observations that they believe should be brought to the attention of the reader. The discussion that follows addresses some general observations that were noted for LaSalle 1 and 2 during the evaluation of their LERs.

General Observations

LaSalle 1 and LaSalle 2 LERs are better than average. The LERs are generally submitted in a timely manner (i.e., usually in less than the 30 days allowed) and they are presented in a good outline format. The outline format helps the LER writer to address the most important areas concerning each event. The use of an outline is always a good idea and one that is very necessary when LERs are written by many different individuals as is the case at LaSalle.

LaSalle 1 and 2 scores could be even better if two minor changes are implemented; namely, improving the text of those LERs that are clearly well below average and writing better abstracts. Many of the LERs were very good, but a few have lowered the overall averages. The review process is very important whenever a large number of writers is involved. All writers can not be expected to have the same level of knowledge necessary to write a good LER; therefore, the reviewers must have that knowledge and correct the bad ones before they are submitted.

A good abstract is easy to write from a good text so long as major points (e.g., root causes and corrective actions) are not left out. Abstract scores will always be at least as good or better than text scores if all major points are addressed. The LaSalle writers are generally providing a good text; therefore, they should be writing better abstracts.

LER Quality Results

A discussion of the analysts' conclusions concerning LER quality are presented below. These conclusions are based solely on the results of the evaluation of the contents of the LERs selected for review and as such represent the analyst's assessment of each units performance (on a scale of 0 to 10) in submitting LERs that meet the requirements of 10 CFR 50.73(b).

The analysts made no attempt to assess differences in scores or the number of deficiencies between units of a multiple unit plant because sufficient information is not available concerning how LERs are generated or reviewed at each unit.

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.

Evaluation Results for LaSalle 1

Table 1A presents the average scores for the sample of LERs evaluated for LaSalle 1. In order to place the scores provided in Table 1A in perspective, the scores from other units that have been evaluated using this methodology are provided in Table 2. Additional units will be added as they are evaluated. Table 3A and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1A. For example, LaSalle 1's average score for the text of the LERs that were evaluated is 7.9 out of a possible 10 points. From Table 3A it can be seen that the text score actually resulted from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions before the event [10 CFR 50.73(b)(2)(ii)(A)] to text presentation. The percent scores in the text summary section of Table 3A provide an indication of how well each text requirement was addressed by

TABLE 1A. SUMMARY OF SCORES[a] FOR LASALLE 1

	Average	High	Low
Text	7.9	9.8	4.6
Abstract	8.1	10.0	2.0
Coded Fields	8.6	9.3	7.6
Overall	8.0[b]	9.6	5.4

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

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

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3A. LER REQUIREMENT PERCENTAGE SCORES FOR LASALLE 1

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	70 (28)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	81 (30)
(2)(ii)(D) - - Root cause and intermediate cause(s)	86 (30)
(2)(ii)(E) - - Mode, mechanism, and effect	93 (15)
(2)(ii)(F) - - EIIS Codes	79 (30)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	61 (14)
(2)(ii)(I) - - Method of discovery	81 (30)
(2)(ii)(J)(1) - Operator actions affecting course	71 (19)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	71 (14)
(2)(ii)(K) - - Safety system responses	95 (18)
(2)(ii)(L) - - Manufacturer and model no. information	61 (11)
(3) - - - - - Assessment of safety consequences	61 (30)
(4) - - - - - Corrective actions	83 (30)
(5) - - - - - Previous similar event information	97 (30)
(2)(i) - - - - Text presentation	81 (30)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	93 (30)
- Description of plant, system, component, and/or personnel responses	84 (27)
- Root cause information	76 (30)
- Corrective Action information	73 (30)
- Abstract presentation	79 (30)

TABLE 3A. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	97 (30)
4 - - - - - - Title	59 (30)
5, 6, and 7 - Event date, LER No., and report date	98 (30)
8 - - - - - - Other facilities involved	83 (8)
9 and 10 - - Operating mode and power level	100 (30)
11 - - - - - Reporting requirements	100 (30)
12 - - - - - Licensee contact information	76 (30)
13 - - - - - Coded component failure information	74 (30)
14 and 15 - - Supplemental report information	99 (30)

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

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

the licensee for the 30 LERs that were evaluated. (Note the large spread between the high and low scores on Table 1A. Those spreads led to the general observation concerning the review process.)

Discussion of Specific Deficiencies

A review of the percentage scores in Table 3A will quickly point out where the licensee is experiencing the most difficulty in preparing LERs. For example, the first requirement that has a score that is below average is 50.73(b)(2)(ii)(A)--Plant conditions prior to the event. Nine of the LER, for which this requirement was deemed applicable, failed to provide information concerning the conditions prior to the event, (e.g., information such as plant power level, mode of operation, or plant or system, temperature and pressure). The analysts realize that the plant power level is at times immaterial to the event being discussed, but other details are then needed to give the reader the necessary background to adequately understand the event. This may be as simple as stating what the person was doing when he discovered the event. However, for events involving safety related systems or components it is almost always a good idea to provide the operating mode and possibly the power level prior to the event. The remaining deficiencies will be discussed in their order of importance.

The LaSalle 1 LERs were generally deficient in the area of assessing safety consequences and implications. Nineteen of the 30 LERs are deficient in that they lack information concerning how the stated conclusions had been reached or they fail to state what the consequences might have been had the circumstances at the time of the occurrence been more severe. It is inadequate to state that "the consequences were minimal because all systems operated as designed". What if they hadn't operated as designed? In this case, the consequences may have been different. A better statement would be that "the consequences were minimal because Systems X and Y operated as designed and System Z was operable had

Systems X and Y not functioned". Likewise, it is inadequate to state that "the consequences were minimal because the reactor was shutdown at the time of the occurrence" if it is possible for that same occurrence to happen at power.

Immediate corrective actions were addressed adequately in most of the LERs. However, fifteen of the 30 LERs failed to address the long term aspect of corrective actions adequately (i.e., they failed to address the fix of the root cause and/or the application of the fix to other components, systems, personnel, or procedures). It is only through the implementation of long term corrective actions that the recurrence of events or the prevention of similar events will be lessened.

Personnel error discussions were not presented well in terms of the fourteen LERs that involved personnel error. In many of these LERs, personnel error was not stated but could only be inferred from other information such as corrective actions. As a minimum the words personnel error should appear somewhere in the LER (i.e., text, abstract, or coded fields) so that a key word search would identify these LERs as involving personnel error. These LERs should also provide information as to the cause of the error (cognitive or procedural) and the type of personnel involved. Related to this deficiency is requirement 50.73(b)(2)(ii)(J)(1)--Operator actions contributing to the event. It should be remembered that the LERs are supposed to be written from the perspective of the operator. If this is done, the discussions involving both personnel error and operator actions should improve.

Adequate times are not present in over a third of the 30 LERs, contributing to the 61% percentage score for requirement 50.73(b)(2)(ii)(H). Inadequate dates and times make it difficult for the reader to gain a time history of the occurrences within an event. For example, LER 84-086-00 for LaSalle 1 has an event date of September 27, 1984 and a report date of December 28, 1984, which is well

beyond the 30 day reporting period. The discovery date is never documented in this LER; therefore, it is impossible for the reader to determine whether the report date is adequate or, even more important, when the mistake was found and corrected.

Five of the 11 applicable LERs are deficient in that they did not contain adequate information concerning the manufacturer and/or model number of the failed component discussed in the LER. Failed component identification is a very important in that it can possibly lead to the discovery of generic problems. Whenever there is any doubt as to whether the design of a component contributed in anyway to the components failure or even its unavailability, that component should be properly identified within the text of the LER.

The root cause and corrective actions information for LaSalle 1 was generally not adequately summarized in the abstracts. These deficiencies were the result of trying to abbreviate the abstracts too much. The abstracts should provide the readers with a summary of all major aspects of the event, which as a minimum include: 1) cause/effect information, 2) plant, system, component, or personnel responses, 3) root cause information, and 4) corrective actions. Failure to provide this information presents a significant problem for those users whose sole source of LER data is the abstract.

The main deficiency in the area of coded fields involves Item 4--Title. Twenty-nine of the thirty LER titles did not indicate root cause. All titles should contain root cause information as well as the effect of the failure or fault described in the LER. The effect (result) can be thought of in terms of why the event had to be reported (e.g., a technical specification violation, a scram, or a release of radioactive effluent). Often, the root cause and result need to be linked by a descriptive phrase which allows the reader to understand how the two ideas are related. Nine of the 30 LERs for LaSalle 1 failed to provide such a phrase.

All thirty of the LERs failed to provide a position title for the licensee contact as is required by NUREG-1022, Page 24, Item 12.

Fourteen of the 30 LERs contain information in the component failure fields, Item 13, even though no component failure had occurred. This is obviously not a major deficiency, but can be misleading to the individual who scans this field to get a count of component failures.

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

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR LASALLE 1 AND 2 LERs

Areas	Comments
Safety assessment information	Statements involving consequences or implication were typically boiler plate statements such as, "minimal safety significance because all system functioned as designed". More effort should be placed on providing details and discussing the consequences of the event occurring under a more severe set of conditions.
Corrective actions to prevent recurrence	More details are required; immediate corrective actions were usually discussed but discussions concerning the actions necessary to reduce the probability of recurrence (i.e., fixing the root cause) and the "prevention of similar events" were generally lacking. Prevention of similar events means applying the planned corrective actions to other components, personnel, or procedures when appropriate.
Personnel error details	Personnel error should be explicitly stated and discussed in enough detail so that the root cause of the personnel error can be determined.
Date and approximate time(s) information	Sufficient dates and times should be included in the text to enable the reader to have a time history of the occurrences within the event and to permit determination of the length of time that system trains and components were out of service.
Operating conditions prior to the event	Details such as power levels, mode names and in some cases temperature and pressure are required.

TABLE 4. (continued)

Areas	Comments
Manufacturer and model number information	Detailed information should be included in the text concerning failed (not faulted) components so that possible generic problems can be identified.
Abstract	Root cause and corrective actions information should be better summarized. In some LERs this information was excluded.
Abstract presentation	Many abstracts are too brief. Space is available to provide the major aspects of each event.
Coded Fields	
a. Titles	Titles should be written such that they better describe the essence of the event.
b. Position title	Position title should be included with licensee contact name.
c. Component failure codes	Information was sometimes provided even though no component failure had occurred. Component faults should not be included in Item 13.

Evaluation Results for LaSalle 2

Tables 1B and 3B provide a summary of the LaSalle 2 evaluation. See Table 2, page 5, in order to place the LaSalle 2 scores in perspective.

A review of Table 3B indicates that LaSalle 2 has basically the same deficiencies as LaSalle 1 and, therefore, a separate discussion of LaSalle 2 deficiencies is not required. (Note: Table 4 applies to LaSalle 2 as well as LaSalle 1.)

TABLE 1B. SUMMARY OF SCORES[a] FOR LASALLE 2

	Average	High	Low
Text	8.0	9.8	4.0
Abstract	7.7	9.6	1.4
Coded Fields	8.6	9.4	7.7
Overall	8.0[b]	9.7	4.5

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

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

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3B. LER REQUIREMENT PERCENTAGE SCORES FOR LASALLE 2

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	70 (30)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	85 (30)
(2)(ii)(D) - - Root cause and intermediate cause(s)	76 (30)
(2)(ii)(E) - - Mode, mechanism, and effect	96 (13)
(2)(ii)(F) - - EIIS Codes	83 (30)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	64 (14)
(2)(ii)(I) - - Method of discovery	87 (30)
(2)(ii)(J)(1) - Operator actions affecting course	76 (19)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	58 (15)
(2)(ii)(K) - - Safety system responses	97 (16)
(2)(ii)(L) - - Manufacturer and model no. information	39 (11)
(3) - - - - - Assessment of safety consequences	78 (30)
(4) - - - - - Corrective actions	78 (30)
(5) - - - - - Previous similar event information	100 (30)
(2)(i) - - - - Text presentation	80 (30)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	85 (30)
- Description of plant, system, component, and/or personnel responses	82 (28)
- Root cause information	72 (30)
- Corrective Action information	67 (30)
- Abstract presentation	75 (30)

TABLE 3B. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	100 (30)
4 - - - - - - Title	52 (30)
5, 6, and 7 - Event date, LER No., and report date	99 (30)
8 - - - - - - Other facilities involved	80 (5)
9 and 10 - - Operating mode and power level	100 (30)
11 - - - - - Reporting requirements	100 (30)
12 - - - - - Licensee contact information	73 (30)
13 - - - - - Coded component failure information	91 (30)
14 and 15 - - Supplemental report information	100 (30)

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

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

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, Licenseee Event Report System, NUREG-1022 Supplement No. 2, U.S. Nuclear Regulatory Commission, September 1985.

APPENDIX A

LER SAMPLE SELECTION INFORMATION FOR LASALLE 1 AND 2

TABLE A-1. LER SAMPLE SELECTION FOR LASALLE 1 (373)

LER Sample Number	LER Number	Comments
1	84-027-00	
2	84-039-00	SCRAM
3	84-044-00	
4	84-048-00	
5	84-051-02	ESF
6	84-056-00	SCRAM
7	84-057-00	ESF
8	84-062-00	
9	84-069-00	
10	84-073-00	ESF
11	84-074-00	ESF
12	84-078-00	ESF
13	84-082-00	ESF
14	84-086-00	
15	84-090-00	
16	84-091-01	ESF
17	84-093-01	
18	85-001-00	
19	85-006-00	
20	85-018-00	
21	85-022-00	ESF
22	85-025-00	ESF
23	85-027-00	

TABLE A-1. (continued)

LER Sample Number	LER Number	Comments
24	85-032-00	
25	85-034-00	ESF
26	85-035-00	SCRAM
27	85-036-00	ESF
28	85-040-00	ESF
29	85-041-00	ESF
30	85-044-00	ESF

TABLE A-2. LER SAMPLE SELECTION FOR LASALLE 2 (374)

LER Sample Number	LER Number	Comments
1	84-024-00	
2	84-028-00	ESF
3	84-033-00	
4	84-040-00	
5	84-043-00	
6	84-048-00	SCRAM
7	84-050-00	SCRAM
8	84-052-00	SCRAM
9	84-053-00	
10	84-055-00	
11	84-057-01	ESF
12	84-059-00	
13	84-060-00	
14	84-063-00	
15	84-068-00	
16	84-069-01	ESF
17	84-071-00	SCRAM
18	84-078-00	
19	84-082-00	
20	84-084-01	
21	84-085-00	SCRAM
22	84-091-00	ESF
23	85-005-00	ESF

TABLE A-2. (continued)

LER Sample Number	LER Number	Comments
24	85-008-00	ESF
25	85-003-00	
26	85-017-00	ESF
27	85-020-00	ESF
28	85-021-00	
29	85-022-00	SCRAM
30	85-023-00	

APPENDIX B

EVALUATION SCORES OF INDIVIDUAL LERs FOR LASALLE 1 AND 2

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs LASALLE 1

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	8.6	7.8	8.9	9.4	9.0	8.2	9.4	9.3	7.9	5.1	9.8	7.8	8.4	7.0	7.9	7.3
Abstract	8.0	9.0	8.8	10.0	8.4	9.0	10.0	9.6	9.4	5.0	9.5	8.3	6.0	2.0	8.5	8.6
Coded Fields	8.3	8.8	8.8	9.3	8.5	8.7	8.2	9.1	8.7	8.8	8.2	9.3	8.3	8.2	9.3	9.3
Overall	8.4	8.3	8.9	9.6	8.8	8.5	9.5	9.4	8.4	5.4	9.6	8.1	7.7	5.6	8.2	7.9

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	8.8	7.1	7.8	4.6	8.9	6.5	7.6	7.5	7.2	5.2	7.8	8.5	9.1	8.3	7.9
Abstract	7.0	7.5	7.0	6.6	9.5	8.3	8.1	8.3	9.0	5.7	9.0	8.7	9.4	9.0	8.1
Coded Fields	7.8	8.3	7.7	9.1	8.6	9.3	8.5	8.0	7.6	8.1	8.7	8.1	8.7	9.0	8.6
Overall	8.2	7.3	7.6	5.7	9.1	7.3	7.8	7.8	7.8	5.6	8.3	8.5	9.2	8.6	8.0

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

TABLE B-2. EVALUATION SUMMARY OF INDIVIDUAL LERs FOR LASALLE 2

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	7.7	9.2	8.8	6.9	9.3	9.1	9.0	7.1	8.6	7.8	8.7	6.1	7.8	6.4	9.8	4.0
Abstract	7.5	7.0	9.1	5.5	9.0	9.1	9.0	5.0	7.0	7.6	8.6	8.5	7.5	5.7	9.6	6.0
Coded Fields	8.3	9.3	8.0	8.7	8.2	9.3	9.2	8.3	8.2	9.3	8.9	8.7	8.2	9.3	9.1	8.8
Overall	7.7	8.6	8.8	6.7	9.1	9.1	9.0	6.6	8.1	7.9	8.7	7.1	7.8	6.5	9.7	5.1

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	9.5	8.2	7.6	8.9	6.1	5.5	8.1	8.8	6.3	9.4	8.3	10.0	9.2	8.1	8.0
Abstract	9.6	8.2	6.9	9.5	5.4	1.4	9.2	9.2	6.6	9.3	9.2	9.0	7.0	6.9	7.7
Coded Fields	8.2	9.3	8.6	9.4	8.0	8.0	7.8	8.3	7.7	8.0	8.6	8.8	8.0	8.0	8.6
Overall	9.4	8.3	7.5	9.1	6.1	4.5	8.4	8.9	6.5	9.2	8.6	9.6	8.4	7.7	8.0

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

APPENDIX C

DEFICIENCY AND OBSERVATION COUNTS FOR LASALLE 1 AND 2

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		9 (28)
50.73(b)(2)(ii)(B)--Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (3)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		11 (30)
a. Date information was insufficient.	6	
b. Time information was insufficient.	9	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		8 (30)
a. Cause of component failure was not included or was inadequate	4	
b. Cause of system failure was not included or was inadequate	1	
c. Cause of personnel error was not included or was inadequate.	3	
50.73(b)(2)(ii)(F)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		2 (15)
a. Failure mode was not included or was inadequate	1	
b. Mechanism (immediate cause) was not included or was inadequate	1	
c. Effect (consequence) was not included or was inadequate.	1	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		8 (30)
50.73(b)(2)(ii)(G)--For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (3)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		4 (14)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		6 (30)
a. Method of discovery for each component failure was not included or was inadequate	3	
b. Method of discovery for each system failure was not included or was inadequate	1	
c. Method of discovery for each personnel error was not included or was inadequate	2	
d. Method of discovery for each procedural error was not included or was inadequate.	0	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		7 (19)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		10 (14)
a. OBSERVATION: A personnel error was implied by the text; but was not explicitly stated.	5	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	5	
c. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	1	
d. 50.73(b)(2)(ii)(J)(2)(iii)--Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	4	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		1 (18)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		5 (11)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		19 (30)
a. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event was not discussed. If no other systems or components were available, the text should state that none existed.	4	
b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state.	8	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		15 (30)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	8	
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.	6	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		0 (30)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		8 (30)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	4	
c. The text contains other specific deficiencies relating to the readability.	4	

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

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

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		7 (30)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		8 (27)
a. Summary of plant responses was not included or was inadequate.	4	
b. Summary of system responses was not included or was inadequate.	1	
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.		13 (30)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		12 (30)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		9 (30)
a. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract.	2	
b. The abstract was greater than 1400 characters	0	
c. The abstract contains undefined acronyms and/or plant specific designators.	3	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	6	

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

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

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		2 (30)
a. Unit number was not included or incorrect.	2	
b. Name was not included or was incorrect.	0	
c. Additional unit numbers were included but not required.	0	
Docket Number was not included or was incorrect.		0 (30)
Page Number was not included or was incorrect.		0 (30)
Title was inadequate		29 (30)
a. Root cause was not given in title	29	
b. Result (effect) was not given in title	2	
c. Link was not given in title	9	
Event Date		0 (30)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		1 (30)
Report Date		1 (30)
a. Date not included	0	
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.		2 (8)
Operating Mode was not included or was inconsistent with text or abstract.		0 (30)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		0 (30)
Reporting Requirements		1 (30)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	0	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	1	
Licensee Contact		30 (30)
a. Field left blank	0	
b. Position title was not included	30	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		15 (30)
a. One or more component failure sub-fields were left blank.	1	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	14	
d. Component failure occurred but entire field left blank.	0	

TABLE C-3. (continued)

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

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

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

TABLE C-4. TEXT DEFICIENCIES AND OBSERVATIONS FOR LASALLE 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		8 (30)
50.73(b)(2)(ii)(B)--Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (8)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		10 (30)
a. Date information was insufficient.	1	
b. Time information was insufficient.	10	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		13 (30)
a. Cause of component failure was not included or was inadequate	5	
b. Cause of system failure was not included or was inadequate	3	
c. Cause of personnel error was not included or was inadequate.	5	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		3 (13)
a. Failure mode was not included or was inadequate	1	
b. Mechanism (immediate cause) was not included or was inadequate	2	
c. Effect (consequence) was not included or was inadequate.	1	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		5 (30)
50.73(b)(2)(ii)(G)--For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (1)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		4 (14)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		1 (30)
a. Method of discovery for each component failure was not included or was inadequate	1	
b. Method of discovery for each system failure was not included or was inadequate	1	
c. Method of discovery for each personnel error was not included or was inadequate	2	
d. Method of discovery for each procedural error was not included or was inadequate.	0	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		5 (15)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		14 (15)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	6	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	1	
c. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	1	
d. 50.73(b)(2)(ii)(J)(2)(iii)--Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	3	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		1 (11)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		8 (11)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		18 (30)
a. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event was not discussed. If no other systems or components were available, the text should state that none existed.	4	
b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state.	5	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		17 (30)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	10	
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.	10	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		0 (30)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		8 (30)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	0	
b. Text contained undefined acronyms and/or plant specific designators.	3	
c. The text contains other specific deficiencies relating to the readability.	6	

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

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

TABLE C-5. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR LASALLE 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		13 (30)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		10 (28)
a. Summary of plant responses was not included or was inadequate.	0	
b. Summary of system responses was not included or was inadequate.	3	
c. Summary of personnel responses was not included or was inadequate.	8	
A summary of the root cause of the event was not included or was inadequate.		17 (30)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		23 (30)

TABLE C-5. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		15 (30)
a. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.	1	
b. The abstract was greater than 1400 characters	0	
c. The abstract contains undefined acronyms and/or plant specific designators.	5	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	11	

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

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

TABLE C-6. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR LASALLE 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		0 (30)
a. Unit number was not included or incorrect.		
b. Name was not included or was incorrect.		
c. Additional unit numbers were included but not required.		
Docket Number was not included or was incorrect.		0 (30)
Page Number was not included or was incorrect.		0 (30)
Title was inadequate		30 (30)
a. Root cause was not given in title	26	
b. Result (effect) was not given in title	6	
c. Link was not given in title	16	
Event Date		0 (30)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		0 (30)
Report Date		1 (30)
a. Date not included	0	
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.		1 (5)
Operating Mode was not included or was inconsistent with text or abstract.		0 (30)

TABLE C-6. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		0 (30)
Reporting Requirements		0 (30)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.		
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.		
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.		
Licensee Contact		30 (30)
a. Field left blank	0	
b. Position title was not included	30	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		0 (30)
a. One or more component failure sub-fields were left blank.	1	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	8	
d. Component failure occurred but entire field left blank.	0	

TABLE C-6. (continued)

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

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

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

APPENDIX D

LER COMMENT SHEETS FOR LASALLE 1 AND 2

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
1. LER Number: 84-027-00	
Scores: Text = 8.6 Abstract = 8.0 Coded Fields = 8.3 Overall = 8.4	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	3. 50.73(b)(4)--It seems that if the power level change is unexpected and begins after the Rad/Chem Supervisor has reported to the Shift Engineer (say 1 or 2 hours after the start of the shift), the corrective actions given for this event will not assure that the Rad/Chem Supervisor will be notified in time.
Abstract	1. 50.73(b)(1)--A summary of the long term corrective actions was not included.
	2. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text: therefore, the text should discuss all information summarized in the abstract.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
2. LER Number: 84-039-00	
Scores: Text = 7.8 Abstract = 9.0 Coded Fields = 8.8 Overall = 8.3	
Text	1. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate. Times of corrective actions were not included.
	2. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	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 were available, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of personnel responses was not included (responses as a result of the scram).
	2. Abstract did not adequately summarize the text.
	3. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included. Root cause was unknown and title should state so. The system (reactor water level control) could be used in the title to indicate that this is the suspected system with the fault.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
3. LER Number: 84-044-00	
Scores: Text = 8.9 Abstract = 8.8 Coded Fields = 8.8 Overall = 8.9	
Text	1. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. THe size and/or model number of the valve should be provided.
	2. More details would be appropriate in Section III explaining why the high pressure that would be seen by the lower pressure system would not cause a significant effect of the plant.
	3. In the second paragraph of Section IV, it is not clear as to why only check valve IE22-F006 was inspected and cleaned as opposed to lapping both valves at that time unless this was really cause determination rather than corrective actions.
Abstract	1. 50.73(b)(1)--Summary of root cause of valve leakage was inadequate.
Coded Fields	1. Item (4)--Title: Root cause and link (testing) was not included.
	2. Position title is not clear. What is E.A.?

