LICENSEE EVENT REPORT (LER)

QUALITY EVALUATION FOR

INDIAN POINT 3 -

DURING THE PERIOD FROM

DECEMBER 1, 1985 TO MAY 31 1987

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SUMMARY

An evaluation of the content of a representative sample of the Licensee Event Reports (LERs) submitted by Indian Point 3 during the period from December 1, 1985 to May 31, 1987 was performed. This evaluation provides an overview of the quality of the LERs by comparing their contents to the reporting requirements of 10 CFR 50.73(b) and the guidelines contained in NUREG-1022 and its Supplements Nos. 1 and 2.

This is the second time the Indian Point 3 LERs have been evaluated using this methodology. The results of this evaluation indicate that the overall quality of the Indian Point 3 LERs, for the three areas that are evaluated (i.e., the text, abstract, and coded fields), has remained virtually unchanged from the previous evaluation. The first evaluation's overall average LER score was 7.5, which was about the same as the industry average at that time. For the current evaluation, the overall average LER score is 7.7 compared with the current industry average of 8.4. This indicates that not only has the licensee made virtually no progress in LER quality, but also that they have not kept pace with the overall industry efforts to provide LERs of consistently high quality.

The most significant deficiencies found in this evaluation concern the requirements to adequately discuss root causes, corrective actions, safety consequences, and personnel errors. In comparison to the previous evaluation, the root cause discussions have shown improvement, but overall are still considered deficient. The quality of the discussions concerning the corrective actions, safety assessments, and personnel error has decreased.

LER QUALITY EVALUATION FOR INDIAN POINT 3

INTRODUCTION

In order to evaluate the overall quality of the contents of the Licensee Event Reports (LERs) submitted by Indian Point 3 during the period from December 1, 1985 to May 31, 1987, a sample of the unit's LERs was evaluated using a refinement of the basic methodology presented in NUREG-1022, Supplement No. 2.¹ The sample consists of a total of 14 LERs, which was the total number of LERs available in the file at the time of evaluation. 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 assessment period because the input was due such a short time after the end of the assessment period. Therefore, any LERs prepared by the unit later in the assessment period were not available for selection.

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 criteria of 10 CFR 50.73(b). In addition, each selected LER is compared to the guidance for preparation of LERs presented in NUREG-1022² and Supplements No. 1^3 and 2 to NUREG-1022; based on this comparison, suggestions were developed for improving the quality of the LERs. The purpose of this evaluation is to provide feedback to improve the quality of LERs. It is not intended to increase the requirements concerning the "content" of these reports beyond the current requirements of 10 CFR 50.73(b). Therefore, statements in this evaluation that suggest measures be taken are not intended to increase requirements of the regulation must be met.

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

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

The results of the LER quality evaluation are divided into two categories: (1) detailed information and (2) summary information. The detailed information, presented in Appendices A through D, consists of LER sample information (Appendix A), a table of the scores for each sample LER (Appendix B), tables of the number of deficiencies and observations for the text, abstract and coded fields (Appendix C), and comment sheets containing narrative statements concerning the contents of each LER (Appendix D). When referring to Appendix D, the reader is cautioned not to try to directly correlate the number of comments on a comment sheet with the LER scores, as the analysts have flexibility to consider the magnitude of a deficiency when assigning scores (e.g., the analysts sometimes make comments relative to a requirement without deducting points for that requirement).

RESULTS

A discussion of the analysts' conclusions concerning LER quality is presented below. These conclusions are based solely on the results of the

evaluation of the contents of the LERs selected for review and as such represent the analysts' assessment of the unit's performance (on a scale of 0 to 10) in submitting LERs that meet the