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
4. LER Number: 84-048-00	
Scores: Text = 9.4 Abstract = 10.0 Coded Fields = 9.3 Overall = 9.6	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
Abstract	1. Very good.
Coded Fields	1. Item (12)--Position title was not included.
	2. Item (4)--Title: Root cause was not included.
Observation	1. Three previous occurrences were reported. What corrective actions were implemented following those events? Are the corrective actions being implemented?
	2. LER prepared very well.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
5. LER Number: 84-051-02	
Scores: Text = 9.0 Abstract = 8.4 Coded Fields = 8.5 Overall = 8.8	
Text	1. 50.73(b)(2)(ii)(C)--Additional dates are needed.
	2. 50.73(b)(2)(ii)(D)--The text should be more specific as to how a positive gounded bus could affect the solenoid.
	3. 50.73(b)(3)--The text should be specific about other systems, if any, that would allow manual control from the control room. If none exist, the consequences of no manual control should be discussed.
	3. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of plant responses was not included. The abstract should indicate the steam flow response to the valve openings.
	2. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate. The abstract should indicate that the temporary fix was to remove the fuses for the solenoid.
Coded Fields	1. Item (4)--Title: Root cause and link were not included. The title should not include acronyms.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
6. LER Number: 84-056-00	
Scores: Text = 8.2 Abstract = 9.0 Coded Fields = 8.7 Overall = 8.5	
Text	1. 50.73(b)(2)(ii)(C)--Approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	3. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included.
	4. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been discussed.
Abstract	1. 50.73(b)(1)--Summary of personnel error was not included.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
7. LER Number: 84-057-00	
Scores: Text = 9.4 Abstract = 10 Coded Fields = 8.2 Overall = 9.5	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences was not included.
	2. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause and link (test) was not included. An appropriate title might be "Procedural Deficiency Causes ESF Actuation-Group I Isolation".
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred. Faulted components need not be included in this field.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section		Comments
8. LER Number: 84-062-00		
Scores: Text = 9.3 Abstract = 9.6 Coded Fields = 9.1 Overall = 9.4		
Text	1.	50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	2.	Acronym(s) and/or plant specific designator(s) are undefined.
Observation	1.	A similar occurrence was noted. The event is believed to be unusual and, therefore, review of the previous corrective actions is in order.
Abstract	1.	50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
Coded Fields	1.	Item (4)--Title: Root cause was not included.
	2.	Item (12)--Title was not included.
Observation	1.	The supplemental report was to have been submitted by 1/1/85. This supplement is not shown to have been received by 9/5/85.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
9. LER Number: 84-069-00	
Scores: Text = 7.9 Abstract = 9.4 Coded Fields = 8.7 Overall = 8.4	
Text	1. 50.73(b)(2)(ii)(C)--Additional dates and/or times needed, especially for corrective actions.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	4. 50.73(b)(2)(ii)(I)--The text should be more specific as to how the leak was found.
	5. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	6. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.
	7. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	8. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. Does training need to be upgraded such as a procedural change to insure proper installation?
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
10. LER Number: 84-073-00	
Scores: Text = 5.1 Abstract = 5.0 Coded Fields = 8.8 Overall = 5.4	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included.
	3. 50.73(b)(2)(ii)(E)--The failure mode/immediate cause discussion of each failed component was inadequate. A more detailed description is needed.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure was not included.
	5. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included. What were the operator(s) actions in response to the Group 1 containment isolation.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate.
	8. A logical transition did not exist between all ideas.
	9. Some ideas were not presented clearly (hard to follow).
	10. A more detailed description of the cause and corrective actions was needed.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of personnel responses was not included.
	3. 50.73(b)(1)--Summary of root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
10. LER Number: 84-073-00 (continued)	
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
11. LER Number: 84-074-00	
Scores: Text = 9.8 Abstract = 9.5 Coded Fields = 8.2 Overall = 9.6	
Text	1. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. Plant conditions should have been provided.
Coded Fields	1. Item (4)--Title: Root cause and link (testing) was not included. 2. Item (12)--Position title was not included. 3. Item (13)--Component failure field contains data when no component failure occurred. Faulted components need not be included in this field.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
12. LER Number: 84-078-00	
Scores: Text = 7.8 Abstract = 8.3 Coded Fields = 9.3 Overall = 8.1	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate. OBSERVATION: Efforts were directed toward establishing the immediate cause. The root cause was not actively pursued.
	3. 50.73(h)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	4. 50.73(h)(4)--Discussion of corrective actions taken or planned was inadequate.
	5. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(h)(1)--Summary of root cause was inadequate.
	3.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
13. LER Number: 84-082-00	
Scores: Text = 8.4 Abstract = 6.0 Coded Fields = 8.3 Overall = 7.7	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2. 50.73(b)(3)--The discussion of the safety implications of the event should be more specific.
	OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state.
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
Abstract	1. The additional space available in the abstract field should have been used to further describe the various responses and corrective actions.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
14. LER Number: 84-086-00	
Scores: Text = 7.0 Abstract = 2.0 Coded Fields = 8.2 Overall = 5.6	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was inadequate. Time periods for other discharge batches (44-84) were not included. When was the misplaced page of the discharge package discovered?
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was inadequate. After several weeks of misplaced documentation, how was the personnel error rediscovered?
	5. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate.
	6. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate. How was the discharge documentation misplaced?
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of plant/system/personnel responses was not included.
	3. 50.73(b)(1)--Summary of root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
14. LER Number: 84-086-00 (continued)	
	4. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included.
	5. Abstract does not adequately summarize the text.
	6. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (7)--OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).
	3. Item (8)--Information in field is inconsistent with text and/or abstract.
	4. Item (12)--Position title was not included.
	5. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
15. LER Number: 84-090-00	
Scores: Text = 7.9 Abstract = 8.5 Coded Fields = 9.3 Overall = 8.2	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the ESF actuation (valve shutdown) was not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. Why were the consequences minimal? What were the minimal consequences?
	4. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. What is planned to prevent future switchovers on high suppression pool level? Level reduction prior to the switchover setpoint could possibly prevent recurrence.
	5. Referencing both sea level numbers (700' 1") and level numbers (26' 9 1/4") is somewhat confusing.
Abstract	1. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
	2. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Title contains an acronym.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
16. LER Number: 84-091-01	
Scores: Text = 7.3 Abstract = 8.6 Coded Fields = 9.3 Overall = 7.9	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(B)--Discussion of the status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included.
	3. 50.73(b)(2)(ii)(G)--The list of systems or secondary functions that were also affected by the failed multi-function component was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was not included.
	6. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate.
	OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.
Observation	1. The root problem causing the tape failures should be determined and corrected.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
17. LER Number: 84-093-01	
Scores: Text = 8.8 Abstract = 7.0 Coded Fields = 7.8 Overall = 8.2	
Text	1. 50.73(b)(2)(ii)(C)--Additional times are needed.
	2. 50.73(b)(3)--The safety assessment should consider possible consequences of the event, as well as, indicating that no problem occurred.
	3. 50.73(b)(4)--The corrective actions should address ways of preventing future similar events. For example, making the training of Stationmen in debris disposal a permanent part of training, so that even employees will also be aware of the problem.
	4. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. The abstract should include the probable root cause and corrective actions.
	2. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (7)--OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).
	3. Item (12)--Position title was not included.
	4. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
18. LER Number: 85-001-00	
Scores: Text = 7.1 Abstract = 7.5 Coded Fields = 8.3 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Model number of switches were not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included. The reason for instrument draft being unknown was not included.
	2. Abstract does not adequately summarize the text.
	3. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (6)--LER number on page 2 was incorrect.
	3. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
19. LER Number: 85-006-00	
Scores: Text = 7.8 Abstract = 7.0 Coded Fields = 7.7 Overall = 7.6	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for the technical specification violation was not included.
	3. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	4. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was not included.
	5. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	6. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Does procedure LIS-NB-104 reference the two hour technical specification limit? Where will the modification be implemented?
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. No mention is made of the requirement to place the channel in the tripped condition.
	2. 50.73(b)(1)--Summary of root cause was not included. (Personnel error-resulted in failure to place the channel in the tripped condition at the 2 hour limit.)
Coded Fields	1. Title is very poor. A suitable title might be: "Personnel Error during Level Switch Calibration(LIS-NB-104). Results in Technical Specification Violation".
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
19. LER Number: 85-006-00 (continued)	
	3. Item (13)--Component failure field contains data when no component failure occurred. It is helpful to provide information about the component as you did in the text; because its drift problem contributed to the event. By providing component information in Item 13 however, you are saying you experienced a component failure, which is not the case with this event.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
20. LER Number: 85-018-00	
Scores: Text = 4.6 Abstract = 6.6 Coded Fields = 9.1 Overall = 5.7	
Text	1. 50.73(b)(2)(ii)(B)--Discussion of the status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	3. 50.73(b)(2)(ii)(E)--The effect discussion of each failed component was inadequate.
	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 was not included.
	5. 50.73(b)(2)(ii)(G)--The list of systems or secondary functions that were also affected by the failed multi-function component was not included.
	6. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	7. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	8. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	9. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	10. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
20. LER Number: 85-018-00 (continued)	
	11. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text.
	4. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (1)--Number was not included.
	2. Item (4)--Title: Root cause was not included.
	3. Item (12)--Title was not included.
Observation	1. The LER addresses the missed sample; however does not address the fact that both hydrogen analyzers were inoperable. What is the significance or ramifications of both analyzers being inoperable?

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
21. LER Number: 85-022-00	
Scores: Text = 8.9 Abstract = 9.5 Coded Fields = 8.6 Overall = 9.1	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. The question that seems unanswered is whether or not a procedural change is needed?
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
22. LER Number: 85-025-00	
Scores: Text = 6.5 Abstract = 8.3 Coded Fields = 9.3 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
Abstract	1. 50.73(b)(1)--Summary of personnel responses was inadequate.
Coded Fields	1. Item (4)--The root cause of the vacuum breaker cycling should be included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments

23. LER Number: 85-027-00

Scores: Text = 7.6 Abstract = 8.1 Coded Fields = 8.5 Overall = 7.8

Text

1. 50.73(b)(2)(ii)(J)(?)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.

2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.

   OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state. What could have been the consequences?

3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. Based on the number of previous occurrences, the corrective action listed does not appear to be comprehensive enough.

Abstract

1. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract.

Coded Fields

1. Item (1)--Unit number was not included.

2. Item (4)--Title: Root cause and result (technical specification violation) were not included.

3. Item (12)--Position title was not included.

4. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
24. LER Number: 85-032-00	
Scores: Text = 7.5 Abstract = 8.3 Coded Fields = 8.0 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate.
	3. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
	4. Abstract does not adequately summarize the text.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
25. LER Number: 85-034-00	
Scores: Text = 7.2 Abstract = 9.0 Coded Fields = 7.6 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Additional dates needed (e.g., when were pressure snubbers installed?)
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier of each component referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	5. 50.73(b)(2)(ii)(J)(2)--The LER is not clear whether a personnel error occurred or not. Were the switches intended to be installed without snubbers?
	6. 50.73(b)(3)--The safety assessment should be specific as to why the consequences were minimal and should discuss probable consequences especially under more severe conditions.
	7. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
26. LER Number: 85-035-00	
Scores: Text = 5.2 Abstract = 5.7 Coded Fields = 8.1 Overall = 5.6	
Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate time information for occurrences was inadequate. When were corrective actions performed?
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate. Root cause for Safety Relief Valve lifting was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included (i.e., Safety Relief Valve).
	4. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate (i.e., operator actions in response to the scram main turbine trip and Safety Relief Valve lift).
	5. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. Which safety systems operated as designed?
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	8. A logical transition does not exist between all ideas.
	9. Some ideas were not presented clearly (hard to follow).
Abstract	1. 50.73(b)(1)--Summary of personnel responses was not included.
	2. 50.73(b)(1)--Summary of plant response was inadequate. Safety Valve Relief lift was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
26. LER Number: 85-035-00 (continued)	
	3. 50.73(b)(1)--Summary of root cause was inadequate. Not all root causes were included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Not all corrective actions were included.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Safety Relief Valve information should be included in this field.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
27. LER Number: 85-036-00	
Scores: Text = 7.8 Abstract = 9.0 Coded Fields = 8.7 Overall = 8.3	
Text	1. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component fault was not included.
	2. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was 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 were available, the text should so state. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	4. It appears from the text that the 1A RHR pump was restarted at 1404 with the isolation signal disabled. Justification for this should have been discussed.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Were the construction prints corrected to reflect the need for pressure snubbers?
	6. Some ideas were not presented clearly (hard to follow). (Paragraph 1, second sentence makes the reader believe that the operator restarted 1A RHR at 1343 and then isolated the valve himself rather than the valve isolating automatically.)
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
27. LER Number: 85-036-00 (continued)	
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred. Faulted component information need not be coded in this field.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
28. LER Number: 85-040-00	
Scores: Text = 8.5 Abstract = 8.7 Coded Fields = 8.1 Overall = 8.5	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each system failure was inadequate.
	2. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of root cause was inadequate.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.
Note	This LER mentions 2 events-each are individually reportable. Therefore, the second event occurring on May 5th 1985 may not be properly reported.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
29. LER Number: 85-041-00	
Scores: Text = 9.1 Abstract = 9.4 Coded Fields = 8.7 Overall = 9.2	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
Abstract	1. No comments.
Coded Fields	1. Item (8)--This field appears to be Not Applicable since the text does not clarify how Unit 2 was involved.
	2. Item (12)--Position title was not included.
	3. Item (13)--This field should have been left blank since no failed components were found during the investigation.

TABLE D-1. SPECIFIC LER COMMENTS FOR LASALLE 1 (373)

Section	Comments
30. LER Number: 85-044-00	
Scores: Text = 8.3	Abstract = 9.0 Coded Fields = 9.0 Overall = 8.6
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate.
Abstract	1. 50.73(b)(1)--Summary of personnel responses was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
1. LER Number: 84-024-00	
Scores: Text = 7.7 Abstract = 7.5 Coded Fields = 8.3 Overall = 7.7	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences was inadequate. When was the charger voltage adjusted to normal?
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each the high charger voltage was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the system failure was not included.
	5. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text. (High charger voltage adjustment.)
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Model number for the inverter or high voltage trip unit would be appropriate.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	8. Why did the occurrence (power lost) happen twice?

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
1. LER Number: 84-024-00 (continued)	
	9. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. What was done to prevent future charger high voltage adjustments?
	10. It is unclear from the discussion whether or not the Topaz inverters are included in a procedure which periodically is used to check the high voltage trip set points.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link (charging) were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
2. LER Number: 84-028-00	
Scores: Text = 9.2 Abstract = 7.0 Coded Fields = 9.3 Overall = 8.6	
Text	1. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Observation	1. Abstract tends to be misleading by ". .alarms indicated on a spurious high ambient temperature . .".
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.
Observation	1. A supplement expected to have been submitted by 12/10/84 has not been received by this date (9/6/85).

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
3. LER Number: 84-033-00	
Scores: Text = 8.8	Abstract = 9.1 Coded Fields = 8.0 Overall = 8.8
Text	1. 50.73(b)(2)(ii)(C)--Additional times are needed.
	2. 50.73(b)(2)(ii)(D)--The root cause for the out of adjustment limit switch was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	4. 50.73(b)(4)--The corrective actions for the solenoid valve coil assembly were very good. The corrective actions for the out of adjustment limit switch should discuss whether or not increased surveillance (procedural change) would be desirable.
Abstract	1. The abstract does not summarize the problem or corrective actions for the outboard isolation valve even though enough space was available, to include this information.
Coded Fields	1. Item (4)--Title: Root causes and link were not included.
	2. Item (7)--OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).
	3. Item (8)--The field should indicate Not Applicable (NA).
	4. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
4. LER Number: 84-040-00	
Scores: Text = 6.9 Abstract = 5.5 Coded Fields = 8.7 Overall = 6.7	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate. Was the previous investigation erroneous because of erroneous drawings, or was it the direct fault of the personnel performing the investigation?
	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 was not included (i.e., crane, hoist etc).
	5. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	6. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	7. A logical transition does not exist between all ideas.
	8. Some ideas were not presented clearly (hard to follow).
Abstract	1. 50.73(b)(1)--Summary of personnel responses was not included.
	2. 50.73(b)(1)--Summary of root cause was inadequate.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Not all corrective actions were included.
	4. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
4. LER Number:	84-040-00 (continued)
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
5. LER Number: 84-043-00	
Scores: Text = 9.3 Abstract = 9.0 Coded Fields = 8.2 Overall = 9.1	
Text	1. Who (title) was responsible for the oversight?
	2. It is not clear from the text whether radiological surveillances were performed during the purge operation or only before and after.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
6. LER Number: 84-048-00	
Scores: Text = 9.1 Abstract = 9.1 Coded Fields = 9.3 Overall = 9.1	
Text	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (12)--Title was not included.
	2. Item (4)--Title: Root cause was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
7. LER Number: 84-050-00	
Scores: Text = 9.0 Abstract = 9.0 Coded Fields = 9.2 Overall = 9.0	
Text	1. 50.73(b)(2)(ii)(C)--Include additional dates and times (e.g., data and/or time for the evaluation of the Load Control Circuit by the engineer and mechanic).
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	3. It was hard to follow the text description of the control system.
Abstract	1. Enough space was available, so that the corrective actions could be more detailed.
Coded Fields	1. Item (4)--Title: Link was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred. The pressure control performed as required.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
8. LER Number: 84-052-00	
Scores: Text = 7.1 Abstract = 5.0 Coded Fields = 8.3 Overall = 6.6	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included. Why did the alternator fail due to a turn-to-turn point.
	2. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate. Operator action taken in response to the turbine trip and reactor scram were not discussed.
	3. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. A more detailed discussion would be appropriate.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of personnel responses was not included.
	3. 50.73(b)(1)--Summary of system responses was inadequate.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
9. LER Number: 84-053-00	
Scores: Text = 8.6 Abstract = 7.0 Coded Fields = 8.2 Overall = 8.1	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences was inadequate. Rather than stating "one sample was missed during the event". Tell the reader the sample (2050) that was missed.
	2. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	3. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. What might have been the consequences had the Off-Gas system not operated as designed during the eight hours before the sample was taken?
	5. Should the panel check, which led to the discovery of the event, be included as part of the Off-Gas system startup procedure?
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. The Technical Specification (T.S.) violation was not mentioned.
	2. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate. Actions to prevent recurrence were not mentioned.
	3. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and result (T.S. violation) were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
10. LER Number: 84-055-00	
Scores: Text = 7.8 Abstract = 7.6 Coded Fields = 9.3 Overall = 7.9	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included.
	3. 50.73(b)(2)(ii)(G)--The list of systems or secondary functions that were also affected by the failed multi-function component was not included.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate.
	OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Observations	1. The LER mentions a modification to a RHR system valve. Modifications to safety related components should be approved by the NRC, valve manufacturer, et al.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] were inadequate.
	2. 50.73(b)(1)--Summary of root cause was inadequate.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
10. LER Number: 84-055-00 (continued)	
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
11. LER Number: 84-057-00	
Scores: Text = 8.7 Abstract = 8.6 Coded Fields = 8.9 Overall = 8.7	
Text	1. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the system failure was not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was 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 were available, the text should so state.
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
Abstract	1. The space available, could have been used add more about the root cause (i.e., the instrument is calibrated for operating conditions and reads conservatively during shutdown).
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
12. LER Number: 84-059-00	
Scores: Text = 6.1 Abstract = 8.5 Coded Fields = 8.7 Overall = 7.1	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	5. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	6. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	7. A logical transition does not exist between all ideas.
	8. Some ideas were not presented clearly (hard to follow).
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
13. LER Number: 84-060-00	
Scores: Text = 7.8 Abstract = 7.5 Coded Fields = 8.2 Overall = 7.8	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Model number of the relay should have been provided.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. The reader should be provided an approximate number of seconds for the relay trip rather than terms such as "excessive" and "slightly greater than".
	4. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. Are there other Agastat relays in the plant that may have been set the same way (i.e. after being cycled many times)?
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. The reader should be told the effect of the "excessive" delay time.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4)--Title: Root cause and result were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--One or more component failure sub-fields were left blank (manufacturer information).

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
14. LER Number: 84-063-00	
Scores: Text = 6.4 Abstract = 5.7 Coded Fields = 9.3 Overall = 6.5	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	3. 50.73(b)(2)(ii)(G)--The list of systems or secondary functions that were also affected by the failed multi-function component was not included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	5. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	6. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was 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 were available, the text should so state.
	8. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
	9. Some ideas were not presented clearly (hard to follow). Acronym(s) and/or plant specific designator(s) are undefined. Some conclusions reached are inconsistent with the facts presented.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
14. LER Number: 84-063-00 (continued)	
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] were inadequate.
	2. 50.73(b)(1)--Summary of root cause was not included.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	4. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
15. LER Number: 84-068-00	
Scores: Text = 9.8 Abstract = 9.6 Coded Fields = 9.1 Overall = 9.7	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(L)--Model number of failed component was not included.
	3. 50.73(b)(4)--OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. The abstract summary of corrective actions was incomplete. It should conclude a summary of the design change investigation.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (8)--THe field should be filled in with Not Applicable or NA.
	3. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments

16. LER Number: 84-069-01

Scores: Text = 4.0 Abstract = 6.0 Coded Fields = 8.8 Overall = 5.1

Text

1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was inadequate. When were corrective actions performed?

2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was not included.

3. 50.73(b)(2)(ii)(E)--The effect discussion of each failed component was inadequate. More detail is needed as to how an improperly crimped terminal board causes the turbine stop valves to open.

4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.

5. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included.

6. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.

7. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.

8. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.

   OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.

9. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate.

10. A logical transition does not exist between all ideas. Some ideas were not presented clearly (hard to follow).

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
16. LER Number: 84-069-01 (continued)	
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of personnel responses was not included.
	3. 50.73(b)(1)--Summary of root cause was not included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
17. LER Number: 84-071-00	
Scores: Text = 9.5 Abstract = 9.6 Coded Fields = 8.2 Overall = 9.4	
Text	1. 50.73(b)(2)(ii)(C)--Time information for occurrences was inadequate. The time the plant was in a safe and stable condition after the scram should be provided.
	2. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Model number for the Shaevitz equipment should be provided.
Abstract	1. No comments.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Manufacturer code for the cable is inconsistent with the text.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
18. LER Number: 84-078-00	
Scores: Text = 8.2 Abstract = 8.2 Coded Fields = 9.3 Overall = 8.3	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(B)--Discussion of the status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each system failure was inadequate.
	4. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate.
	OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of root cause was inadequate.
	3. 50.73(b)(1)--Summary of system response was inadequate.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	5. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
19. LER Number: 84-082-00	
Scores: Text = 7.6 Abstract = 6.9 Coded Fields = 8.6 Overall = 7.5	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	3. 50.73(b)(3)--The safety assessment indicates that most people could not get through the hole, but if some could, the assessment should address the consequences had somebody entered. The assessment should give more details as to why no entry was believed to have occurred (e.g., no unexplained high dosimetry badge readings).
	4. 50.73(b)(4)--Will an inspection be made to determine if other unplugged holes exist?
Abstract	1. 50.73(b)(1)--The abstract did not include the root cause.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section		Comments
20. LER Number: 84-084-01		
Scores: Text = 8.9 Abstract = 9.5 Coded Fields = 9.4 Overall = 9.1		
Text	1.	50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
Abstract	1.	No comments.
Coded Fields	1.	Item (4)--Title: Root cause was not included. To say unknown would be appropriate.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
21. LER Number: 84-085-00	
Scores: Text = 6.1 Abstract = 5.4 Coded Fields = 8.0 Overall = 6.1	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(B)--Discussion of the status of structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each system failure was inadequate.
	4. 50.73(b)(2)(ii)(E)--The mechanism discussion of each failed component was inadequate.
	5. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	6. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	8. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] were inadequate.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
21. LER Number: 84-085-00 (continued)	
	2. 50.73(b)(1)--Summary of personnel responses was inadequate.
	3. 50.73(b)(1)--Summary of root cause was inadequate.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	5. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
22. LER Number: 84-091-00	
Scores: Text = 5.5 Abstract = 1.4 Coded Fields = 8.0 Overall = 4.5	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each system failure was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was not included. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
	6. Some conclusions reached are inconsistent with the facts presented. A logical transition does not exist between all ideas. Some ideas were not presented clearly (hard to follow).
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was not included.
	2. 50.73(b)(1)--Summary of root cause was not included.
	3. 50.73(b)(1)--Summary of personnel responses was not included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
22. LER Number: 84-091-00 (continued)	
	5. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
23. LER Number: 85-005-00	
Scores: Text = 8.1 Abstract = 9.2 Coded Fields = 7.8 Overall = 8.4	
Text	1. 50.73(b)(2)(D)--The reason the coil burned out was not addressed (e.g., moisture, vibration, natural end of life, etc.).
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	4. 50.73(b)(3)--OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available, the text should so state.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--The abstract is a good summary of the text; but is deficient in root cause and corrective actions because the text is inadequate in these areas.
Coded Fields	1. Item (4)--The title gives a reader almost no idea of what happened since almost no one has an idea what the designation 2WR04U means without reading the text.
	2. Item (8)--The field should be filled in with Not Applicable or NA.
	3. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
24. LER Number: 85-008-00	
Scores: Text = 8.8 Abstract = 9.2 Coded Fields = 8.3 Overall = 8.9	
Text	1. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	2. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Corrective actions did not include personnel.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Corrective actions did not include personnel.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (8)--Information in field is inconsistent with text and/or abstract. How was unit one involved?

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
25. LER Number: 85-003-00	
Scores: Text = 6.3 Abstract = 6.6 Coded Fields = 8.0 Overall = 6.5	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Time information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	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 was not included.
	5. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	6. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	7. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.
	8. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	9. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate.
Abstract	1. 50.73(b)(1)--Summary of personnel responses was inadequate.
	2. 50.73(b)(1)--Summary of root cause was inadequate.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
25. LER Number: 85-003-00 (continued)	
	4. Abstract does not adequately summarize the text. Additional space was available, within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section		Comments
26. LER Number: 85-017-00		
Scores: Text = 9.4 Abstract = 9.3 Coded Fields = 8.0 Overall = 9.2		
Text	1.	50.73(b)(2)(ii)(C)--Time information for occurrences was not included.
Abstract	1.	50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
		OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract.
Coded Fields	1.	Item (4)--Title: Root cause was not included.
	2.	Item (4)--Title: Link was not included.
	3.	Item (12)--Title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
27. LER Number: 85-020-00	
Scores: Text = 8.3 Abstract = 9.2 Coded Fields = 8.6 Overall = 8.6	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.
	3. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	4. 50.73(b)(4)--The corrective actions should address long term actions needed to prevent recurrence.
	5. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. The abstract is a good summary of the text; but since the discussion of long term corrective actions is lacking in the text; it is also lacking in abstract.
	2. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4)--Title: Root causes and link were not included.
	2. Item (8)--The field should be filled in with Not Applicable or NA.
	3. Item (12)--Position title was not included.
	4. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
28. LER Number: 85-021-00	
Scores: Text = 10.0 Abstract = 9.0 Coded Fields = 8.8 Overall = 9.6	
Text	1. No comments.
Abstract	1. 50.73(b)(1)--Summary of root causes was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR LASALLE 2 (374)

Section	Comments
30. LER Number: 85-023-00	
Scores: Text = 8.1 Abstract = 6.9 Coded Fields = 8.0 Overall = 7.7	
Text	1. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1)--Summary of personnel responses was inadequate.
	3. 50.73(b)(1)--Summary of root cause was not included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (4)--Title: Link was not included.
	3. Item (12)--Title was not included.

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

OCT 1[illegible] [illegible]

MEMORANDUM FOR: Charles E. Norelius, Director
Division of Reactor Projects, Region III

FROM: Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

SUBJECT: SALP ASSESSMENT INPUT FOR DRESDEN, UNITS 2 AND 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 C) is the assessment of the LERs from Dresden, Units 2 and 3. In general, we find these LERs to be of barely 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.

In addition, we recently completed a study (AEOD/P504) of unplanned reactor trips that occurred in 1984. A summary table of reactor trip frequencies from that study is provided in Attachment A.

Finally, we also recently completed a study (AEOD/P503) of ESF actuation that occurred during the first half of 1984. Several summary tables from that study are provided in Attachment B.

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

Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

Enclosures:
As Stated

cc: E. Schweibinz, RIII
M. Pearson, RIII
C. Miller, INEL

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
WPPSS 2	4	20	7	17	2983.0	5.70	175.5
CALLAWAY 1	1	13	6	6	1131.5	5.30	188.6
GRAND GULF 1	2	6	3	4	1010.0	3.96	252.5
SUSQUEHANNA 2	2	8	1	7	2145.9	3.26	306.6
SALEM 1	0	10	3	7	2672.3	2.62	381.8
MCGUIRE 2	5	13	0	16	6138.3	2.61	383.6
SALEM 2	0	10	2	8	3386.0	2.36	423.3
HATCH 2	0	7	0	7	3108.7	2.25	444.1
DIABLO CANYON 1	0	7	3	2	967.1	2.07	483.6
LASALLE 2	3	8	2	9	4469.8	2.01	496.6
SURRY 2	2	13	2	12	7435.3	1.61	619.6
BROWNS FERRY 3	2	0	1	1	700.7	1.43	700.7
LASALLE 1	0	9	0	9	6280.0	1.43	697.8
SEQUOYAH 2	0	10	0	9	6334.0	1.42	703.8
NORTH ANNA 1	2	7	2	6	4759.9	1.26	793.3
ST.LUCIE 2	1	9	0	9	7379.2	1.22	819.9
TURKEY POINT 4	0	11	3	6	5079.8	1.18	846.6
SURRY 1	1	7	2	6	5293.7	1.13	882.3
D.C.COOK 2	2	6	1	6	5294.8	1.13	882.5
SEQUOYAH 1	1	12	4	7	6206.1	1.13	886.6
SUMMER	0	12	5	6	5553.4	1.08	925.6
SUSQUEHANNA 1	1	6	0	7	6549.3	1.07	935.6
DRESDEN 3	0	9	4	4	3889.0	1.03	972.3
TROJAN	0	7	2	5	4895.4	1.02	979.1
INDIAN POINT 3	0	9	0	7	6941.6	1.01	991.7
TURKEY POINT 3	1	8	1	7	7366.6	0.95	1052.4
LA CROSSE	1	8	0	7	7437.0	0.94	1062.4
ST.LUCIE 1	2	4	1	5	5555.2	0.90	1111.0
HATCH 1	3	7	3	5	5638.7	0.89	1127.7
MCGUIRE 1	0	5	0	5	6090.8	0.82	1218.2
SAN ONOFRE 3	0	9	3	4	5070.7	0.79	1267.7
ARKANSAS 2	0	15	6	6	7631.9	0.79	1272.0
YANKEE ROWE	2	3	0	5	6398.6	0.78	1279.7
RANCHO SECO 1	0	4	0	4	5338.8	0.75	1334.7
BRUNSWICK 2	0	3	1	2	2650.1	0.75	1325.1
DUANE ARNOLD	0	6	1	5	6627.1	0.75	1325.4
DAVIS-BESSE 1	1	4	0	4	5529.0	0.72	1382.3
FARLEY 2	1	5	0	6	8375.7	0.72	1396.0

APPENDIX B 1984 RE-CTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
BRUNSWICK 1	0	7	2	5	7023.8	0.71	1404.8
CALVERT CLIFFS 1	4	1	0	5	7531.0	0.66	1506.2
PALISADES	0	1	0	1	1550.5	0.64	1550.5
PEACH BOTTOM 3	1	4	0	5	7757.7	0.64	1551.5
QUAD CITIES 1	1	3	0	3	4766.9	0.63	1589.0
ZION 1	0	6	2	4	6319.8	0.63	1579.9
BROWNS FERRY 1	4	4	3	5	8067.4	0.62	1613.5
BEAVER VALLEY 1	1	6	0	4	6476.3	0.62	1619.1
OCONEE 3	0	4	0	4	6520.7	0.61	1630.2
MAINE YANKEE	1	7	3	4	6688.8	0.60	1672.2
SAN ONOFRE 2	1	4	2	3	5272.4	0.57	1757.5
FITZPATR'CK	0	4	0	4	7087.2	0.56	1771.8
ARKANSAS 1	0	3	0	3	6222.4	0.48	2074.1
DRESDEN 2	0	3	0	3	6511.4	0.46	2170.5
INDIAN POINT 2	1	5	2	2	4718.4	0.42	2359.2
OCONEE 1	0	3	0	3	7452.4	0.40	2484.1
D.C.COOK 1	0	3	0	3	8085.9	0.37	2695.3
PRAIRIE ISLAND 1	0	4	1	3	8321.3	0.36	2773.8
BROWNS FERRY 2	0	3	0	2	5895.7	0.34	2947.9
COOPER	0	3	1	2	5952.6	0.34	2976.3
NORTH ANNA 2	1	4	2	2	6136.0	0.33	3068.0
ZION 2	2	6	5	2	6285.2	0.32	3142.6
HADDAM NECK	1	3	1	2	6515.6	0.31	3257.8
CALVERT CLIFFS 2	0	2	0	2	6630.2	0.30	3315.1
QUAD CITIES 2	1	4	0	2	6988.6	0.29	3494.3
VERMONT YANKEE	0	2	0	2	7115.2	0.28	3557.6
KEWAUNEE	0	5	2	2	7570.5	0.26	3785.3
CRYSTAL RIVER 3	0	2	0	2	8346.5	0.24	4173.3
MILLSTONE 2	1	2	1	2	8596.8	0.23	4298.4
FORT CALHOUN 1	0	1	0	1	5386.3	0.19	5386.3
R.E.GINNA	0	1	0	1	6848.7	0.15	6848.7
FARLEY 1	0	2	1	1	7005.8	0.14	7005.8
BIG ROCK POINT	0	3	3	0	5981.9	0.00	.
SAN ONOFRE 1	0	0	0	0	888.6	0.00	.
OYSTER CREEK	0	2	2	0	1700.0	0.00	.
NINE MILE POINT 1	0	1	1	0	6414.0	0.00	.
MILLSTONE 1	0	0	0	0	6990.2	0.00	.
H.B.ROBINSON	0	1	0	0	516.1	0.00	.

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
MONTICELLO	0	0	0	0	810.6	0	.
POINT BEACH 1	1	1	0	0	6420.1	0	.
OCONEE 2	0	0	0	0	8784.0	0	.
PEACH BOTTOM 2	0	0	0	0	2583.9	0	.
PILGRIM	0	0	0	0	170.3	0	.
POINT BEACH 2	0	1	0	0	7544.2	0	.
PRAIRIE ISLAND 2	0	0	0	0	7844.0	0	.
BYRON 1	2	0	0	0	0.0	.	.

TABLE A.1
NUMBER OF ESF ACTUATIONS REPORTED BY
COMMERCIAL U. S. NUCLEAR POWER PLANTS
JANUARY 1, 1984 THROUGH JUNE 30, 1984

UNIT	ESF ACTUATIONS
SAN ONOFRE 2	82
SEQUOYAH 1	51
WASHINGTON NUCLEAR 2	37
MONTICELLO	26
D. C. COOK 2	25
DUANE ARNOLD	25
SEQUOYAH 2	21
LA SALLE 2	20
FORT CALHOUN	20
GRAND GULF 1	19
LA SALLE 1	17
SAN ONOFRE 3	14
BRUNSWICK 1	10
SUSQUEHANNA 1	10
DIABLO CANYON 1	9
MCGUIRE 1	7
BRUNSWICK 2	6
KEWAUNEE	6
MAINE YANKEE	6
PALISADES	6
SUMMER 1	6
ARKANSAS NUCLEAR ONE 2	5
BROWNS FERRY 1	4
PEACH BOTTOM 2	4
BROWNS FERRY 3	3
D. C. COOK 1	3
CRYSTAL RIVER 3	3
TROJAN	3
TURKEY POINT 3	3
TURKEY POINT 4	3
YANKEE ROWE	3
BEAVER VALLEY	2
BROWNS FERRY 2	2
CALLAWAY	2
FITZPATRICK	2
INDIAN POINT 3	2
LACROSSE	2
MILLSTONE 2	2
NINE MILE POINT	2
SALEM 1	2
SAN ONOFRE 1	2
SUSQUEHANNA 2	2
THREE MILE ISLAND 1	2
VERMONT YANKEE	2
ZION 1	2
ARKANSAS NUCLEAR ONE 1	1
BIG ROCK POINT	1
CALVERT CLIFFS 2	1
COOPER	1
DAVIS BESSE 1	1
FT. ST. VRAIN	1
GINNA	1
E. I. HATCH 2	1
NORTH ANNA 1	1
OYSTER CREEK	1
POINT BEACH 2	1
PRAIRIE ISLAND 2	1
QUAD CITIES 2	1
RANCHO SECO	1
ROBINSON 2	1
SURRY 1	1
CALVERT CLIFFS 1	0
CONNECTICUT YANKEE	0
DRESDEN 2	0
DRESDEN 3	0
FARLEY 1	0
FARLEY 2	0
E. I. HATCH 1	0
HUMBOLDT BAY	0
INDIAN POINT 2	0
MCGUIRE 2	0
MILLSTONE 1	0
NORTH ANNA 2	0
OCONEE 1	0
OCONEE 2	0
OCONEE 3	0
PEACH BOTTOM 3	0
PILGRIM 1	0
POINT BEACH 1	0
PRAIRIE ISLAND 1	0
QUAD CITIES 1	0
SALEM 2	0
ST. LUCIE 1	0
ST. LUCIE 2	0
SURRY 2	0
THREE MILE ISLAND 2	0
ZION 2	0

Definitions

1. Valid (design basis) actuation: the measured parameter actually reached the intended actuation setpoint and the condition that the ESF was intended to mitigate actually existed.

2. Valid (non-design basis) actuation: the measured parameter actually reached the intended actuation setpoint but the condition that the ESF was intended to mitigate did not exist. These ESF actuations resulted primarily because the actuation setpoints, as governed by the technical specification, were set very close to the parameter background levels experienced during various unit operational modes. These ESF actuations were considered to be valid but did not represent a required response to a design basis event. Rather, they were actuations resulting from non-design basis conditions, such as a accumulation of radioactive trash in front of a radiation monitor during refueling operations. These valid but non-design basis actuations were primarily associated with either toxic gas monitors or radiation-related monitors. The ESF actuations which resulted from these setpoints being reached were principally associated with isolation of the containment or auxiliary building, or with isolation of the control room emergency ventilation.

3. False actuation: the measured parameter did not reach the intended actuation setpoint. These actuations were a result of something other than the measured parameter reaching its intended setpoints. They were caused fairly equally by spurious signals, equipment failures, or problems related to personnel. These false ESF actuations principally affected systems whose functions were associated with either isolation or ventilation. The main parameters involved with these false actuations were radiation and loss of power.

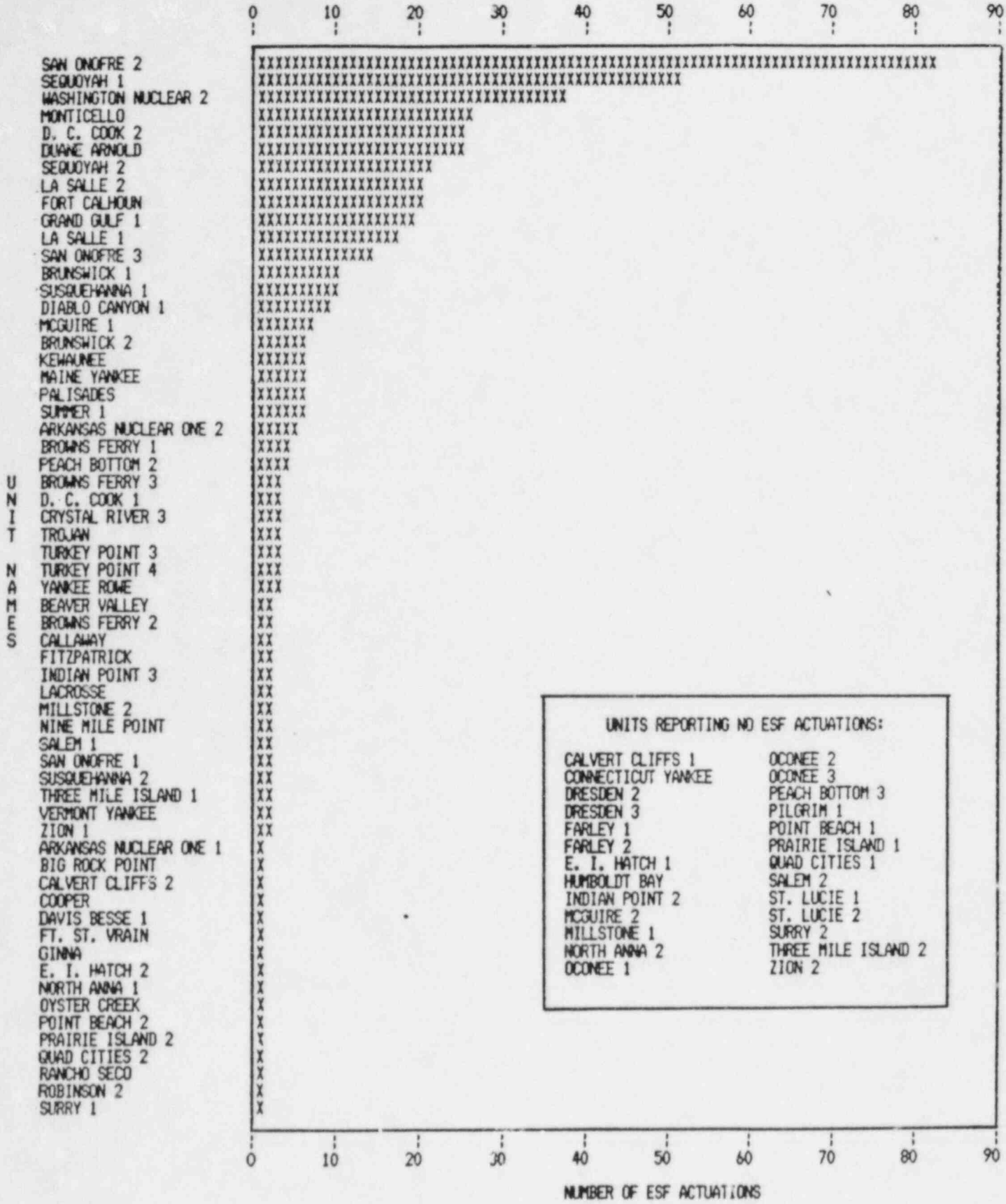
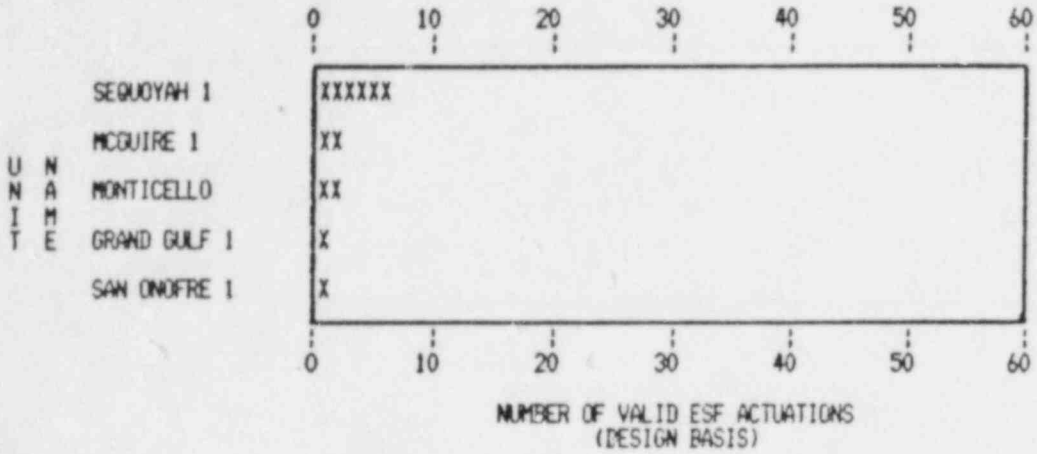


Figure 1: Unit Distribution of Engineered Safety Features Actuations (January - June 1984)



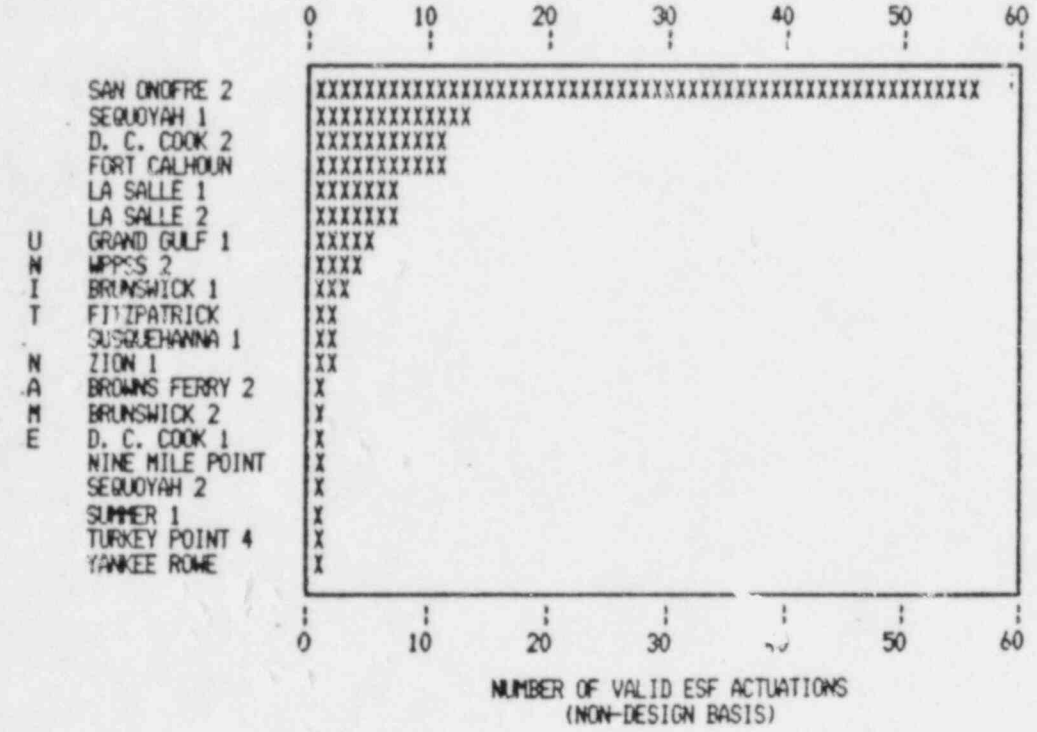


Figure 3: Unit Distribution of Valid ESF Actuations

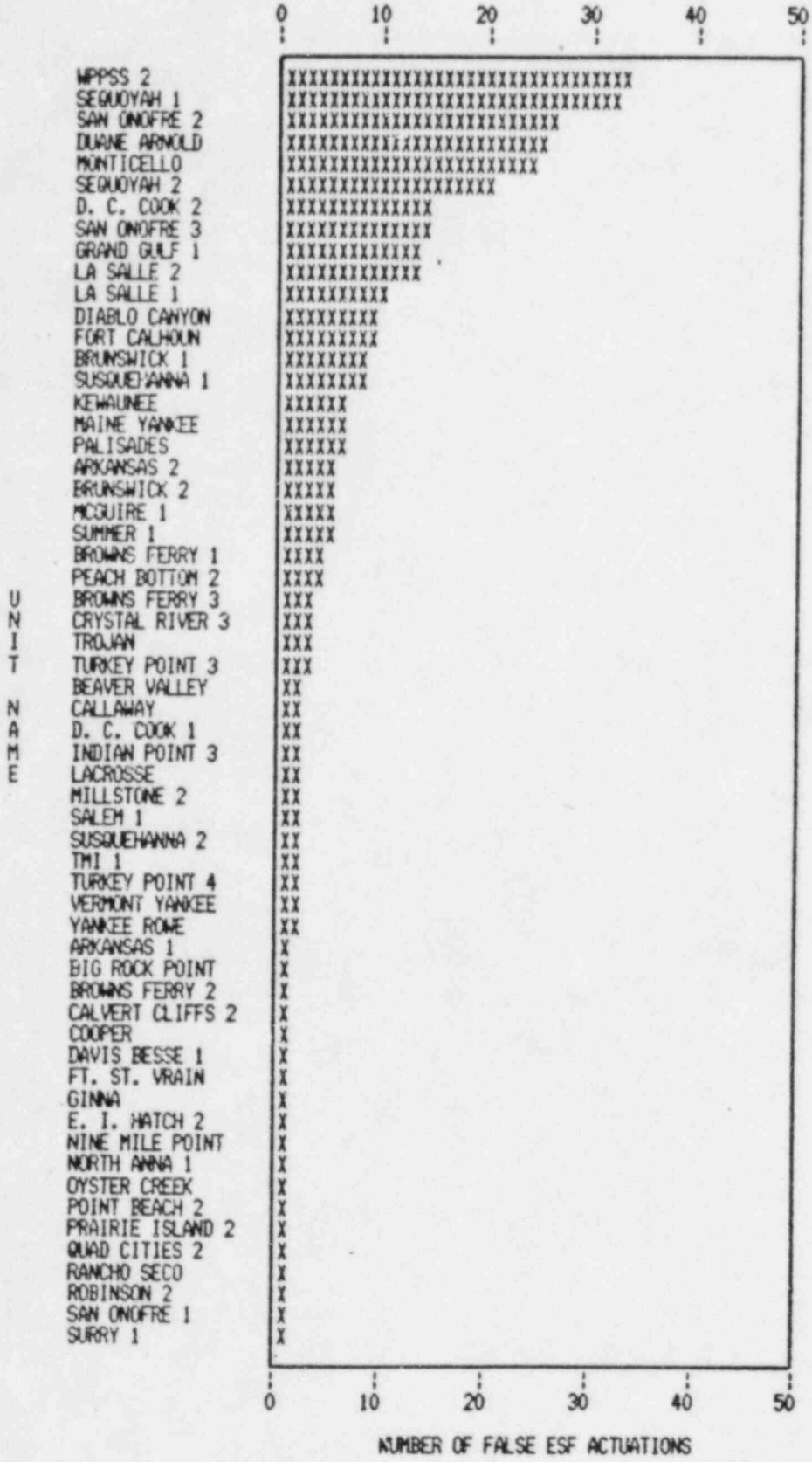


Figure 8: Unit Distribution of False ESF Actuations

ENCLOSURE

AEOD INPUT TO SALP REVIEW FOR DRESDEN 2, 3

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Dresden 2 and Dresden 3 during the June 1, 1984 to September 30, 1985 Systematic Assessment of Licensee Performance (SALP) assessment period, a sample of each unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178[1]. The sample consisted of 22 LERs for Dresden 2 and 17 LERs for Dresden 3, which represents fifty percent of the LERs that were available for review at the time the evaluation 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-1022[2], and Supplements 1[3] and 2[4] to NUREG-1022.

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

The LER specific comments serve two purposes; (1) they point out what the analysts considered to be the specific deficiencies or observations concerning the information pertaining to the event, and (2) they provide a

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

Evaluation Results

No attempt is made at this time to explain differences between results for multiple units beyond providing general comments, when applicable, in the Discussion of Results. However, as data is collected, scores for the units that have been evaluated will be presented for comparison purposes.

The results of the evaluation are presented by unit and 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 specific 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 for each LER (Appendix D). When referring to these appendices, the reader is cautioned not to try to directly correlate the number of comments on an individual comment sheet with the assigned scores, as the analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

In the case where multiple units are evaluated, the results are submitted in one enclosure and the summary tables are assigned an alphabetic character so that the different units can reference the same table numbers. For example, the letters A and B assigned to a table number correspond to Unit 2 and 3, respectively for this enclosure.

Discussion of Results

A discussion of the analysts' conclusions 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 analyst's opinion of each units performance (on a scale of 0 to 10) in submitting LERs that meet the requirements of 10 CFR 50.73(b).

The analysts made no attempt to assess differences in scores or the number of deficiencies between units of a multiple unit plant because sufficient information is not available concerning how LERs are generated or reviewed at each unit.

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.

Evaluation Results for Dresden 2

Table 1A presents the average scores for the sample of LERs evaluated for Dresden 2. In order to place the scores provided in Table 1A in perspective, the scores from other units that have been evaluated using this methodology are provided in Table 2. Additional units will be added as they are evaluated. Table 3A and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1A. For example, Dresden's average score for the text of the LERs that were evaluated is 6.9 out of a possible 10 points. From Table 3A it can be seen that the text score actually resulted from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions before the event [10 CFR 50.73(b)(2)(ii)(A)] to text

TABLE 1A. SUMMARY OF SCORES[a] FOR DRESDEN 2

	Average	High	Low
Text	6.9	9.5	4.5
Abstract	7.3	10.0	4.0
Coded Fields	7.9	8.7	6.7
Overall	7.1[b]	9.6	4.8

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

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

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3A. LER REQUIREMENT PERCENTAGE SCORES FOR DRESDEN 2

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	83 (22)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	36 (22)
(2)(ii)(D) - - Root cause and intermediate cause(s)	64 (22)
(2)(ii)(E) - - Mode, mechanism, and effect	92 (13)
(2)(ii)(F) - - EIIS Codes	0 (22)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	38 (8)
(2)(ii)(I) - - Method of discovery	64 (21)
(2)(ii)(J)(1) - Operator actions affecting course	90 (16)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	68 (13)
(2)(ii)(K) - - Safety system responses	65 (8)
(2)(ii)(L) - - Manufacturer and model no. information	0 (11)
(3) - - - - - Assessment of safety consequences	70 (22)
(4) - - - - - Corrective actions	68 (22)
(5) - - - - - Previous similar event information	91 (22)
(2)(i) - - - - Text presentation	81 (22)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	81 (22)
- Description of plant, system, component, and/or personnel responses	86 (22)
- Root cause information	55 (22)
- Corrective Action information	63 (22)
- Abstract presentation	81 (22)

TABLE 3A. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	94 (22)
4 - - - - - - Title	39 (22)
5, 6, and 7 - Event date, LER No., and report date	100 (22)
8 - - - - - - Other facilities involved	60 (5)
9 and 10 - - Operating mode and power level	100 (22)
11 - - - - - Reporting requirements	95 (22)
12 - - - - - Licensee contact information	81 (22)
13 - - - - - Coded component failure information	55 (22)
14 and 15 - - Supplemental report information	98 (22)

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.

presentation. The percent scores in the text summary section of Table 3A provide an indication of how well each text requirement was addressed by the licensee for the 22 LERs that were evaluated.

Discussion of Specific Deficiencies

The most significant areas that need improvement are presented in Table 4. Note that Table 4 is applicable to both Dresden 2 and 3 because both units have essentially the same average and percentage scores.

A review of the percentages scores quickly points out additional areas in which the licensee is deficient. For example, Dresden 2 failed to provide dates and approximate times for most of the LERs evaluated. This is apparent from the 36% score for requirement 50.73(b)(2)(ii)(C) and also is reflected in the 38% score for requirement 50.73(b)(2)(ii)(H) (i.e., the requirement to provide an estimate of the elapsed time from the discovery of a failure in a safety system train until the time the train is returned to service). The elapsed time for the train failure could have been estimated if adequate times of various occurrences had been provided in the text.

The abstract scores reflect the text deficiencies somewhat, in that the root cause and corrective action requirements have the lowest scores. If these areas are not adequately addressed in the text, it is reasonable to assume that these deficiencies will carry over into the abstract. However, a number of abstracts failed to provide any information concerning corrective actions even though the information was available in the text.

The lowest scores in the area of coded fields are the title (Item 4) and the "other facilities involved" information (Item 8). Titles were generally very poor in that most did not provide the reader with a clear idea of what the event was about. Most titles (20) lacked root cause and many (8) lacked the link between cause and result (effect). Ten titles failed to indicate the result for which the event was reportable (e.g., a Technical Specification violation, an ESF actuation, etc.).

TABLE 4. AREAS MOST NEEDING IMPROVEMENT FOR DRESDEN 2 AND 3 LERs

Areas	Comments
Root cause discussions	More details are needed; cause information could sometimes only be inferred from corrective actions.
Personnel error discussions	More details are needed; at times personnel error was not even identified as being the root cause of the event although that appeared to be the case from the discussion.
Corrective actions to prevent recurrence	More details are needed; immediate corrective actions were usually discussed but discussions concerning the actions necessary to reduce the probability of recurrence (i.e., fixing the root cause) and the "prevention of similar events" were generally lacking. Prevention of similar events means applying the planned corrective actions to other components, personnel, or procedures when appropriate.
Safety assessment information	Statements involving consequences or implication were typically boiler plate statements such as, "minimal safety significance because all system functioned as designed". More effort needed to be placed on providing details and discussing the consequences of the event occurring under a more severe set of conditions.
Manufacturer and model number information	Detailed information is needed in the text concerning failed (not faulted) components so that possible generic problems can be identified.
Date and approximate time(s) information	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 and to permit determination of the length of time that system trains and components were out of service.

TABLE 4. (continued)

Areas	Comments
Text presentation consistency	While most presentations were adequate, they lacked any structuring or consistency such as would be provided by using an outline format.
Text readability	The use of acronyms and/or plant specific designators made some LERs hard to follow. In one particular LER (84-016-00 for Dresden 2) a figure would have been extremely useful.
Abstracts	Corrective action information was often not included or was inadequate.
Coded fields	
a. Titles	Titles need to be written such that they better describe the essence of the event.

The licensee was not very consistent in the area of identifying other facilities involved in the event (e.g., did an occurrence at Unit 2 also affect Unit 3?). At times, the field was filled in when it was not appropriate and, at other times, it was not filled in when it appeared (from the information in the text) to be appropriate. This field should only be used if the other unit was directly involved in the event. It should not be used to indicate that corrective actions were extented to the other unit.

The score concerning component failure information (Item 13) also requires some explanation. Item 13 requires that coded information (i.e., cause, system, component, and manufacturer) be provided whenever a component failure is part of the event. In some of the LERs reviewed this was not done. In others, information was provided even though no component failure occurred. This is not necessarily a serious deficiency but does point out that the author may not be sure of the requirements. It also has another side effect. For some LERs, a cause code of A (personnel error) was given when there was no component failure. Personnel error did appear to be the root cause of these events but, because the author had already provided the code in Item 13, he apparently felt it was not necessary to state "personnel error" explicitly in the text and abstract. In some of these cases, it was difficult (from the information in the text) to determine that a personnel error had really taken place. Cause information must be discussed in the text in detail even if the cause code in Item 13 is provided. Filling in the cause code when no component failure occurs is not necessary and appears to be a hold over from the pre-1984 LER form.

For more specific information concerning the areas that need improvement, the reader should refer to the specific information presented in Appendices C and D. General guidance concerning these requirements can be found in NUREG-1022, Supplement No. 2.

Evaluation Results for Dresden 3

Tables 1B and 3B provide a summary of the Dresden 3 evaluation. See Table 2, page 5, in order to place the Dresden 3 scores in perspective.

A review of Table 3B indicates that Dresden 3 has basically the same deficiencies as Dresden 2 and, therefore, a separate discussion of Dresden 3 deficiencies is not required. As discussed earlier, Table 4, page 9, applies to Dresden 3 as well as Dresden 2.

TABLE 1B. SUMMARY OF SCORES[a] FOR DRESDEN 3

	Average	High	Low
Text	7.2	9.1	4.0
Abstract	7.3	9.6	3.0
Coded Fields	8.0	9.0	7.2
Overall	7.3[b]	8.8	5.2

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 3B. EVALUATION SUMMARY FOR DRESDEN 3

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A)--Plant conditions prior to event	65 (17)
(2)(ii)(B)--Inoperable equipment that contributed	b
(2)(ii)(C)--Dates and approximate times	22 (17)
(2)(ii)(D)--Root cause and intermediate cause(s)	87 (17)
(2)(ii)(E)--Mode, mechanism, and effect	91 (17)
(2)(ii)(F)--EIIS Codes	0 (17)
(2)(ii)(G)--Secondary function affected	b
(2)(ii)(H)--Estimate of unavailability	67 (6)
(2)(ii)(I)--Method of discovery	76 (17)
(2)(ii)(J)(1)--Operator actions affecting course	83 (15)
(2)(ii)(J)(2) -Personnel error (procedural deficiency)	68 (10)
(2)(ii)(K)--Safety system responses	56 (8)
(2)(ii)(L)--Manufacturer and model no. information	14 (7)
(3)--Assessment of safety consequences	52 (17)
(4)--Corrective actions	84 (17)
(5)--Previous similar event information	100 (17)
(2)(i)--Text presentation	79 (17)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	98 (17)
- Description of plant, system, component, and/or personnel responses	76 (17)
- Root cause information	71 (17)
- Corrective Action information	55 (17)
- Abstract presentation	65 (17)

TABLE 3B. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	95 (17)
4 - - - - - - Title	38 (17)
5, 6, and 7 - Event date, LER No., and report date	99 (17)
8 - - - - - - Other facilities involved	25 (17)
9 and 10 - - Operating mode and power level	100 (17)
11 - - - - - Reporting requirements	100 (17)
12 - - - - - Licensee contact information	81 (17)
13 - - - - - Coded component failure information	74 (17)
14 and 15 - - Supplemental report information	100 (17)

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 were not applicable to certain LERs, therefore, the number of points possible had to be 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 will always be given 100% if it is provided but must always be considered "not applicable" when it is not provided.

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, Licenseee Event Report System, NUREG-1022 Supplement No. 2, U.S. Nuclear Regulatory Commission, September 1985.

APPENDIX A

LER SAMPLE SELECTION INFORMATION FOR DRESDEN 2 AND 3

TABLE A-1. LER SAMPLE SELECTION FOR DRESDEN 2 (237)

LER Sample Number	LER Number	Comments
1	84-009-00	SCRAM
2	84-011-01	
3	84-016-00	
4	84-019-00	
5	84-021-01	
6	84-023-01	
7	84-025-01	ESF
8	85-001-01	
9	85-002-02	
10	85-004-00	
11	85-005-00	
12	85-006-01	SCRAM
13	85-010-01	
14	85-011-00	
15	85-012-00	SCRAM
16	85-013-00	ATWS
17	85-015-01	
18	85 017-00	
19	85-019-00	ESF
20	85-020-00	
21	85-022-00	SCRAM
22	85-024-00	

TABLE A-2. LER SAMPLE SELECTION FOR DRESDEN 3 (249)

LER Sample Number	LER Number	Comments
1	84-006-08	Apparent typo in revision number
2	84-007-01	SCRAM
3	84-009-00	
4	84-010-00	SCRAM
5	84-013-01	
6	84-014-00	
7	84 018-01	SCRAM
8	84-023-01	
9	85-002-02	SCRAM
10	85-003-00	
11	85-005-00	
12	85-008-00	ESF
13	85-009-00	
14	85-010-00	SCRAM
15	85-011-01	
16	85-012-00	
17	85-013-00	

APPENDIX B

EVALUATION SCORES OF INDIVIDUAL LERs FOR DRESDEN 2 AND DRESDEN 3

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR DRESDEN 2

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	6.4	4.6	5.3	5.3	4.8	5.4	7.4	9.2	7.9	6.9	6.5	6.7	8.5	9.0	7.6	7.8
Abstract	8.0	7.0	5.6	5.0	4.0	5.9	6.0	9.5	7.4	6.7	7.5	8.2	9.2	8.4	8.1	8.3
Coded Fields	8.7	8.0	7.9	7.7	7.3	8.1	8.4	7.6	8.5	7.5	7.7	8.5	7.8	8.7	8.2	7.3
Overall	7.1	5.7	5.7	5.5	4.8	5.8	7.1	9.1	7.8	6.9	6.9	7.3	8.6	8.8	7.8	7.9

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	6.6	9.5	7.2	6.9	4.5	8.3	--	--	--	--	--	--	--	--	6.9
Abstract	7.0	10.0	8.8	6.9	4.5	8.6	--	--	--	--	--	--	--	--	7.3
Coded Fields	6.7	8.7	7.4	8.3	7.7	8.0	--	--	--	--	--	--	--	--	7.9
Overall	6.7	9.6	7.7	7.0	4.8	8.4	--	--	--	--	--	--	--	--	7.1

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

TABLE B-2. EVALUATION SUMMARY OF INDIVIDUAL LERs FOR DRESDEN 3

	LER Sample Number															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	7.3	6.4	7.7	6.3	8.5	7.1	4.0	8.5	7.5	8.0	9.1	7.0	7.9	7.5	7.3	4.0
Abstract	6.5	7.5	7.3	6.0	6.3	9.0	6.6	9.6	8.5	6.5	8.5	7.5	3.0	6.9	9.1	8.0
Coded Fields	8.2	7.9	8.1	8.7	7.7	7.2	8.3	8.4	7.9	7.9	7.6	8.4	7.7	7.7	8.1	9.0
Overall	7.2	6.9	7.6	6.5	7.8	7.7	5.2	8.8	7.8	7.5	8.8	7.3	6.4	7.3	7.9	5.7

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2
Abstract	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	7.3
Coded Fields	7.7	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0
Overall	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	7.3

APPENDIX C

DEFICIENCY AND OBSERVATION COUNTS FOR DRESDEN 2 AND DRESDEN 3

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		6 (21)
50.73(b)(2)(ii)(B)--Discussion of the status of 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 (7)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		15 (22)
a. Date information was insufficient.	13	
b. Time information was insufficient.	14	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		12 (22)
a. Cause of component failure was not included or was inadequate	9	
b. Cause of system failure was not included or was inadequate	1	
c. Cause of personnel error was not included or was inadequate.	4	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		3 (13)
a. Failure mode was not included or was inadequate	1	
b. Mechanism (immediate cause) was not included or was inadequate	3	
c. Effect (consequence) was not included or was inadequate.	1	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier and/or system identifier for each component or system was not included.		22 (22)
50.73(b)(2)(ii)(G)--For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (3)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		5 (8)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		8 (21)
a. Method of discovery for each component failure was not included or was inadequate.	7	
b. Method of discovery for each system failure was not included or was inadequate.	1	
c. Method of discovery for each personnel error was not included or was inadequate.	1	
d. Method of discovery for each procedural error was not included or was inadequate	1	
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		3 (16)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		8 (13)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	3	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	4	
c. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	4	
d. 50.73(b)(2)(ii)(J)(2)(iii)--Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	1	
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		4 (8)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		10 (11)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		14 (22)
a. OBSERVATION: The availability of 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.	3	
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.	8	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		16 (22)
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation or correct the personnel) was not included or was inadequate.	2	
b. A discussion of actions required to reduce the probability or recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	8	
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 manufacturers and model number) was not included or was inadequate.	6	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		2 (22)
50.73(b)(2)(i)--Text presentation inadequacies.		14 (22)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	1	
b. Text contained undefined acronyms and/or plant specific designators.	7	
c. The text contains other specific deficiencies relating to the readability.	7	

a. The "sub-paragraph total" is a tabulation of specific deficiencies or observations within certain requirements (i.e., paragraphs). 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 the requirement was considered applicable.

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[1]
A summary of occurrences (immediate cause and effect) was not included or was inadequate.		7 (22)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		4 (22)
a. Summary of plant responses was not included or was inadequate.	1	
b. Summary of system responses was not included or was inadequate.	2	
c. Summary of personnel responses was not included or was inadequate.	2	
A summary of the root cause of the event was not included or was inadequate.		9 (22)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		11 (22)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies.		15 (22)
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.	6	
b. The abstract was greater than 1400 characters.	2	
c. The abstract contains undefined acronyms and/or plant specific designators.	5	
d. The abstract contains other specific deficiencies (ie., poor summarization, contradictions etc.)	9	

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

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

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		7 (22)
a. Unit number was not included or incorrect.	7	
b. Name was not included or was incorrect.	0	
c. Additional unit numbers were included but not required.	0	
Docket number was not included or was incorrect.		
Page number was not included or was incorrect.		
Title was inadequate		22 (22)
a. Root cause was not given in title	20	
b. Result (effect) was not given in title	10	
c. Link was not given in title	8	
Event Date		0 (22)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect.		0 (22)
Report Date		0 (22)
a. Date not included		
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).		
Other Facilities information in field is inconsistent with text and/or abstract.		2 (5)
Operating Mode was not included or was inconsistent with text or abstract.		0 (22)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Reporting Requirements		1 (22)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	1	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	0	
Licensee Contact		21 (22)
a. Field left blank	0	
b. Position title was not included	21	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		11 (22)
a. One or more component failure sub-fields were left blank.	3	
b. Cause, system, and/or component code is inconsistent with text.	0	
c. Component failure field contains data when no component failure occurred.	6	
d. Component failure occurred but entire field left blank.	2	

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		0 (22)
a. Neither "Yes"/"No" block of the supplemental report field was checked.		
b. The block checked was inconsistent with the text.		
Expected submission date information is inconsistent with the block checked in Item (14).		0 (22)

a. The "subtotal" 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 subtotals do not necessarily add up to the total.

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

TABLE C-4. TEXT DEFICIENCIES AND OBSERVATIONS FOR DRESDEN 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		9 (17)
50.73(b)(2)(ii)(B)--Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (5)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		14 (17)
a. Date information was insufficient.	13	
b. Time information was insufficient.	13	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		3 (17)
a. Cause of component failure was not included or was inadequate	3	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	0	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		2 (17)
a. Failure mode was not included or was inadequate	1	
b. Mechanism (immediate cause) was not included or was inadequate	1	
c. Effect (consequence) was not included or was inadequate.	0	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		17 (17)
50.73(b)(2)(ii)(G)--For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (1)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		2 (6)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		4 (17)
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	2	
d. Method of discovery for each procedural error was not included or was inadequate.	0	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		3 (15)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		3 (10)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	0	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	2	
c. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	2	
d. 50.73(b)(2)(ii)(J)(2)(iii)--Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	1	
e. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	0	

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		5 (8)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		7 (7)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		14 (17)
a. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event was not discussed. If no other systems or components were available the text should state that none existed.	4	
b. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what were considered the most severe conditions, the text should so state.	7	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		8 (17)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	1	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	2	
c. OBSERVATION: A discussion of actions required to prevent similar failures in similar and/or other systems (e.g., correct the faulty part in all components with the same manufacturer and model number) was not included or was inadequate.	3	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		0 (17)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		15 (17)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	1	
b. Text contained undefined acronyms and/or plant specific designators.	8	
c. The text contains other specific deficiencies relating to the readability.	6	

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

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

TABLE C-5. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR DRESDEN 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		2 (17)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		7 (17)
a. Summary of plant responses was not included or was inadequate.	0	
b. Summary of system responses was not included or was inadequate.	4	
c. Summary of personnel responses was not included or was inadequate.	3	
A summary of the root cause of the event was not included or was inadequate		7 (17)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate		12 (17)

TABLE C-5. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		15 (17)
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.	7	
b. The abstract was greater than 1400 characters		
c. The abstract contains undefined acronyms and/or plant specific designators.	4	
d. The abstract contains other specific deficiencies (i.e., poor summarization, contradictions, etc.)	7	

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

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

TABLE C-6. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR DRESDEN 3

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		3 (17)
a. Unit number was not included or incorrect.	3	
b. Name was not included or was incorrect.	0	
c. Additional unit numbers were included but not required.	0	
Docket Number was not included or was incorrect.		0 (17)
Page Number was not included or was incorrect.		0 (17)
Title was inadequate		17 (17)
a. Root cause was not given in title	15	
b. Result (effect) was not given in title	5	
c. Link was not given in title	6	
Event Date		0 (17)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		1 (17)
Report Date		0 (17)
a. Date not included		
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).		
Other Facilities information in field is inconsistent with text and/or abstract.		3 (4)

TABLE C-6. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Operating Mode was not included or was inconsistent with text or abstract.		0 (17)
Power level was not included or was inconsistent with text or abstract		0 (17)
Reporting Requirements		0 (17)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.		
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.		
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.		
Licensee Contact		16 (17)
a. Field left blank	0	
b. Position title was not included	16	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		10 (17)
a. One or more component failure sub-fields were left blank.	1	
b. Cause, system, and/or component code is inconsistent with text.	1	
c. Component failure field contains data when no component failure occurred.	8	
d. Component failure occurred but entire field left blank.	0	

TABLE C-6. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		0 (17)
a. Neither "Yes"/"No" block of the supplemental report field was checked. b. The block checked was inconsistent with the text.		
Expected submission date information is inconsistent with the block checked in Item (14).		0 (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 requirement deficiencies or observations. The number in parenthesis is the number of LERs for which a certain requirement was applicable.

APPENDIX D

LER COMMENT SHEETS FOR DRESDEN 2 AND DRESDEN 3

TABLE D-1. SPECIFIC LER COMMENTS FOR DRESDEN 2 (237)

Section	Comments
1. LER Number: 84-009-00	
Scores: Text = 6.4 Abstract = 8.0 Coded Fields = 8.7 Overall = 7.1	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. The discussion should include the operating power level.
	2. 50.73(b)(2)(ii)(C)-- dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure was not included.
	5. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. The text indicates that all safety system responsed as required. The text should be more specific about the safety system responses.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	8. 50.73(b)(4)--Observation: In order to prevent similar failures the corrective actions should address whether or not valves other than the feedwater valves have the same coupler, and if so, whether or not the locktabs should be installed on other valves with these couplers.
	9. Acronym(s) and/or plant specific designator(s) are undefined. The text does not indicate what the designations 2B, 3A, and 3B mean. It was assumed that the numbers implied unit identification and the letters identified feedwater loops.

TABLE D-1. (continued)

Section	Comments
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. The abstract should indicate that the loose locknuts resulted in the coupling failure. This helps clearify the use of locktabs for corrective actions.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. The fact that locktabs were installed on other couplers should be mentioned.
Coded Fields	1. Item (4) Title: Root cause was not included. The title should indicate that vibration of a feedwater valve caused the event. For example the title might read, "Reactor Scram on Low Vessel Level due to Vibration Induced Failure of Feedwater Valve Coupler."
	2. Item (8)--As noted in text comment 11, Dresden Unit 3 appears to be involved.
	3. Item (12)--Position title was not included.

2. LER Number: 84-011-01

Scores: Text = 4.6 Abstract = 7.0 Coded Fields = 8.1 Overall = 5.7

Text	1. 50.73(b)(2)(ii)(C)-- Dates and Approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate. The text does not explain why the definition of a fire barrier penetration was not clearly understood.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.

TABLE D-1. (continued)

Section	Comments
	5. The abstract contained greater than 1400 characters.
	6. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was inadequate.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	8. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state.
	9. Item (5)--Discovery date was given instead of event date.
	10. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. The text does not include actions taken to reduce the probability of similar events occurring in the future.
	11. Some ideas were not presented clearly (hard to follow).
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. Abstract does not adequately summarize the text.
Coded Fields	Item (1)--Unit number was not included.
	Item (4) Title: Root cause and link were not included.
	Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(ii).
	Item (12)--Position title was not included.
	Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-1. (continued)

Section	Comments

3. LER Number: 84-016-00

Scores: Text = 5.3 Abstract = 5.6 Coded Fields = 7.9 Overall = 5.7

Text

1. 50.73(b)(2)(ii)(C)-- Date and approximate time information for occurrences was not included.

2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure and personnel error was not included.

3. 50.73(b)(2)(ii)(E)--The mode, mechanism, and effect discussion of each failed component was inadequate.

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 was not included.

5. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure, personnel error, and procedural error was not included.

6. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate; the extent to which procedures were in error was not made clear, except as could be inferred from corrective actions.

7. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.

8. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.

9. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.

10. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.

TABLE D-1. (continued)

Section	Comments
	11. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate; the total release and Cobalt 60 numbers should have been compared with the limit that was exceeded (20.405(a)(1)(iii)).
	12. 50.73(b)(4)--OBSERVATION: Counseling of the radwaste operators might be an additional appropriate corrective action. The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state.
	13. Some conclusions reached are inconsistent with the facts presented; why was it necessary to adjust and calibrate the floor drain surge tank level switch?
	14. Some ideas were not presented clearly (hard to follow); namely, the flow path and significance of the plugged sparger.
	15. OBSERVATION: A diagram or figure would have aided understanding.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was not included.
	2. 50.73(b)(1)--Summary of root causes was 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; abstract states "forced to" as opposed to "was required" in text when discussing the water transfer. Abstract states "surveys" vs. "calculations" (text) to determine off-site release.
	4. Abstract contradicts the text.
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (13)--Component failure occured but entire field left blank.

TABLE D-1. (continued)

Section	Comments
4. LER Number: 84-019-01	
Scores: Text = 5.3 Abstract = 5.0 Coded Fields = 7.7 Overall = 5.5	
Text	1. 50.73(b)(2)(ii)(C)-- dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included.
	3. 50.73(b)(2)(ii)(E)--The mechanism (immediate cause) discussion of each failed component was not included.
	4. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	5. 50.73(b)(3)--Could continued deterioration of these welds have caused a safety problem, especially during other plant operating conditions?
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. The discussion should indicate what actions will be taken to prevent the welds from cracking in the future.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was not included.
	2. 50.73(b)(1)--Summary of root cause was 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. For example, the abstract indicates that one weld was inboard of the isolation valve, while the text is not as specific.
Coded Fields	1. Item (1)--unit number was not included.
	2. The title is unclear as to the type of indications detected and does not indicate the root cause.
	3. Item (12)--position title was not included.

TABLE D-1. (continued)

Section	Comments
5. LER Number: 84-021-01	
Scores: Text = 5.0 Abstract = 4.4 Other Fields = 7.3 Overall = 5.0	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate.
	2. 50.73(b)(2)(ii)(C)--Approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included; i.e. "Full in".
	4. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each limit switch personnel error was inadequate. How did the first SCRE and Shift Foreman make the mistake? Did they use a procedure?
	5. 50.73(b)(2)(ii)(E)--The mechanism (immediate cause) discussion of each failed component was not included; i.e. "Full in" limit switch.
	6. 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 was not included.
	7. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure was not included.
	8. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate.
	9. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was inadequate. How was the mistake made.
	10. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.

TABLE D-1. (continued)

Section	Comments
	11. 50 73(b)(2)(ii)(L)--Identification (e g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	12. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	13. 50.73(b)(4)--Corrective actions taken or planned to repair "Full in" limit switch was not discussed.
	14. 50.73(b)(5)--Information concerning previous similar events was not included.
	15. 50.73(b)(5)--If no previous similar events are known, the text should so state.
	16. Acronym(s) and/or plant specific designator(s) are undefined; i.e. SCRE and CRD.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was not included.
	2. 50.73(b)(1)--Summary of Root causes was not included; i.e. Rootcause of "Full in" limit switch failing and root cause of personnel error
	3. 50.73(b)(1)--Summary of personnel responses was inadequate.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Corrective actions to repair "Full in" limit switch were not included.
	5. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
	6. Abstract does not adequately summarize the text.
	7. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (1)--Unit number was not included.

TABLE D-1. (continued)

Section	Comments
	2. Item (4) Title: Root cause and result (effect) were not included.
	3. Item (12)--Position title was not included.
	4. Item (13)--One or more component failure sub-fields were left blank.
6. LER Number: 84-023-01	
Scores: Text = 5.4	Abstract = 5.9 Coded Fields = 8.2 Overall = 5.8
Text	1. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	5. The safety assessment lacked details.
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. What was done to assure that this, and possibly other similar valves, will not have a misaligned valve stem in the future?
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate.
	2. 50.73(b)(1) -Summary of root cause was not included.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	4. Abstract describes the text as opposed to summarizing it.

TABLE D-1. (continued)

Section	Comments
Coded Fields	1. Item (4) Title: Root cause and result (Technical Specification Violation) were not included.
	2. Item (12)--Position title was not included.
7. LER Number: 84-025-01	
Scores: Text = 7.4	Abstract = 6.0 Coded Fields = 8.4 Overall = 7.1
Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--What was the root cause for the dirty contacts?
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(H)--The discussion should give an estimate of how long the breaker was defective. In particular, was the breaker bad during operation before the refueling outage?
	5. 50.73(b)(2)(ii)(J)(1)--Is there a possible deficiency in the maintenance procedure which allowed the contacts to become dirty and allowed the coil to burnup.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. 50.73(b)(4)--The discussion of corrective actions does not indicate what will be done to prevent future coil burnouts nor any actions to prevent the contacts from becoming dirty again.
Abstract	1. The abstract does not indicate that the trip coil burned up.
	2. The abstract should indicate that all similar breaker have been or will be check during the outage.

TABLE D-1. (continued)

Section	Comments
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. The abstract should summarize actions that will prevent recurrence of the event.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (4) Title: Root cause and effect were was not included.
	3. Item (12)--Position title was not included.

8. LER Number: 85-001-01

Scores: Text = 9.0 Abstract = 9.5 Coded Fields = 7.5 Overall = 9.0

Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was inadequate; i.e. Date and time of discovery of breaker failure during relay testing.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate; i.e. Repair of breaker 2329 which requires reconnecting the four disconnected wires was not discussed.
Abstract	1. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
	2. Abstract does not adequately summarize the text.
	3. Corrective actions to repair breaker 2329 was included in the abstract but not the text.
Coded Fields	Item (1)--Unit number was not included.
	Item (4) Title: Root cause and result (effect) were not included.
	Item (12)--Position title was not included.

TABLE D-1. (continued)

Section	Comments
	Item (13)--Component failure field contains data when no component failure occurred; the breaker was faulted not failed: at no reason internal to the component boundaries of the breaker.

9. LER Number: 85-002-02

Scores: Text = 7.9 Abstract = 7.4 Coded Fields = 8.5 Overall = 7.8

Text	1.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2.	50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Provide information on the manufacturer (Model #) of closure mechanism or other information that would enable others to determine if they have the same hardware.
	3.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed.
	4.	50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Where any provisions made to check the adjustment more often?
	5.	Some ideas were not presented clearly (hard to follow). More details are needed concerning the relay mechanism concerning when it "seals in."
Abstract	1.	50.73(b)(1)--Summary of root cause was inadequate.
	2.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3.	Abstract does not adequately summarize the text; concerning corrective actions. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4) Title: Root cause and result (containment breach) was not included.

TABLE D-1. (continued)

Section	Comments
	2. Item (12)--Position title was not included.
	3. Item (13)--One or more component failure sub-fields were left blank.
10. LER Number: 85-004-00	
Scores: Text = 6.9 Abstract = 6.7 Coded Fields = 7.5 Overall = 6.9	
Text	1. 50.73(b)(2)(ii)(C)--dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(J)(2)(ii)--It is not clear whether a procedure was already in place, and if one was, whether there was an error in the procedure, or whether the personnel were not following it.
	4. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. The discussion should be more specific about the safety system responses.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. The safety assessment should indicate whether or not the event could occur under more severe conditions, and if possible under more severe conditions the text should include an assessment of the consequences.
	6. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. The abstract does not clearly state that the cause was personnel error, and does not clearly show the lack of communication.
	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 abstract gives the time between scrams, which is not given in the text.

TABLE D-1. (continued)

Section	Comments
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.
	4. Item (4) Title: Root cause and link were not included.

11. LER Number: 85-005-00

Scores: Text = 6.4 Abstract = 7.5 Coded Fields = 7.6 Overall = 6.9

Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included. OBSERVATION--Operator actions that affected the course of the event should be discussed even though actions only included the fact that he monitored the event.
	3 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was not included.
	4. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	5. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate; to state that all systems functioned as designed is not a good discussion.
	6. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was not included.
	7. 50.73(b)(4)--Discussion of any corrective taken were not included.

TABLE D-1. (continued)

Section	Comments
	8. 50.73(b)(5)--Information concerning previous similar events was not included.
	9. 50.73(b)(5)--If no previous similar events are known, the text should so state.
	10. Acronym(s) and/or plant specific designator(s) are undefined; i.e. which level transmitter was involved?
Abstract	1. 50.73(b)(1)--Summary of personnel responses was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined; i.e. which level transmitter was involved
Coded Fields	Item (4) Title: Link and result were not included.
	Item (12)--Position title was not included.
	Item (13)--Component failure field contains data when no component failure occurred.
	Item (15)--Observation expected supplemental report date is 04-15-85; however this report is not yet on file.

12. LER Number: 85-006-01

Scores: Text = 6.7 Abstract = 8.2 Coded Fields = 8.5 Overall = 7.3

Text	1. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.

TABLE D-1. (continued)

Section	Comments
	4. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. Item (5)--Discovery date was given instead of event date.
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. When will the "rewire" take place? Why do the power supplies need to be "redesigned" or does this mean only that the schematics will be redrawn? What were the results of the "schematic verification" of other work performed by the AE? What was done to assure that future design change reviews would be performed adequately?
	7. The text contradicts itself. The first paragraph mentions the "switch's" scram function when in fact it appears "trip units" replaced the transmitters and switches.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4) Title: Root cause was not included. The term scram is misleading; trip may have been more appropriate given the initial conditions.
	2. Item (12)--Position title was not included.

13. LER Number: 85-010-01

Scores: Text = 8.5 Abstract = 9.2 Coded Fields = 7.8 Overall = 8.6

Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.

TABLE D-1. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(I)--Be more specific about how the error was discovered. For example, the shift foreman happened to notice or during a routine inspection, etc.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. The text should discuss whether or not other system or trains would be able to perform the battery's function if a fire had occurred.
	4. 50.73(b)(4)--Will the review of fire watches be emphasized in more than the next training session to help reduce the probability of future similar events as new personnel are employed?
	5. Acronym(s) and/or plant specific designator(s) are undefined. The text does not clearify the meaning of the acronyms 112 and 113.
Abstract	1. The abstract does not indicate the possible effect a fire would have had on Unit 3.
	2. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined. The abstract does not define the use of U2.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (4) Title: Root cause and link were not included.
	3. Item (12)--Position title was not included.
	4. Item (13)--Component failure field contains data when no component failure occurred.

14. LER Number: 85-011-00

Scores: Text = 9.0 Abstract = 8.4 Coded Fields = 8.7 Overall = 8.8

Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.

TABLE D-1. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
	3. 50.73(b)(4) were other personnel notified of the procedural change?
	4. All LER's are required to stand move. The corrective actions of LER 84-6 of Docket 50-249 should be stated in this LER if used as a reference which directly relates to your event.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Action taken to prevent the recurrence of similar events was not included.
	2. Abstract describes the text as opposed to summarizing it.
Coded Fields	1. Item (4) Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

15. LER Number: 85-012-00

Scores: Text = 7.6 Abstract = 8.1 Coded Fields = 8.2 Overall = 7.8

Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	3. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	4. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included.

TABLE D-1. (continued)

Section	Comments
	5. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. More details needed as opposed to a boiler plate statement.
	6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. Would these relays ever be blocked at power? Reference next to last sentence in first paragraph.
	7. Acronym(s) and/or plant specific designator(s) are undefined. Use of function names is preferable to "590-112 relays."
	8. OBSERVATION: Original corrective actions were inadequate. All those involved in relay blocking should have been informed of the problem.
Abstract	1. 50.73(b)(1)--Summary of system responses was inadequate.
	2. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined; namely 590-112 relays.
Coded Fields	1. Item (4) Title: Root cause and link was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

16. LER Number: 85-013-00

Scores: Text = 7.8 Abstract = 8.3 Coded Fields = 7.3 Overall = 7.9

Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.

TABLE D-1. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(D)--What caused the isolation valve to leak?
	3. Item (14)--The block checked was inconsistent with information in the text.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included. The text does not identify the failed valve.
	5. 50.73(b)(3)--The safety assessment should indicate whether or not the isolation valve leak was severe enough to cause a problem when the valve was need to isolate the level instrument for repair.
	6. 50.73(b)(4)--The corrective actions do not indicate whether or not the isolation valve needed repair and if repair was needed whether or not it was performed.
	7. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (4) Title: Root cause and link were not included. The title also contains undefined acronyms.
	2. Item (12)--Position title was not included.
	3. Item (13)--One or more component failure sub-fields were left blank. The field should have been filled out for the vlave. No other component failures occurred.

17. LER Number: 85-015-01

Scores: Text = 6.6 Abstract = 7.0 Coded Fields = 6.7 Overall = 6.7

Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included; i.e. why did the setpoints drift.

TABLE D-1. (continued)

Section	Comments
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Without knowing the root cause of the pressure switches drift; how do we know that this problem call not recur? A discussion of what was done to reduce the probablity of recurrence of the problem was not included.
	6. Acronym(s) and/or plant specific designator(s) are undefined; i.e. EHC.
Abstract	1. 50.73(b)(1)--Summary of root causes was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
Coded Fields	1. Item (4) Title: Root cause and result were not included.
	2. Item (11)--OBSERVATION: It appears it would have been more appropriate to report this event under paragraph(s) 50.73(a)(2)(ii).
	3. Item (12)--Position title was not included.

18. LER Number: 85-017-00

Scores: Text = 9.5 Abstract = 10.0 Coded Fields = 8.7 Overall = 9.6

Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
Abstract	1. No comments.

TABLE D-1. (continued)

Section	Comments
Coded Fields	1. Item (4) Title: Result (Tech. Spec. violation) was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

19. LER Number: 85-019-00

Scores: Text = 7.2 Abstract = 8.8 Coded Fields = 7.4 Overall = 7.7

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. The text should at least indicate the power level.
	2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--Were other sources of vibration investigated?
	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 was not included.
	5. 50.73(b)(2)(ii)(J)(2)(ii)--The text should indicate whether or not approved procedure was being followed.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. The long term corrective actions to prevent recurrence were not discussed. Perhaps a procedure change is called for so new employees will also be aware of the problem. OBSERVATION: Corrective actions should consider whether or not this model relay is used elsewhere in the plant where vibration could also be a problem.
Abstract	1. The abstract contained greater than 1400 characters.
Coded Fields	1. Item (4) Title: Root cause and link were not included.

TABLE D-1. (continued)

Section	Comments
	2. Item (8)--Information in field is inconsistent with text and/or abstract. The text does not discuss the effect on Unit 3.
	3. Item (12)--Position title was not included.
	4. Item (13)--No component failure actually occurred so this field should have been left blank.
20. LER Number: 85-020-00	
Scores: Text = 6.9 Abstract = 6 9 Coded Fields = 8.3 Overall = 7.0	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate; i.e. power level was not included.
	2. 50.73(b)(2)(ii)(C)-- information for occurrences was inadequate; i.e. date and time HPCI valve failed to close during surveillance test.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included; i.e., why were contacts dirty?
	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 was not included.
	5. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was inadequate. The time that the HPCI system was declared inoperable was not included.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.

TABLE D-1. (continued)

Section	Comments
	8. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of why the auxiliary contacts were replaced was not included.
	9. Some ideas were not presented clearly (hard to follow): i.e., why replace previously dirty contacts.
Abstract	1. 50.73(b)(1)--Summary of root causes was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. A discussion of why the auxiliary contacts were replaced was not included.
	3. Abstract describes the text as opposed to summarizing it.
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

21. LER Number: 85-022-00

Scores: Text = 4.5 Abstract = 4.5 Coded Fields = 7.7 Overall = 4.8

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate.
	2. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component and system failure was not included.
	4. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	5. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the system failure was not included.
	6. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. More details are needed as opposed to boiler plate statements.

TABLE D-1. (continued)

Section		Comments
	7.	50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	8.	50.73(h)(4)--Discussion of corrective actions taken or planned was not included. What was done to minimize the possibility of this event recurring? Was the problem with the spill valve fixed?
	9.	A logical transition does not exist between all ideas. Some ideas were not presented clearly (hard to follow). More details are needed concerning how the efforts to restore the off gas system caused a condenser vacuum decrease.
Abstract	1.	50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. See comment 9 above.
	2.	50.73(b)(1)--Summary of plant and system responses was inadequate.
	3.	50.73(b)(1)--Summary of root cause was inadequate. More information is needed concerning the spill valve problem.
	4.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
Coded Fields	1.	Item (4) Title: Root cause and linking statement were not included. "Manual" scram should have been indicated.
	2.	Item (12)--Position title was not included.
	3.	Item (13)--One or more component failure sub-fields were left blank.

TABLE D-1. (continued)

Section	Comments
22. LER Number: 85-024-00	
Scores: Text = 8.3 Abstract = 8.6 Coded Fields = 8.0 Overall = 8.4	
Text	An LER with an abstract only is acceptable, therefore, to repeat the abstract almost word-for-word in the text field is not necessary. The abstract only LER, however, must meet all the requirements for a text, while still remaining below the 1400 character limit required for abstracts.
	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. The text should indicate the power level.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	4. 50.73(b)(4)--What long term actions are needed to make sure new employees receive the proper guidance. For example, does the procedure need changing or should use of caution card be reviewed more often.
Abstract	1. The abstract contained greater than 1400 characters.
Coded Fields	1. Item (4) Title: Root cause and result were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

D-2. SPECIFIC LER COMMENTS FOR DRESDEN 3 (249)

Section	Comments
1. LER Number: 84-006-01	
Scores: Text = 7.3 Abstract = 6.5 Coded Fields = 8.2 Overall = 7.2	
Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. More details as to why the status of various pumps made the safety significance minimal.
	4. Some ideas were not presented clearly (hard to follow); i.e., it is unclear why the reactor has to be vented @ less than 149°F. Why is the 149°F limit conservative?
	5. Acronym(s) and/or plant specific designator(s) are undefined; i.e., CECO.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate. Personnel error was implied by corrective actions.
	2. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
	3. Abstract does not adequately summarize the text.
	4. Abstract contradicts the text; i.e. temperature range maintained by recirculation pumps.
Coded Fields	Item (4) Title: Root cause was not included.
	Item (6) and (7)--The date appears to have been typed two spaces two far to the left. Revision number is missing. Revision number on page two is one(1). Cover letter refers to the LER as revision zero(0).
	Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments
	Item (13)--Component failure field contains data when no component failure occurred.

2. LER Number: 84-007-01

Scores: Text = 6.4 Abstract = 7.5 Coded Fields = 7.9 Overall = 6.9

Text

1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Power level should have been provided.

2. 50.73(b)(2)(ii)(C)--Date and approximate time information for occurrences was not included.

3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.

4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure was not included.

5. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate.

6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Manufacturer name should have been provided.

7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.

8. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. What was done to prevent recurrence of the failure? Do the filters need to be changed more often?

9. A logical transition does not exist between all ideas. What is the significance (without additions statements) of providing the various filter replacement schedules?

TABLE D-2. (continued)

Section	Comments
Abstract	1. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate. The corrective actions should indicate that all H. Pratt valves will be modified.
Coded Fields	1. Item (4) Title: Root cause and link were not included. 2. Item (12)--Position title was not included. 3. Item (13)--A cause code of "B" would probably be more appropriate. Cause code "B" is appropriate for a component which is unable to meet its intended function. A more appropriate system code would appear to be "BF."

4. LER Number: 84-010-00

Scores: Text = 6.3 Abstract = 6.0 Coded Fields = 9.3 Overall = 6.5

Section	Comments
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate; i.e., power level. 2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included. 3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included. 4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failure was not included. 5. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included. OBSERVATION: Operator actions that affected the course of the event should be discussed even if those actions only included the fact that he monitored the event. 6. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate. To say "all emergency systems operated as designed" is an inadequate discussion of safety system responses.

TABLE D-2. (continued)

Section	Comments
	7. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	8. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	9. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state.
	10. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of system responses and personnel responses were not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. An additional statement that "other feedwater regulating valves with similar coupling were checked and scheduled for repair" would be adequate.
	3. Abstract does not adequately summarize the text.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (4) Title: Root cause was not included.
	3. Item (12)--Position title was not included.

5. LER Number: 84-013-00

Scores: Text = 8.5 Abstract = 6.3 Coded Fields = 7.7 Overall = 7.8

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.

TABLE D-2. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	4. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	5. Acronym(s) and/or plant specific designator(s) are undefined. Valve 3-1601-63 should have been referred to by its system/functional name as well. GSEP is undefined.
Abstract	1. 50.73(b)(1)--Summary of root cause (of the personnel error) was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text.
	4. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
	5. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
Coded Fields	1. Item (4) Title: Root cause and result was not included. This "title" is extremely misleading.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

6. LER Number: 84-014-00

Scores: Text = 7.1 Abstract = 9.0 Coded Fields = 7.2 Overall = 7.7

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. The text should indicate the power level.

TABLE D-2. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	5. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included.
	6. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.
	7. 50.73(b)(2)(ii)(J)(2)(iv)--The text should be more specific about the type of personnel involved.
	8. 50.73(b)(3)--OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	9. 50.73(b)(4)--OBSERVATION: The text should discuss actions to be taken to prevent future similar events. For example, upgraded or more frequent training.
	10. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (4)--Undefined acronym.

TABLE D-2. (continued)

Section	Comments
	3. Item (4) Title: Root cause and result were not included. The real problem in this event is a technical specification violation due to personnel error.
	4. Item (12)--Position title was not included.
	5. Item (13)--Component failure field contains data when no component failure occurred.
7. LER Number: 84-018-01	
Scores: Text = 4.0	Abstract = 6.6 Coded Fields = 8.3 Overall = 5.2
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate; i.e., power level.
	2. 50.73(b)(2)(ii)(C)--Not all dates and approximate times were given.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate; i.e., root cause of bad switch in reset circuitry of controlled and root cause of disc and stem separation.
	4. 50.73(b)(2)(ii)(E)--The failure mode discussion of each failed component was not included; i.e., what would be the failure mode of the master controller with its intermittent problem.
	5. 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 was not included.
	6. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included. During the course of the event what did the operators do and see?
	7. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was not included.

TABLE D-2. (continued)

Section	Comments
Abstract	1. 50.73(b)(1)--Summary of plant and system responces was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. See commend 8 above.
Coded Fields	1. Item (1)--Unit number was not included.
	2. Item (4) Title: Root cause and link was not included.
	3. Item (12)--Position title was not included.

3. LER Number: 84-009-00

Scores: Text = 7.7 Abstract = 7.3 Coded Fields = 8.1 Overall = 7.6

Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was inadequate.
	4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate. Include the model number of the fault valve operator.
	5. 50.73(b)(3)--OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.

TABLE D-2. (continued)

Section	Comments
	8. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	9. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	10. OBSERVATION: The availability of other systems or components capable of mitigating the consequences of the event should be discussed. If no other systems or components were available the text should so state.
	11. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	12. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Is there a probability of the event occurring with 3B FWRV?
	13. All LER's are required to stand alone. A summary of the details of CRDJ-7 should have been written into the LER.
	14. Some ideas were not presented clearly (hard to follow). It is not clear with the CRD did not insert fully.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included; i.e., bad switch.
	2. 50.73(b)(1)--Summary of system responses and personnel responses was 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.
	5. Abstract should not contain a reference.

TABLE D-2. (continued)

Section	Comments
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

8. LER Number: 84-023-00

Scores: Text = 8.5 Abstract = 9.6 Coded Fields = 8.4 Overall = 8.8

Text	1. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	4. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. It is not clear from the text whether vibrational displacement readings were taken prior to declaring the HPCI operable. More details concerning the missing keepers in the turbine alignment keys are needed. Is there a generic problem here?
	5. A logical transition does not exist between all ideas.
Abstract	1. No comments.
Coded Fields	1. Item (4) Title: Root cause and link was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

9. LER Number: 85-002-00

Scores: Text = 7.5 Abstract = 8.5 Coded Fields = 7.9 Overall = 7.8

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Include the power level in the text.

TABLE D-2. (continued)

Section	Comments
	2. 50.73(b)(2)(ii)(C)--Date of event needs to be included in the text.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was 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 was not included.
	6. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	7. 50.73(b)(4)--Are other similar level indicators located elsewhere, and should these also be considered for replacement to prevent similar occurrences?
	8. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included. The abstract should state specifically that a personnel error occurred.
	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. No mention of a safety assessment was made in the text.
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments

10. LER Number: 85-003-00

Scores: Text = 7.0 Abstract = 6.5 Coded Fields = 7.8 Overall = 6.9

Text

1. 50.73(b)(2)(ii)(C)-- Approximate times information for occurrences was not included.

2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included, i.e., belts.

3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.

4. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.

5. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.

6. All LERs should stand alone. What was contained in the I.E. Information Notice No. 83-56

7. Did the HPCI room stay below 200°F for the full period of HPCI inoperability (Jan to Feb)

Abstract

1. 50.73(b)(1)--Summary of root cause was not included, i.e., belt.

2. Abstract does not adequately summarize the text.

3. Abstract contradicts the text, i.e., reportable occurrence 85-03 vice 85-06.

4. Abstract should not contain a reference.

Coded Fields

Item (4) Title: Root cause and result (effect) wire were not included.

Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments
11. LER Number: 85-005-00	
Scores: Text = 9.1 Abstract = 8.6 Coded Fields = 7.6 Overall = 8.8	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was 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 were available the text should so state.
	3. Some conclusions reached are inconsistent with the facts presented. The last sentence on page 2 indicates that the diesel generator would have started on conditions indicative of a large break. This is not consistent with the idea presented in the safety significance sentence (page 3).
	4. Acronym(s) and/or plant specific designator(s) are undefined; namely, A-man and NSO.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. Some of the more important actions to prevent recurrence should have been mentioned.
Coded Fields	1. Item (4) Title: Root cause and result were not included. Personnel and diesel should have been mentioned.
	2. Item (8)--Information in field is inconsistent with text and/or abstract.
	3. Item (12)--Position title was not included.
	4. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. (continued)

Section	Comments
12. LER Number: 85-008-00	
Scores: Text = 7.0 Abstract = 7.5 Coded Fields = 8.4 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Include the power level in the text.
	2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. The text should be specific as to why the safety consequences are minimal.
	5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. What actions will be taken to prevent recurrence?
	6. Acronym(s) and/or plant specific designator(s) are undefined. It is not clear what the designator 2/3 means.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	2. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined. As in the text, the meaning of 2/3 is not clear.
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (8)--Information in field is inconsistent with text and/or abstract. How was Unit 2 affected?
	3. Item (12)--Position title was not included.
	4. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. (continued)

Section	Comments

13. LER Number: 85-009-00

Scores: Text = 7.9 Abstract = 3.0 Coded Fields = 7.7 Overall = 6.4

Text

1. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.

2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.

3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. More detail as to why other isolation valves in their proper position made the safety significance minimal.

4. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.

5. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate, i.e., the text does not state that the torus sight glass manual isolation valve was re-shut.

Abstract

1. 50.73(b)(1)--Summary of root cause was not included.

2. 50.73(b)(1)--Summary of personnel responses was not included.

3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.

4. Abstract does not adequately summarize the text.

Coded Fields

1. Item (4) Title: Root cause and result (effect) were not included.

2. Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments
14. LER Number: 85-010-00	
Scores: Text = 7.5 Abstract = 6.9 Coded Fields = 7.7 Overall = 7.3	
Text	1. 50.73(b)(2)(ii)(C)--Date and approximate times information for occurrences was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate.
	4. OBSERVATION: It would aid others to knwo the manufacturer and model number of the level sensors so that they can consider taking precautions against similar vibration induced actuations.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	6. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. 50.73(b)(1)--Summary of system responses was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined.
	4. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract. Abstract tells the reader it was a "full" scram.
Coded Fields	1. Item (4) Title: Root cause (suspected) and link was not included.
	2. Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments
	3. Item (13)--One or more component failure sub-fields were left blank. We realize that it wasn't really a component failure but see comment 4 above.
15. LER Number: 85-011-01	
Scores: Text = 7.3 Abstract = 9.1 Coded Fields = 8.1 Overall = 7.9	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Include the power level in the text.
	2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(3)--Be specific about the doses received and be specific why there was no safety significance. Apparently 100 m is acceptalbe, and if it is this should be noted.
	5. 50.73(b)(4)--The LER should state if this is considered an isolated incident, so that it is more obvious to a reader that no long term corrective actions are required.
	6. Acronym(s) and/or plant specific designator(s) are undefined.
Abstract	1. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract. The date is given in the abstract but not the text.
Coded Fields	1. Item (4)--Title should not contain acronyms.
	2. Item (4) Title: Root cause and link were not included.
	3. Item (12)--Position title was not included.

TABLE D-2. (continued)

Section	Comments
	4. Item (13)--Component failure field contains data when no component failure occurred.
16. LER Number: 85-012-00	
Scores: Text = 4.0 Abstract = 8.0 Coded Fields = 8.9 Overall = 5.7	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(C)--Dates and approximate times information for occurrences was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included; i.e., the root cause of the feedwater check valve leaking excessively its found during the unit 3 short outage was not included.
	4. 50.73(b)(2)(ii)(E)--The mechanism (immediate cause) discussion of each failed component was not included; i.e., the mechanism of the feedwater check valve leaking excessively as found during the Unit 3 short outage ws not inlcuded.
	5. 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 was not included.
	6. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was not included; i.e., the event during the Unit 3 short outage.
	7. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text wasnot included., i.e., valve and pressure seal ring.
	8. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included; i.e., safety assessment of feedwater check valve leak found during Unit 3 short outage.

TABLE D-2. (continued)

Section	Comments
	9. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate; i.e., corrective actions taken or planned to fix feedwater check valve found leaking during Unit 3 short outage.
	10. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined. This LER is confusing as to whether the feedwater check valve found leaking during the Unit 3 short outage is the same as the check valve found leaking prior to the outage. The valve number is the same (3-220-62A), but without more informatio such as dates and times, this LER is confusing. If the valves are the same, then two separate LERs are needed to report two separate technical specifications violations of the same valve since it does not seem possible that the valve would leak at greater than technical specification leak rate in less than or equal to one month with normal wear.
Abstract	1. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract.
	2. Abstract contradicts the text.
	3. Abstract does not adequately summarize the text.
Coded Fields	1. Item (4) Title: Root cause were not included.
	2. Item (12)--Position title was not included.

17. LER Number: 85-013-00

Scores: Text = 8.3 Abstract = 7.4 Coded Fields = 7.7 Overall = 8.0

Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Reactor power level and refueling floor radiation level would be appropriate.
	2. 50.73(b)(2)(ii)(C)--Date and times information for occurrences was not included. They do appear in abstract but the requirement is that they appear in the text.

TABLE D-2. (continued)

Section	Comments
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occured under what were considered the most severe conditions, the text should so state.
	5. Acronym(s) and/or plant specific designator(s) are undefined. the reader has to go to the title for the precise funcion of ARM 3-1705-16.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	2. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text, therefore, the text should discuss all information summarized in the abstract; see Comment 2 above.
	3. Abstract contains acronym(s) and/or plant specific designator(s) which are undefined. Same comment as 5 above.
Coded Fields	1. Item (4) Title: Root cause and result was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

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

OCT 17 1985

MEMORANDUM FOR: Charles E. Norelius, Director
Division of Reactor Projects, Region III

FROM: Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

SUBJECT: SALP ASSESSMENT INPUT FOR QUAD CITIES, UNITS 1 AND 2

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 C) is the assessment of the LERs from Quad Cities, Units 1 and 2. In general, we find these LERs to be of 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.

In addition, we recently completed a study (AEOD/P503) of unplanned reactor trips that occurred in 1984. A summary table of reactor trip frequencies from that study is provided in Attachment A.

Finally, we also recently completed a study (AEOD/P503) of ESF actuation that occurred during the first half of 1984. Several summary tables from that study are provided in Attachment B.

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

T. A. Ippolito

Thomas A. Ippolito, Deputy Director
Office for Analysis and Evaluation
of Operational Data

Enclosures:
As Stated

cc: E. Schweibinz, RIII
M. Pearson, RIII
C. Miller, INEL

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
WPPSS 2	4	20	7	17	2983.0	5.70	175.5
CALLAWAY 1	1	13	6	6	1131.5	5.30	188.6
GRAND GULF 1	2	6	3	4	1010.0	3.96	252.5
SUSQUEHANNA 2	2	8	1	7	2145.9	3.26	306.6
SALEM 1	0	10	3	7	2672.3	2.62	381.8
MCGUIRE 2	5	13	0	16	6138.3	2.61	383.6
SALEM 2	0	10	2	8	3386.0	2.36	423.3
HATCH 2	0	7	0	7	3108.7	2.25	444.1
DIABLO CANYON 1	0	7	3	2	967.1	2.07	483.6
LASALLE 2	3	8	2	9	4469.8	2.01	496.6
SURRY 2	2	13	2	12	7435.3	1.61	619.6
BROWNS FERRY 3	2	0	1	1	700.7	1.43	700.7
LASALLE 1	0	9	0	9	6280.0	1.43	697.8
SEQUOYAH 2	0	10	0	9	6334.0	1.42	703.8
NORTH ANNA 1	2	7	2	6	4759.9	1.26	793.3
ST LUCIE 2	1	9	0	9	7379.2	1.22	819.9
TURKEY POINT 4	0	11	3	6	5079.8	1.18	846.6
SURRY 1	1	7	2	6	5293.7	1.13	882.3
D C COOK 2	2	6	1	6	5294.8	1.13	882.5
SEQUOYAH 1	1	12	4	7	6206.1	1.13	886.6
SUMMER	0	12	5	6	5553.4	1.08	925.6
SUSQUEHANNA 1	1	6	0	7	6549.3	1.07	935.6
DRESDEN 3	0	9	4	4	3889.0	1.03	972.3
TROJAN	0	7	2	5	4895.4	1.02	979.1
INDIAN POINT 3	0	9	0	7	6941.6	1.01	991.7
TURKEY POINT 3	1	8	1	7	7366.6	0.95	1052.4
LA CROSSE	1	8	0	7	7437.0	0.94	1062.4
ST.LUCIE 1	2	4	1	5	5555.2	0.90	1111.0
HATCH 1	3	7	3	5	5638.7	0.89	1127.7
MCGUIRE 1	0	5	0	5	6090.8	0.82	1218.2
SAN ONOFRE 3	0	9	3	4	5070.7	0.79	1267.7
ARKANSAS 2	0	15	6	6	7631.9	0.79	1272.0
YANKEE ROWE	2	3	0	5	6398.6	0.78	1279.7
RANCHO SECO 1	0	4	0	4	5338.8	0.75	1334.7
BRUNSWICK 2	0	3	1	2	2650.1	0.75	1325.1
DUANE ARNOLD	0	6	1	5	6627.1	0.75	1325.4
DAVIS-BESSE 1	1	4	0	4	5529.0	0.72	1382.3
FARLEY 2	1	5	0	6	8375.7	0.72	1396.0

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
BRUNSWICK 1	0	7	2	5	7023.8	0.71	1404.8
CALVERT CLIFFS 1	4	1	0	5	7531.0	0.66	1506.2
PALISADES	0	1	0	1	1550.5	0.64	1550.5
PEACH BOTTOM 3	1	4	0	5	7757.7	0.64	1551.5
QUAD CITIES 1	1	3	0	3	4766.9	0.63	1589.0
ZION 1	0	6	2	4	6319.8	0.63	1579.9
BROWNS FERRY 1	4	4	3	5	8067.4	0.62	1613.5
BEAVER VALLEY 1	1	6	0	4	6476.3	0.62	1619.1
OCONEE 3	0	4	0	4	6520.7	0.61	1630.2
MAINE YANKEE	1	7	3	4	6688.8	0.60	1672.2
SAN ONOFRE 2	1	4	2	3	5272.4	0.57	1757.5
FITZPATRICK	0	4	0	4	7087.2	0.56	1771.8
ARKANSAS 1	0	3	0	3	6222.4	0.48	2074.1
DRESDEN 2	0	3	0	3	6511.4	0.46	2170.5
INDIAN POINT 2	1	5	2	2	4718.4	0.42	2359.2
OCONEE 1	0	3	0	3	7452.4	0.40	2484.1
D.C.COOK 1	0	3	0	3	8085.9	0.37	2695.3
PRAIRIE ISLAND 1	0	4	1	3	8321.3	0.36	2773.8
BROWNS FERRY 2	0	3	0	2	5895.7	0.34	2947.9
COOPER	0	3	1	2	5952.6	0.34	2976.3
NORTH ANNA 2	1	4	2	2	6136.0	0.33	3068.0
ZION 2	2	6	5	2	6285.2	0.32	3142.6
HADDAM NECK	1	3	1	2	6515.6	0.31	3257.8
CALVERT CLIFFS 2	0	2	0	2	6630.2	0.30	3315.1
QUAD CITIES 2	1	4	0	2	6988.6	0.29	3494.3
VERMONT YANKEE	0	2	0	2	7115.2	0.28	3557.6
KEWAUNEE	0	5	2	2	7570.5	0.26	3785.3
CRYSTAL RIVER 3	0	2	0	2	8346.5	0.24	4173.3
MILLSTONE 2	1	2	1	2	8596.8	0.23	4298.4
FORT CALHOUN 1	0	1	0	1	5386.3	0.19	5386.3
R.E.GINNA	0	1	0	1	6848.7	0.15	6848.7
FARLEY 1	0	2	1	1	7005.8	0.14	7005.8
BIG ROCK POINT	0	3	3	0	6981.9	0.00	.
SAN ONOFRE 1	0	0	0	0	888.6	0.00	.
OYSTER CREEK	0	2	2	0	1700.0	0.00	.
NINE MILE POINT 1	0	1	1	0	6414.0	0.00	.
MILLSTONE 1	0	0	0	0	6990.2	0.00	.
H.B.ROBINSON	0	1	0	0	616.1	0.00	.

APPENDIX B 1984 REACTOR TRIP RATES

NAME	MANUAL	AUTO MATIC	LESS THAN OR EQUAL 15% POWER	GREATER THAN 15% POWER	CRITICAL HOURS	TRIP RATE PER 1000 HOURS POWER GT 15	MEAN TIME BETWEEN TRIPS POWER GT 15%
MONTICELLO	0	0	0	0	810.6	0	.
POINT BEACH 1	1	1	0	0	6420.1	0	.
OCONEE 2	0	0	0	0	8784.0	0	.
PEACH BOTTOM 2	0	0	0	0	2583.9	0	.
PILGRIM	0	0	0	0	170.3	0	.
POINT BEACH 2	0	1	0	0	7544.2	0	.
PRAIRIE ISLAND 2	0	0	0	0	7844.0	0	.
BYRON 1	2	0	0	0	0.0	.	.

TABLE A.1
NUMBER OF ESF ACTUATIONS REPORTED BY
COMMERCIAL U. S. NUCLEAR POWER PLANTS
JANUARY 1, 1984 THROUGH JUNE 30, 1984

UNIT	ESF ACTUATIONS
SAN ONOFRE 2	82
SEQUOYAH 1	51
WASHINGTON NUCLEAR 2	37
MONTICELLO	26
D. C. COOK 2	25
DUANE ARNOLD	25
SEQUOYAH 2	21
LA SALLE 2	20
FORT CALHOUN	20
GRAND GULF 1	19
LA SALLE 1	17
SAN ONOFRE 3	14
BRUNSWICK 1	10
SUSQUEHANNA 1	10
DIABLO CANYON 1	9
MCGUIRE 1	7
BRUNSWICK 2	6
KEWAUNEE	6
MAINE YANKEE	6
PALISADES	6
SUMMER 1	6
ARKANSAS NUCLEAR ONE 2	5
BROWNS FERRY 1	4
PEACH BOTTOM 2	4
BROWNS FERRY 3	3
D. C. COOK 1	3
CRYSTAL RIVER 3	3
TROJAN	3
TURKEY POINT 3	3
TURKEY POINT 4	3
YANKEE ROWE	3
BEAVER VALLEY	2
BROWNS FERRY 2	2
CALLAWAY	2
FITZPATRICK	2
INDIAN POINT 3	2
LACROSSE	2
MILLSTONE 2	2
NINE MILE POINT	2
SALEM 1	2
SAN ONOFRE 1	2
SUSQUEHANNA 2	2
THREE MILE ISLAND 1	2
VERMONT YANKEE	2
ZION 1	2

UNIT	ESF ACTUATIONS
ARKANSAS NUCLEAR ONE 1	1
BIG ROCK POINT	1
CALVERT CLIFFS 2	1
COOPER	1
DAVIS BESSE 1	1
FT. ST. VRAIN	1
GINNA	1
E. I. HATCH 2	1
NORTH ANNA 1	1
OYSTER CREEK	1
POINT BEACH 2	1
PRAIRIE ISLAND 2	1
QUAD CITIES 2	1
RANCHO SECO	1
ROBINSON 2	1
SURRY 1	1
CALVERT CLIFFS 1	0
CONNECTICUT YANKEE	0
DRESDEN 2	0
DRESDEN 3	0
FARLEY 1	0
FARLEY 2	0
E. I. HATCH 1	0
HUMBOLDT BAY	0
INDIAN POINT 2	0
MCGUIRE 2	0
MILLSTONE 1	0
NORTH ANNA 2	0
OCONEE 1	0
OCONEE 2	0
OCONEE 3	0
PEACH BOTTOM 3	0
PILGRIM 1	0
POINT BEACH 1	0
PRAIRIE ISLAND 1	0
QUAD CITIES 1	0
SALEM 2	0
ST. LUCIE 1	0
ST. LUCIE 2	0
SURRY 2	0
THREE MILE ISLAND 2	0
ZION 2	0

Definitions

1. Valid (design basis) actuation: the measured parameter actually reached the intended actuation setpoint and the condition that the ESF was intended to mitigate actually existed.

2. Valid (non-design basis) actuation: the measured parameter actually reached the intended actuation setpoint but the condition that the ESF was intended to mitigate did not exist. These ESF actuations resulted primarily because the actuation setpoints, as governed by the technical specification, were set very close to the parameter background levels experienced during various unit operational modes. These ESF actuations were considered to be valid but did not represent a required response to a design basis event. Rather, they were actuations resulting from non-design basis conditions, such as a accumulation of radioactive trash in front of a radiation monitor during refueling operations. These valid but non-design basis actuations were primarily associated with either toxic gas monitors or radiation-related monitors. The ESF actuations which resulted from these setpoints being reached were principally associated with isolation of the containment or auxiliary building, or with isolation of the control room emergency ventilation.

3. False actuation: the measured parameter did not reach the intended actuation setpoint. These actuations were a result of something other than the measured parameter reaching its intended setpoints. They were caused fairly equally by spurious signals, equipment failures, or problems related to personnel. These false ESF actuations principally affected systems whose functions were associated with either isolation or ventilation. The main parameters involved with these false actuations were radiation and loss of power.

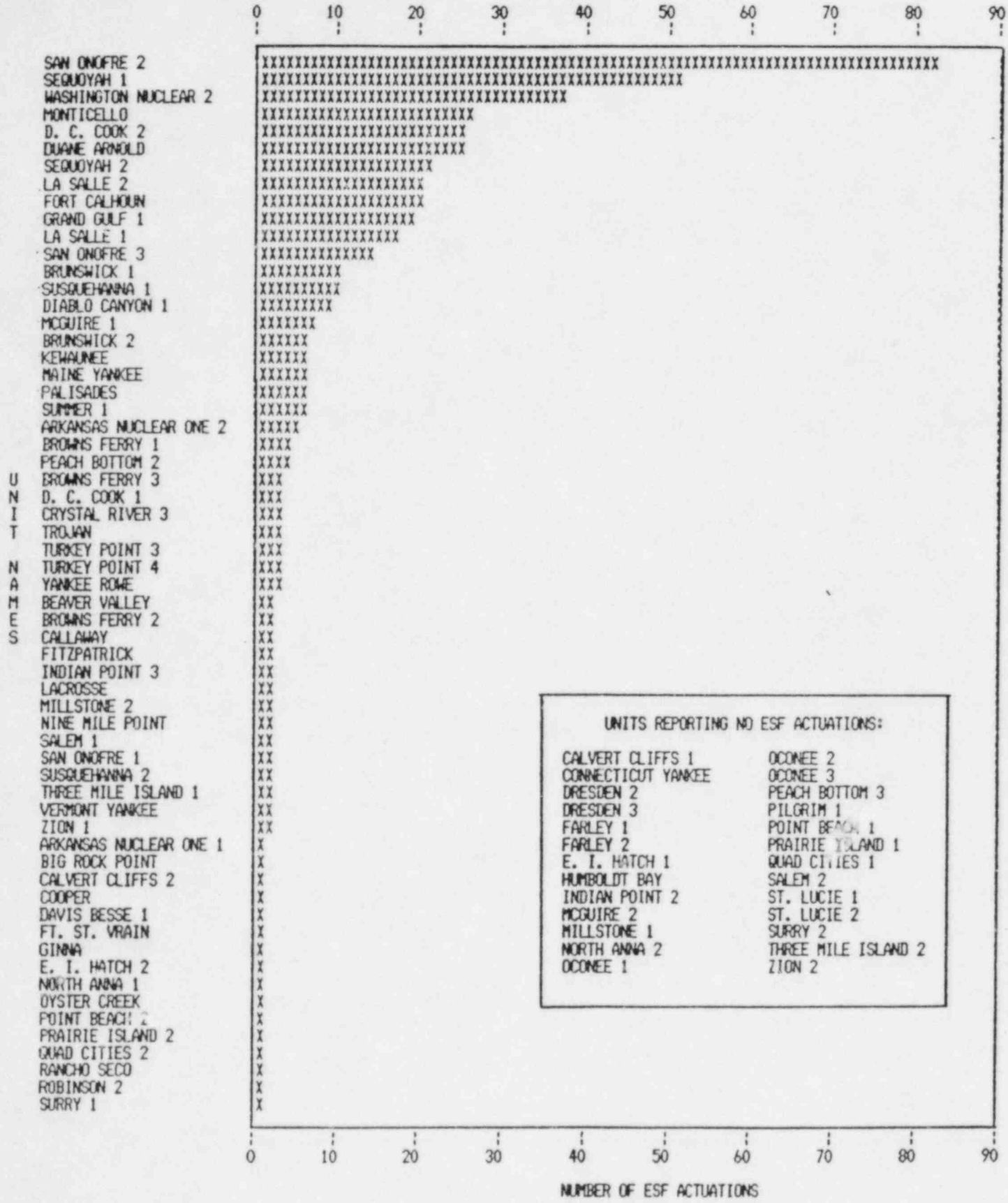
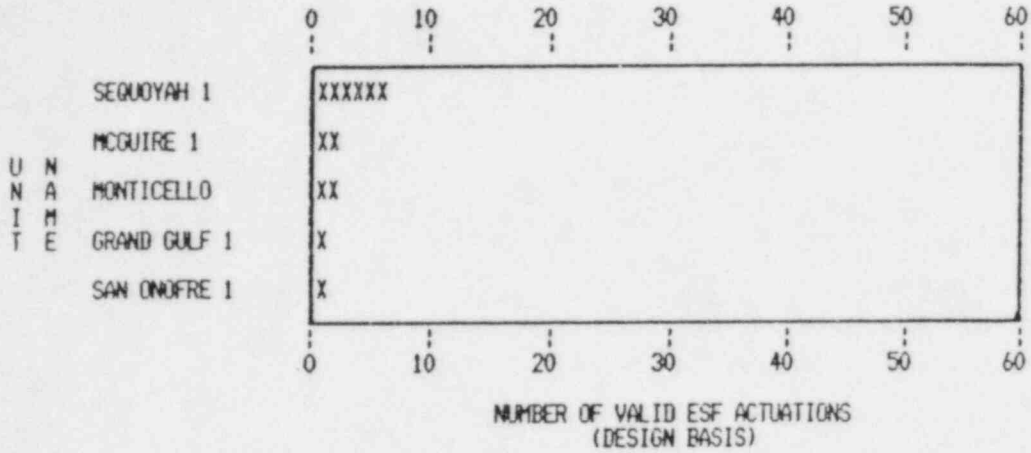


Figure 1: Unit Distribution of Engineered Safety Features Actuations (January - June 1984)



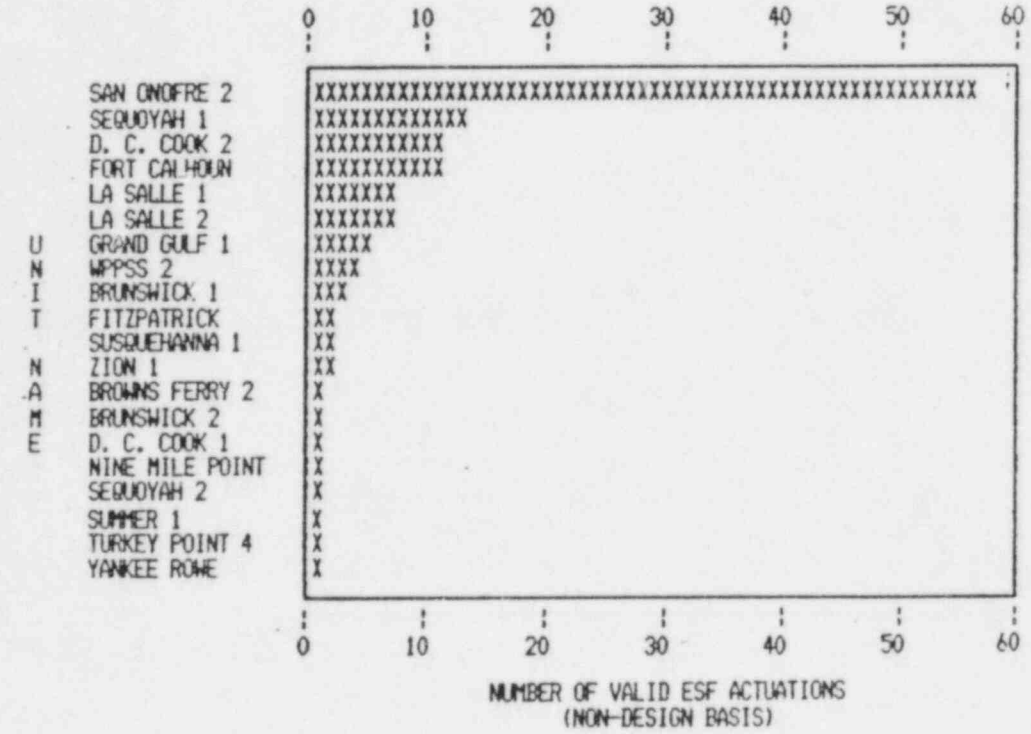


Figure 3: Unit Distribution of Valid ESF Actuations

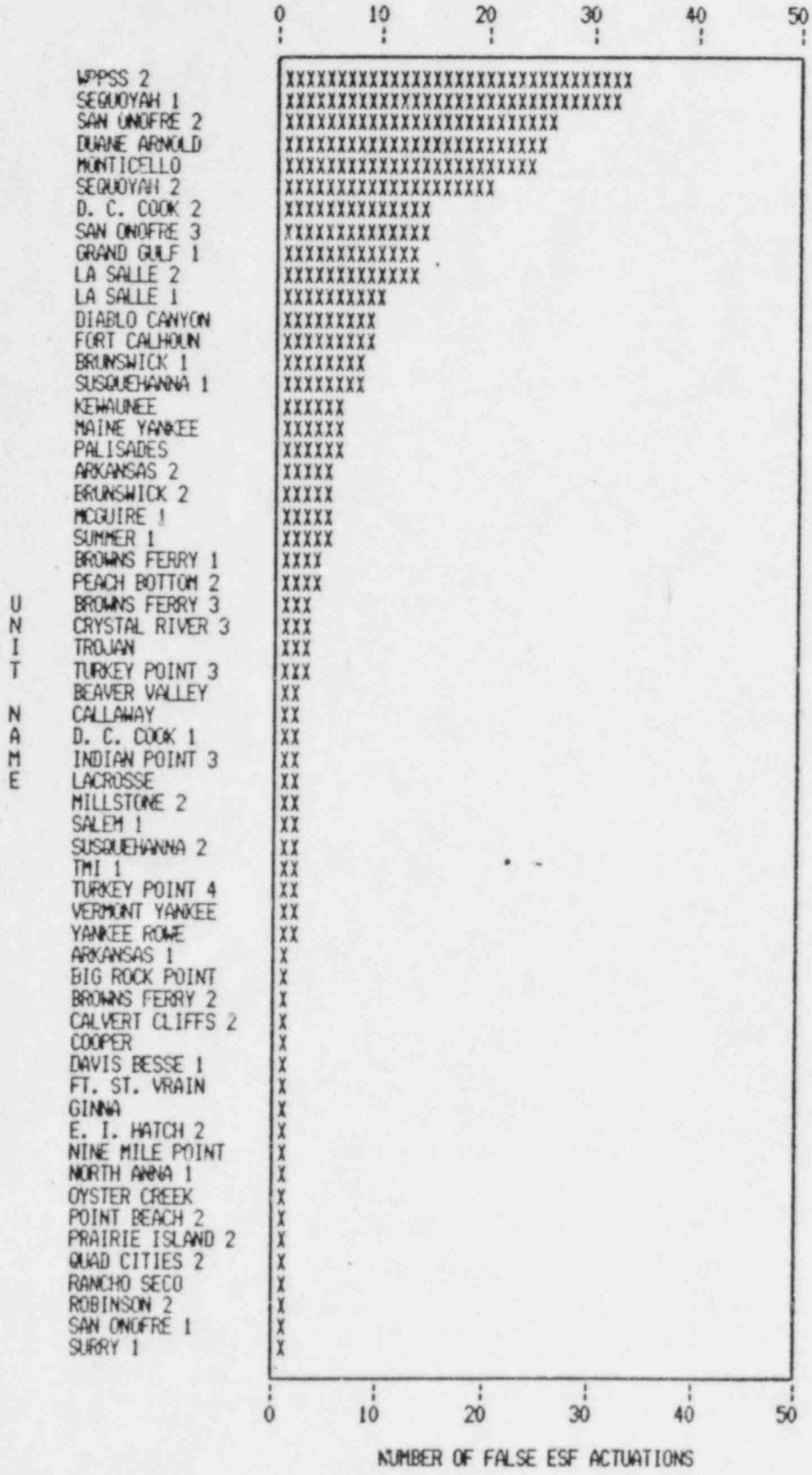


Figure 8: Unit Distribution of False ESF Actuations

ENCLOSURE

AEOD INPUT TO SALP REVIEW FOR QUAD CITIES 1 AND 2

Introduction

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Quad Cities 1 and Quad Cities 2 during the June 1, 1984 to September 30, 1985 Systematic Assessment of Licensee Performance (SALP) assessment period, a sample of each unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG/CR-4178[1]. The sample consisted of 10[a] LERs for Quad Cities 1 and 11 LERs for Quad Cities 2, which represents seventy-seven and fifty percent, respectively of the LERs that were available for review at the time the evaluation 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 consisted of a detailed review of each selected LER to determine how well the content of its text, abstract, and coded fields met NUREG-1022[2], and Supplements 1[3] and 2[4] to NUREG-1022.

The evaluation process for each LER was divided into two parts. The first part of the evaluation consists of documenting comments specific to

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a. Ten is considered to be the minimum number of LERs necessary to have a representive sample. The Quad Cities 1 file contained 13 LERs for the assessment period at the time the evaluation was started.

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

Evaluation Results

No attempt is made at this time to explain differences between results for multiple units beyond providing general comments, when applicable, in the Discussion of Results. However, as data is collected, scores for the units that have been evaluated will be presented for comparison purposes.

The results of the evaluation are presented by unit and 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 specific 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 for each LER (Appendix D). When referring to these appendices, the reader is cautioned not to try to directly correlate the number of comments on an individual comment sheet with the assigned scores, as the analyst has flexibility to consider the magnitude of a deficiency when assigning scores.

In the case where multiple units are evaluated, the results are submitted in one enclosure and the summary tables are assigned an alphabetic character so that the different units can reference the same table numbers. For example in this enclosure, the letters A and B assigned to a table number correspond to Unit 1 and 2, respectively.

Discussion of Results

A discussion of the analysts' conclusions 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 analyst's opinion of each units performance (on a scale of 0 to 10) in submitting LERs that meet the requirements of 10 CFR 50.73(b).

The analysts made no attempt to assess differences in scores or the number of deficiencies between Quad Cities 1 and Quad Cities 2 because sufficient information is not available concerning how LERs are generated or reviewed at each unit.

Evaluation Results for Quad Cities 1

Table 1A presents the average scores for the sample of LERs evaluated for Quad Cities 1. The reader is cautioned that the scores resulting from the methodology used for this evaluation are not directly comparable to the scores contained in NUREG/CR-4178 due to refinements in the methodology. In order to place the scores provided in Table 1A in perspective, the scores from other units that have been evaluated using this methodology are provided in Table 2. Additional units will be added as they are evaluated. Table 3A and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1A. For example, Quad Cities 1's average score for the text of the LERs that were evaluated is 7.9 out of a possible 10 points. From Table 3A it can be seen that the text score actually resulted from the review and evaluation of 17 different requirements ranging from the discussion of plant operating

TABLE 1A. SUMMARY OF SCORES[a] QUAD CITIES 1

	Average	High	Low
Text	7.9	9.4	5.3
Abstract	6.5	9.0	1.9
Coded Fields	8.4	9.3	7.4
Overall	7.5[b]	8.8	5.3

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

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

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3A. LER REQUIREMENT PERCENTAGE SCORES FOR QUAD CITIES 1

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	100 (10)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	73 (10)
(2)(ii)(D) - - Root cause and intermediate cause(s)	75 (10)
(2)(ii)(E) - - Mode, mechanism, and effect	95 (8)
(2)(ii)(F) - - EIIS Codes	65 (10)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	50 (6)
(2)(ii)(I) - - Method of discovery	100 (9)
(2)(ii)(J)(1) - Operator actions affecting course	86 (7)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	60 (6)
(2)(ii)(K) - - Safety system responses	86 (6)
(2)(ii)(L) - - Manufacturer and model no. information	80 (5)
(3) - - - - - Assessment of safety consequences	66 (10)
(4) - - - - - Corrective actions	75 (10)
(5) - - - - - Previous similar event information	70 (10)
(2)(i) - - - - Text presentation	82 (10)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	95 (10)
- Description of plant, system, component, and/or personnel responses	94 (9)
- Root cause information	50 (10)
- Corrective Action information	25 (10)
- Abstract presentation	67 (10)

TABLE 3A. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	100 (10)
4 - - - - - - Title	56 (10)
5, 6, and 7 - Event date, LER No., and report date	100 (10)
8 - - - - - - Other facilities involved	90 (10)
9 and 10 - - Operating mode and power level	100 (10)
11 - - - - - Reporting requirements	98 (10)
12 - - - - - Licensee contact information	76 (10)
13 - - - - - Coded component failure information	60 (10)
14 and 15 - - Supplemental report information	90 (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.

conditions before the event [10 CFR 50.73(b)(2)(ii)(A)] to text presentation. The percent scores in the text summary section of Table 3A 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 3A will quickly point out those areas where the licensee is experiencing the most difficulty in preparing LERs. For example, the licensee's percentage score for requirement 50.73(b)(2)(ii)(C), (i.e., dates and approximate times for occurrences) is only 73%. Seven of the 10 LERs failed to provide adequate dates or times. This deficiency contributed to the fact that for three of six LERs involving train unavailability, [i.e., requirement 50.73(b)(2)(ii)(H)], the unavailability time could not be estimated. Dates and especially times are important in that they enable the reader to gain a clear understanding of the sequence of occurrences. Times should be provided for occurrences such as: discoveries, initiations of safety systems, scrams, large transients, placing a component out of service, returning a system to service, and the plant being plcaed in a safe and stable condition. The remaining deficiencies will be discussed in their relative order of importance.

The Quad Cities 1 LERs were generally deficient in the area of assessing the safety consequences of the event. Six of the ten LERs did not adequately discuss safety consequences and implications. Safety consequences were addressed in most of the LERs but only in terms of stating that "the consequences were minimal" or that "none existed". Justification for these statements consisted of statements such as "because all systems operated normally" or "because other equipment was available if needed". This is good information but it does not address the situation in which the event might have occurred under a different set of initial conditions (e.g., higher power level) or conditions that would have magnified the consequences. An example is the situation where during a test a personnel error results in the actuation of an Engineered Safety

Feature. The safety assessment for this event might state that "the safety consequences were minimal because the reactor was shutdown". This is an inadequate response however, if this same test can be performed during power operation. The reasons given to justify concluding that there were no safety consequences or that they were minimal must be applicable for all probable scenarios.

Four of the six LERs involving personnel errors were inadequate in the area of providing details such as whether the personnel error was cognitive and/or procedural. This information can often be inferred from the corrective actions, but by doing so, the reader is not always sure of what actually prompted the licensee to take the actions. For example, if the licensee's corrective actions consist of discussing the event with those involved and changing a procedure, the reader must assume that both personnel and the procedure error contributed somewhat equally to the event. However, this may not be the case. Changing the procedure may have been just an added precaution (e.g., adding a caution notice prior to a certain step to remind personnel of something they were already expected to know). Stating in the LER that the cause was due to personnel error is good but such statements must be followed by a discussion of the circumstances that contributed to the personnel error.

One LER (i.e., Quad Cities 1/84-014-00) provides a good example of a general deficiency involving the requirement to provide the manufacturer and model number (or other identification) for failed components, [requirement 50.73(b)(2)(ii)(L)]. This LER describes an event where two Low Pressure Coolant Injection (LPCI) valves failed to open. The cause of this event is given as personnel error in that a wiring diagram mistake resulted in the logic circuits for these valves being unable to stop them from experiencing "hammering". This logic circuit error was not noticed however, until the valves motor operators were replaced with environmentally qualified motor operators which were not equipped with brakes. Apparently, the brakes on the old (brake equipped) motor operators had reduced the hammering effect so that the valves operated adequately even without a working anti-hammering circuit. When the new

motor operators were installed, hammering resulted in valve stem damage such that the valves would no longer fully open. The valve manufacturer and model was not provided in the text, probably because the root cause was not considered to be a valve problem. However, this information could potentially be useful to others who may not be unaware that the valve operator they are going to replace may not have a brake system. It is often difficult to determine whether or not component design has contributed to an event. If in any doubt, a good rule would be to provide manufacturer and model number information.

The last two text requirements that were deficient are 50.73(b)(5) and 50.73(b)(2)(ii)(F). Three of the 10 LERs did not provide adequate information concerning previous similar events (or state that there were none) and four LERs did not contain component or system identifier codes (i.e., EIIS codes). Previous similar event information is important as it can lead to the identification of recurring problems and trends.

One observation noted relative to requirement 50.73(b)(2)(ii)(A) is that Quad Cities 1 and 2 have nonstandard operating modes; therefore, a description of any mode mentioned in the text should be provided.

The abstract scores are much lower than what would be expected given that the text and coded fields scores are above average, see Table 1A and Table 2. The reason for the low abstract scores is that the root cause and corrective action information that was presented in the text was generally not summarized in the abstract. Five of the 10 LER abstracts were deficient in the area of root cause and eight abstracts did not contain any corrective action information. The reason for leaving out information concerning root cause and corrective action is not apparent as the abstracts were generally very short and adequate space was available to include this information.

The coded fields were generally good. Titles were the main deficiency. All titles were considered to be inadequate in one or more areas. Most (8) lacked root cause information.

TABLE 4. (continued)

Areas	Comments
Abstract	Root cause and corrective action information was often not included or was inadequate. The abstracts were generally too brief. The space available in this area should be better utilized.
Coded Fields	
a. Titles	Titles need to be written such that they better describe the essence of the event.
b. Licensee contact position title	Position title is required to be included in addition to the licensee contact name. See NUREG-1022, page 24, Item 12.

Evaluation Results for
Quad Cities 2

Tables 1B and 3B provide a summary of the Quad Cities 2 evaluation. See Table 2 in order to place the Quad Cities 2 scores in perspective.

A review of Table 3B indicates that Quad Cities 2 has essentially the same deficiencies as Quad Cities 1 and, therefore, a separate discussion of specific Quad Cities 2 deficiencies is not required. As stated above, Table 4 applies to Quad Cities 2 as well as Quad Cities 1.

TABLE 1B. SUMMARY OF SCORES[a] QUAD CITIES 2

	Average	High	Low
Text	7.9	9.5	5.6
Abstract	6.4	8.1	5.0
Coded Fields	8.6	10.0	7.6
Overall	7.5[b]	8.7	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

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

a. Units are ordered by overall average score.

b. Standard deviation of overall average score.

TABLE 3B. LER REQUIREMENT PERCENTAGE SCORES FOR QUAD CITIES 2

TEXT

Requirements [50.73(b)] - Descriptions	Percentage Scores ( )[a]
(2)(ii)(A) - - Plant condition prior to event	86 (11)
(2)(ii)(B) - - Inoperable equipment that contributed	b
(2)(ii)(C) - - Date(s) and approximate times	80 (11)
(2)(ii)(D) - - Root cause and intermediate cause(s)	74 (11)
(2)(ii)(E) - - Mode, mechanism, and effect	100 (9)
(2)(ii)(F) - - EIIS Codes	45 (11)
(2)(ii)(G) - - Secondary function affected	b
(2)(ii)(H) - - Estimate of unavailability	67 (3)
(2)(ii)(I) - - Method of discovery	80 (10)
(2)(ii)(J)(1) - Operator actions affecting course	86 (7)
(2)(ii)(J)(2) - Personnel error (procedural deficiency)	100 (3)
(2)(ii)(K) - - Safety system responses	64 (7)
(2)(ii)(L) - - Manufacturer and model no. information	83 (6)
(3) - - - - - Assessment of safety consequences	55 (11)
(4) - - - - - Corrective actions	85 (11)
(5) - - - - - Previous similar event information	50 (11)
(2)(i) - - - - Text presentation	87 (11)

ABSTRACT

Requirements [50.73(b)(1)] - Descriptions	Percentage Scores ( )[a]
- Major occurrences (Immediate cause and effect information)	100 (11)
- Description of plant, system, component, and/or personnel responses	92 (9)
- Root cause information	27 (11)
- Corrective Action information	34 (11)
- Abstract presentation	67 (11)

TABLE 3B. (continued)

CODED FIELDS

Item Number(s) - Description	Percentage Scores ( )[a]
1, 2, and 3 - Facility name (unit no.), docket no. and page number(s)	96 (11)
4 - - - - - - Title	56 (11)
5, 6, and 7 - Event date, LER No., and report date	100 (11)
8 - - - - - - Other facilities involved	100 (11)
9 and 10 - - Operating mode and power level	97 (11)
11 - - - - - Reporting requirements	100 (11)
12 - - - - - Licensee contact information	87 (11)
13 - - - - - Coded component failure information	96 (11)
14 and 15 - - Supplemental report information	100 (11)

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.

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, Licenseee Event Report System, NUREG-1022 Supplement No. 2, U.S. Nuclear Regulatory Commission, September 1985.

APPENDIX A

LER SAMPLE SELECTION INFORMATION FOR QUAD CITIES 1 AND 2

TABLE A-1. LER SAMPLE SELECTION FOR QUAD CITIES 1 (254)

LER Sample Number	LER Number	Comments
1	84-013-00	SCRAM, ESF
2	84-014-00	
3	84-016-00	SCRAM
4	84-017-00	
5	84-018-01	
6	85-001-00	
7	85-002-00	
8	85-003-00	ESF
9	85-013-00	
10	85-014-00	

TABLE A-2. LER SAMPLE SELECTION FOR QUAD CITIES 2 (265)

LER Sample Number	LER Number	Comments
1	84-006-00	
2	84-009-00	SCRAM
3	84-011-00	
4	84-014-00	
5	85-001-00	SCRAM
6	85-002-00	
7	85-005-00	SCRAM
8	85-007-00	
9	85-008-00	
10	85-009-00	
11	85-012-00	ESF

APPENDIX B

EVALUATION SCORES OF INDIVIDUAL LERs FOR QUAD CITIES 1 AND 2

TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERs FOR QUAD CITIES 1

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	9.4	9.0	6.7	8.0	9.0	8.9	6.7	5.3	8.8	6.7	--	--	--	--	--	--
Abstract	6.8	1.9	6.5	7.2	8.4	6.5	6.5	4.5	9.0	7.5	--	--	--	--	--	--
Coded Fields	9.3	7.4	9.1	8.9	8.8	8.3	8.8	7.9	7.4	8.2	--	--	--	--	--	--
Overall	8.6	6.7	6.9	7.9	8.8	8.1	6.9	5.3	8.7	7.1	--	--	--	--	--	--

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.9
Abstract	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.5
Coded Fields	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.4
Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5

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

TABLE B-2. EVALUATION SCORES OF INDIVIDUAL LERs FOR QUAD CITIES 2

	LER Sample Number[a]															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Text	9.5	5.6	7.1	7.0	7.1	9.3	8.0	8.1	8.7	9.2	7.5	--	--	--	--	--
Abstract	7.0	5.5	7.5	5.5	6.5	5.7	5.5	8.1	8.1	5.0	5.5	--	--	--	--	--
Coded Fields	8.8	8.1	9.1	8.3	8.3	8.8	8.9	10.0	8.5	8.3	7.6	--	--	--	--	--
Overall	8.7	5.8	7.4	5.7	7.0	8.2	7.3	8.3	8.5	7.9	6.9	--	--	--	--	--

	LER Sample Number														
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVERAGE
Text	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.9
Abstract	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4
Coded Fields	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.6
Overall	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5

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

APPENDIX C

DEFICIENCY AND OBSERVATION COUNTS FOR QUAD CITIES 1 AND 2

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR QUAD CITIES 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		0 (10)
50.73(b)(2)(ii)(B)--Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (2)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		7 (10)
a. Date information was insufficient.	5	
b. Time information was insufficient.	6	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		4 (10)
a. Cause of component failure was not included or was inadequate	0	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	2	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		1 (8)
a. Failure mode was not included or was inadequate	0	
b. Mechanism (immediate cause) was not included or was inadequate	0	
c. Effect (consequence) was not included or was inadequate.	1	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier for each component or system was not included.		4 (10)
50.73(b)(2)(ii)(G)--For a failure of a component with multiple functions, a list of systems or secondary functions which were also affected was not included or was inadequate.		0 (1)
50.73(b)(2)(ii)(H)--For a failure that rendered a train of a safety system inoperable, the estimate of elapsed time from the discovery of the failure until the train was returned to service was not included.		3 (6)
50.73(b)(2)(ii)(I)--The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		0 (9)

a. Method of discovery for each component failure was not included or was inadequate
b. Method of discovery for each system failure was not included or was inadequate
c. Method of discovery for each personnel error was not included or was inadequate
d. Method of discovery for each procedural error was not included or was inadequate.

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(J)(1)--Operator actions that affected the course of the event including operator errors and/or procedural deficiencies were not included or were inadequate.		2 (7)
50.73(b)(2)(ii)(J)(2)--The discussion of each personnel error was not included or was inadequate.		4 (6)
a. OBSERVATION: A personnel error was implied by the text, but was not explicitly stated.	0	
b. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included or was inadequate.	2	
c. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	3	
d. 50.73(b)(2)(ii)(J)(2)(iii)--Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate.	0	
e. 50.73(b)(2)(ii)(J)(2)(iv)--Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.	0	

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		1 (6)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		1 (5)
50.73(b)(3)--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.	1	
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.	4	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		4 (10)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	1	
c. OBSERVATION: A discussion of actions required to prevent similar failures in similar and/or other systems (e.g., correct the faulty part in all components with the same manufacturer and model number) was not included or was inadequate.	3	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		2 (10)

TABLE C-1. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		0 (10)
a. OBSERVATION: A diagram would have aided in understanding the text discussion.		
b. Text contained undefined acronyms and/or plant specific designators.		
c. The text contains other specific deficiencies relating to the readability.		

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

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

TABLE C-2. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR QUAD CITIES 1

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		1 (10)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		1 (10)
a. Summary of plant responses was not included or was inadequate.	1	
b. Summary of system responses was not included or was inadequate.	1	
c. Summary of personnel responses was not included or was inadequate.	1	
A summary of the root cause of the event was not included or was inadequate.		5 (10)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		8 (10)

TABLE C-2. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		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.	2	
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.)	6	

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

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

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

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		0 (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 inadequate		10 (10)
a. Root cause was not given in title	8	
b. Result (effect) was not given in title	3	
c. Link was not given in title	3	
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		0 (10)
Report Date		0 (10)
a. Date not included		
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).		
Other Facilities information in field is inconsistent with text and/or abstract.		1 (10)
Operating Mode was not included or was inconsistent with text or abstract.		0 (10)

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		0 (10)
Reporting Requirements		0 (10)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.	0	
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.	1	
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.	0	
Licensee Contact		6 (10)
a. Field left blank	0	
b. Position title was not included	6	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		3 (10)
a. One or more-component failure sub-fields were left blank.	2	
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.	0	

TABLE C-3. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		0 (10)
a. Neither "Yes"/"No" block of the supplemental report field was checked.	1	
b. The block checked was inconsistent with the text.	0	
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, (e.g., an LER can be deficient in the area of both date and time information), the sub-paragraph totals do not necessarily add up to the paragraph total.

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

TABLE C-4. TEXT DEFICIENCIES AND OBSERVATIONS FOR QUAD CITIES 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(A)--Plant operating conditions before the event were not included or were inadequate.		2 (11)
50.73(b)(2)(ii)(B)--Discussion of the status of the structures, components, or systems that were inoperable at the start of the event and that contributed to the event was not included or was inadequate.		0 (3)
50.73(b)(2)(ii)(C)--Failure to include sufficient date and/or time information.		5 (11)
a. Date information was insufficient.	1	
b. Time information was insufficient.	5	
50.73(b)(2)(ii)(D)--The root cause and/or intermediate failure, system failure, or personnel error was not included or was inadequate.		4 (11)
a. Cause of component failure was not included or was inadequate	4	
b. Cause of system failure was not included or was inadequate	0	
c. Cause of personnel error was not included or was inadequate.	0	
50.73(b)(2)(ii)(E)--The failure mode, mechanism (immediate cause), and/or effect (consequence) for each failed component was not included or was inadequate.		0 (9)
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-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(ii)(K)--Automatic and/or manual safety system responses were not included or were inadequate.		2 (7)
50.73(b)(2)(ii)(L)--The manufacturer and/or model number of each failed component was not included or was inadequate.		1 (6)
50.73(b)(3)--An assessment of the safety consequences and implications of the event was not included or was inadequate.		6 (11)
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.	1	
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.	5	
50.73(b)(4)--A discussion of any corrective actions planned as a result of the event including those to reduce the probability of similar events occurring in the future was not included or was inadequate.		2 (11)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
a. A discussion of actions required to correct the problem (e.g., return the component or system to operation condition or correct the personnel error) was not included or was inadequate.	0	
b. A discussion of actions required to reduce the probability of recurrence of the problem or similar event (correct the root cause) was not included or was inadequate.	2	
c. OBSERVATION: A discussion of actions required to prevent similar failures in similar and/or other systems (e.g., correct the faulty part in all components with the same manufacturer and model number) was not included or was inadequate.	1	
50.73(b)(5)--Information concerning previous similar events was not included or was inadequate.		6 (11)

TABLE C-4. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
50.73(b)(2)(i)--Text presentation inadequacies.		2 (11)
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.	2	

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

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

TABLE C-5. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR QUAD CITIES 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
A summary of occurrences (immediate cause and effect) was not included or was inadequate		0 (11)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		2 (9)
a. Summary of plant responses was not included or was inadequate.	0	
b. Summary of system responses was not included or was inadequate.	1	
c. Summary of personnel responses was not included or was inadequate.	1	
A summary of the root cause of the event was not included or was inadequate.		8 (11)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		8 (11)

TABLE C-5. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Abstract presentation inadequacies		8 (11)
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.	0	
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.)	8	

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

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

TABLE C-6. CODED FIELDS DEFICIENCIES AND OBSERVATIONS FOR QUAD CITIES 2

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Facility Name		0 (11)
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 (11)
Page Number was not included or was incorrect.		1 (11)
Title was inadequate		9 (11)
a. Root cause was not given in title	9	
b. Result (effect) was not given in title	1	
c. Link was not given in title	4	
Event Date		0 (11)
a. Date not included or was incorrect.		
b. Discovery date given instead of event date.		
LER Number was not included or was incorrect		0 (11)
Report Date		0 (11)
a. Date not included		
b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate).		
Other Facilities information in field is inconsistent with text and/or abstract.		0 (11)
Operating Mode was not included or was inconsistent with text or abstract.		1 (11)

TABLE C-6. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Power level was not included or was inconsistent with text or abstract		0 (11)
Reporting Requirements		0 (11)
a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text.		
b. OBSERVATION: It would have been more appropriate to report the event under a different paragraph.		
c. OBSERVATION: It would have been appropriate to report this event under additional unchecked paragraphs.		
Licensee Contact		6 (11)
a. Field left blank	0	
b. Position title was not included	6	
c. Name was not included	0	
d. Phone number was not included.	0	
Coded Component Failure Information		1 (11)
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.	0	

TABLE C-6. (continued)

Description of Deficiencies and Observations	Number of LERs with Deficiencies and Observations: Sub-paragraph Totals[a]	Number of LERs with Deficiencies and Observations: Paragraph Totals ( )[b]
Supplemental Report		0 (11)
a. Neither "Yes"/"No" block of the supplemental report field was checked. b. The block checked was inconsistent with the text.		
Expected submission date information is inconsistent with the block checked in Item (14).		0 (11)

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

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

APPENDIX D

LER COMMENT SHEETS FOR QUAD CITIES 1 AND 2

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
1. LER Number: 84-013-00	
Scores: Text = 9.4 Abstract = 6.8 Coded Fields = 9.3 Overall = 8.6	
Text	1. 50.73(b)(2)(ii)(c)--Additional times during the event would be desirable.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(J)(2)(ii)--The text is vague as to whether or not the mechanic and foreman were following an approved procedure.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate. The abstract should be more specific about the personnel error and the procedural deficiency.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4) Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
2. LER Number: 84-014-00	
Scores: Text = 9.0 Abstract = 1.9 Coded Fields = 7.4 Overall = 6.7	
Text	1. 50.73(b)(2)(ii)(C)--Dates and approximate times were inadequate (e.g., data and approximate times for corrective actions).
	2. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	3. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	4. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	5. 50.73(b)(5)--Information concerning previous similar events was not included.
	6. 50.73(b)(5)--If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of occurrences [immediate cause(s) and effects(s)] was inadequate. The immediate cause for the valves not opening was not discussed.
	2. 50.73(b)(1)--Summary of root cause was not included.
	3. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	4. Abstract does not adequately summarize the text.
	5. Additional space was available within the abstract field to provide the necessary information but it was not utilized.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
2. LER Number:	84-014-00 (continued)
Coded Fields	1. Item (4)--Title: Root causes and link were not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--One or more component failure sub-fields were left blank.
	4. Item (8)--Information in field is inconsistent with text and/or abstract.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
3. LER Number: 84-016-00	
Scores: Text = 6.7 Abstract = 6.5 Coded Fields = 9.1 Overall = 6.9	
Text	1. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate. How long after the scram before the plant was in a safe and stable condition?
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was inadequate.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. What was the "prompt operator action" that minimized the safety implications, (see last sentence of abstract)?
	5. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was inadequate. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was not included. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included.
	6. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was inadequate.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
3. LER Number: 84-016-00 (continued)	
	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	8. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered, actions such as discussing the event with other instrument maintenance personnel. If an experienced man made this mistake, others with less experience might make it also.
	9. 50.73(b)(5)--Information concerning previous similar events was not included.
	50.73(b)(5)--If no previous similar events are known, the text should so state.
Abstract	1. 50.73(b)(1)--Summary of plant, system, and personnel responses was inadequate. More details are needed rather than boiler plate statements.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was 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 (see comment Number 4 above).
	4. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
4. LER Number: 84-017-00	
Scores: Text = 8.0 Abstract = 7.2 Coded Fields = 8.9 Overall = 7.9	
Text	1. 50.73(b)(2)(ii)(C)--Date information for occurrences was inadequate. The data for the beginning of the refueling outage and the modification to the butterfly valve are needed to clarify the safety significance of the event (see text comment 5).
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3. 50.73(b)(2)(ii)(J)(2)(i)--Discussion as to whether the personnel error was cognitive or procedural was inadequate.
	4. 50.73(b)(2)(ii)(J)(2)(ii)--Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was inadequate.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. The text indicates that a similar problem existed during other refueling outages and the text does not indicate if the recent modification was performed before or during the present refueling outage. The consequences of the event if it could occur under more severe conditions should be discussed.
	6. 50.73(b)(4)--Were any efforts made to determine if other butterfly valves could have been reassembled incorrectly?
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
Coded Fields	1. Item (4)--Title: Result (effect) was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
4. LER Number:	84-017-00 (continued)
	2. Item (11)--OBSERVATION: It appears it would have been appropriate to also report this event under paragraph(s) 50.73(a)(2)(ii).
	3. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
5. LER Number: 84-018-01	
Scores: Text = 9.0 Abstract = 8.4 Coded Fields = 8.8 Overall = 8.8	
Text	1. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate. The approximate time for the September 24, 1984 occurrence was not included.
	2. OBSERVATION: 50.73(B)(2)(ii)(L) recommend that the manufacturer and model number of the radiation monitor be given.
	3. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. The actions taken to try to determine the root cause were not discussed.
Abstract	1. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate. The actions taken to try to determine the root cause were not included.
	2. The reason for this supplemental report as stated in the abstracts contradicts the reason given in the abstract of LER #84-018-00.
	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 (i.e., reason for supplemental report).
Coded Fields	1. Item (4)--Title: Root cause was not included. Root cause was unknown, but words like uncertain or spurious could have been used.
	2. Item (12)--Position title was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
6. LER Number: 85-001-00	
Scores: Text = 8.9 Abstract = 6.5 Coded Fields = 8.3 Overall = 8.1	
Text	1. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was 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 were available, the text should so state.
	2. Other than the safety assessment, this LER text was very good in terms of both content and presentation.
Abstract	1. 50.73(b)(1)--Summary of root cause was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and result was not included.
	2. Item (12)--Position title was not included.
Note	1. Although more details would be needed to make an absolute statement, it appears from the text that the reset solenoid valves should not be considered to have "failed". The "faulted" condition of the valves appears to be the result of a termination failure to which the specific solenoid valves did not directly contribute.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
7. LER Number: 85-002-00	
Scores: Text = 6.7 Abstract = 6.5 Coded Fields = 8.8 Overall = 6.9	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate. The text should indicate the reason that ball valves needed cleaning and lubrication (for example, exposure to construction activities, maintenance interval appears to be too long (procedural), etc).
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System identifier for each component referred to in the LER was not given.
	3. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	4. 50.73(b)(2)(ii)(J)(1)--As mentioned in Comment 2, the text should address whether or not the valve had recieved proper maintenance (possible procedural deficiency).
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	6. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered.
Abstract	1. 50.73(b)(1)--Summary of root cause and corrective actions was inadequate.
Coded Fields	1. Item (4) Title: Root cause was not included.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
8. LER Number: 85-003-00	
Scores: Text = 5.3 Abstract = 4.5 Coded Fields = 7.9 Overall = 5.3	
Text	1. 50.73(b)(2)(ii)(C)--Date and approximate time information for occurrences was inadequate (e.g., when did instrument maintenance remove the 2A drywell radiation monitor trip unit for repair?).
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was inadequate; the reason that the auto-start relay 595-133 was degraded was not included. The reason for the apparent phase to ground short was not included.
	3. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each personnel error was not included. Does a communication problem exist in that the test director did not know the plant status?
	4. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included (i.e., standby gas treatment system is a safety system).
	5. 50.73(b)(2)(ii)(J)(2)--Discussion of personnel error was not included.
	6. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was not included.
	7. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	8. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate. Until modification M-4-2-82-9 is completely installed, what will be done to prevent recurrence of this event or similar events involving Group II isolation?

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
8. LER Number:	85-003-00 (continued)
	9. 50.73(b)(5)--Information concerning previous similar events was inadequate.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. The abstract contained greater than 1400 characters.
	4. Abstract does not adequately summarize the text.
	5. Abstract contradicts the text (i.e., which unit was affected? 1 or 2?).
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (13)--One or more component failure sub-fields were left blank.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
9. LER Number: 85-013-00	
Scores: Text = 8.8 Abstract = 9.0 Coded Fields = 7.4 Overall = 8.7	
Text	1. 50.73(b)(2)(ii)(E)--The effect discussion of each failed component was inadequate. What was the consequence on Unit 2, if any?
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	3. OBSERVATION: The tentative schedule for relay replacement would have been good information.
	4. OBSERVATION: More detail than necessary was provided concerning testing in conjunction with repair.
Abstract	1. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (8)--Information in field is inconsistent with text and/or abstract.
	3. Item (14)--Neither "Yes"/"No" block of the supplemental report field was checked.

TABLE D-1. SPECIFIC LER COMMENTS FOR QUAD CITIES 1 (254)

Section	Comments
10. LER Number: 85-014-00	
Scores: Text = 6.7 Abstract = 7.5 Coded Fields = 8.2 Overall = 7.1	
Text	The inclusion of references in an LER is desirable, however, each LER is supposed to stand alone and should contain all information needed to understand the event. Even after referring to LER 85-012-00, the order of events is unclear. It is also unclear why this LER reports an event which occurred between the first and second occurrences reported in LER 85-012-00. The following comments arise because of the confusion in timing and lack of detail in this LER. 1. 50.73(b)(2)(ii)(C)--Additional dates and times are needed to aid understanding. As an example, from LER-012-00 it appears that the exchange of the trip units between indicators 1A and 1B occurred on April 18 or 19 which is after the report date of this LER. 2. 50.73(b)(2)(ii)(D)--As mentioned in Comment 1, some events reported in this LER appear to have occurred after the report date of this LER; therefore, the root cause of this event (faulty capacitor found April 19 or 20) could possibly have been included in this LER. 3. 50.73(b)(A)--As in Comment 2, the corrective actions (replacing faulty capacitors) could possibly have been included in this LER.
Abstract	No comments.
Coded Fields	1. Item (4)--Title: Result (effect) was not included. 2. Item (13)--This item should be filled in for failed components only. The information in this LER does not indicate a failure so this field should be left blank. If the failed capacitor had been mentioned, filling in this field would have been appropriate. When this item is filled in, however, all five fields should contain information.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
1. LER Number: 84-006-00	
Scores: Text = 9.5 Abstract = 7.0 Coded Fields = 8.8 Overall = 8.7	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was not included.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. Abstract does not adequately summarize the text.
	3. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
2. LER Number: 84-009-00	
Scores: Text = 5.6 Abstract = 5.5 Coded Fields = 8.1 Overall = 5.8	
Text	1. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate.
	2. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(H)--The estimate of the elapsed time from the discovery of the failure of a safety system train until the train was returned to service was not included.
	5. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the component failures was not included.
	6. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was not included.
	7. 50.73(b)(2)(ii)(L)--Identification (e.g. manufacturer and model no.) of the failed component(s) discussed in the text was inadequate.
	8. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	9. 50.73(b)(5)--Information concerning previous similar events was not included.
	10. Some ideas were not presented clearly (hard to follow).

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
2. LER Number:	84-009-00 (continued)
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4) Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
3. LER Number: 84-011-00	
Scores: Text = 7.1 Abstract = 7.5 Coded Fields = 9.1 Overall = 7.4	
Text	1. 50.73(b)(2)(ii)(C)--Additional times are needed.
	2. 50.73(b)(2)(ii)(D)--Since each LER is supposed to stand alone and the cause appears to be the same for both events and was found before this LER went out, this LER should indicate the cause.
	3. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	4. 50.73(b)(4)--For the same reasons stated in text Comment 2, this LER should include the corrective actions.
Abstract	1. As mentioned in text Comments 2 and 4, the abstract should include available information on cause and corrective actions.
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (12)--Position title was not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
4. LER Number: 84-014-00	
Scores: Text = 7.0 Abstract = 5.5 Coded Fields = 8.3 Overall = 6.7	
Text	1. 50.73(b)(2)(ii)(D)--The root and/or intermediate cause discussion for each component failure was not included (i.e., turbine seal; why does it leak at low RPM's and why was the closed side limit switch on Valve 2-2301-4 out of calibration?).
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate.
	3. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were considered the most severe conditions, the text should so state.
	4. 50.73(b)(4)--Discussion of corrective actions taken or planned was inadequate (i.e., turbine seal).
	5. A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) was not included or was inadequate.
	6. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been discussed.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text.
	4. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Root causes and results were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
5. LER Number: 85-001-00	
Scores: Text = 7.1 Abstract = 6.5 Coded Fields = 8.3 Overall = 7.0	
Text	1. 50.73(b)(2)(ii)(A)--Discussion of plant operating conditions before the event was inadequate. Percent power rather than a plant specific number (i.e. 647 MWe) should have been provided.
	2. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate.
	3. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	4. 50.73(b)(2)(ii)(K)--Discussion of automatic and/or manual safety system responses was not included.
	5. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were discussed the most severe conditions, the text should so state.
	6. Some conclusions reached are inconsistent with the facts presented. A logical transition does not exist between all ideas. Some ideas were not presented clearly (hard to follow). It is not clear that the discussion of the "properly functioning control valve" in the first paragraph only applied to testing.
Abstract	1. 50.73(b)(1)--Summary of system responses was inadequate.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
5. LER Number:	85-001-00 (continued)
Coded Fields	1. Item (4)--Title: Root cause was not included.
	2. Item (9)--Operating mode was inconsistent with other reports.
	3. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
6. LER Number: 85-002-00	
Scores: Text = 9.3 Abstract = 5.7 Coded Fields = 8.8 Overall = 8.2	
Text	1. 50.73(b)(2)(ii)(D)--What was the root cause of the support arm breakage? Knowing this would help the reader to justify the conclusions that no further corrective actions were needed and that this was an isolated event.
	2. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System identifier for each component referred to in the LER were not included.
	3. 50.73(b)(4)--Without knowing the root cause of the support arm breakage, the reader does not know whether the corrective actions will prevent recurrence.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. The abstract should be specific about the corrective actions taken.
Coded Fields	1. Item (4)--Title: Root cause and link were not included.
	2. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265) (continued)

Section	Comments

7. LER Number: 85-005-00

Scores: Text = 8.0 Abstract = 5.5 Coded Fields = 8.9 Overall = 7.3

Text	1.	50.73(b)(2)(ii)(C)--Dates and approximate times are inadequate (i.e., date and approximate times of limits switch replacement and testing).
	2.	50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	3.	50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate (i.e., operator actions during the scram).
	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 were available the text should so state.
	5.	OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were discussed the most severe conditions, the text should so state.
Abstract	1.	50.73(b)(1)--Summary of personnel responses was inadequate.
	2.	50.73(b)(1)--Summary of root cause was not included.
	3.	50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was inadequate.
	4.	Abstract does not adequately summarize the text.
	5.	Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1.	Item (4)--Title: Root cause was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
8. LER Number: 85-007-00	
Scores: Text = 8.1 Abstract = 8.1 Coded Fields = 10.0 Overall = 8.3	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	3. 50.73(b)(5)--Information concerning previous similar events was not included.
Abstract	1. Information as to what kind of information is to be included in the supplemental report should be provided.
	2. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	No comments.
Note	Scores for this LER assumed that supplement would contain all the necessary information.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
9. LER Number: 85-008-00	
Scores: Text = 8.7 Abstract = 8.1 Coded Fields = 8.5 Overall = 8.5	
Text	1. 50.73(b)(2)(ii)(C)--Include the date of the supplemental report in the text.
	2. 50.73(b)(2)(ii)(D)--The text should either indicate the root cause or that the root cause will be provided in the supplemental report.
	3. OBSERVATION: The consequences of the event had it occurred under more severe conditions should be discussed. If the event occurred under what were discussed the most severe conditions, the text should so state.
	4. 50.73(b)(5)--Information concerning previous similar events was not included.
Abstract	1. OBSERVATION: The abstract contains information not included in the text. The abstract is intended to be a summary of the text; therefore, the text should discuss all information summarized in the abstract. The abstract gives a postulated root cause not discussed in the text.
Coded Fields	1. Item (12)--Position title was not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
10. LER Number: 85-009-00	
Scores: Text = 9.2 Abstract = 5.0 Coded Fields = 8.3 Overall = 7.9	
Text	1. 50.73(b)(2)(ii)(F)--The Energy Industry Identification System component function identifier(s) and/or system name of each component or system referred to in the LER was not included.
	2. 50.73(b)(2)(ii)(J)(2)--OBSERVATION: Personnel error was implied but was not explicitly stated in the text.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text.
	4. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (4)--Title: Link and root cause were not included.

TABLE D-2. SPECIFIC LER COMMENTS FOR QUAD CITIES 2 (265)

Section	Comments
11. LER Number: 85-012-00	
Scores: Text = 7.5 Abstract = 5.5 Coded Fields = 7.6 Overall = 6.9	
Text	1. 50.73(b)(2)(ii)(C)--Approximate time information for occurrences was inadequate.
	2. 50.73(b)(2)(ii)(I)--Discussion of the method of discovery of the personnel error was not included.
	3. 50.73(b)(2)(ii)(J)(1)--Discussion of operator actions that affected the course of the event was inadequate. It is not clear whether the Unit Operator's action (i.e., tripping the diesel generator) was also considered a personnel error. Was he following a procedure?
	4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event was not included.
	5. OBSERVATION: Additional corrective actions based on the generic implications of the failure or error should have been considered. It is not clear whether all persons that could "operate outside of a Work Request" were cautioned.
	6. 50.73(b)(5)--Information concerning previous similar events was not included.
Abstract	1. 50.73(b)(1)--Summary of root cause was not included.
	2. 50.73(b)(1)--Summary of corrective actions taken or planned as a result of the event was not included.
	3. Abstract does not adequately summarize the text. Additional space was available within the abstract field to provide the necessary information but it was not utilized.
Coded Fields	1. Item (3)--Page number was not included.
	2. Item (4)--Title: Root cause and link were not included.
	3. Item (13)--Component failure field contains data when no component failure occurred.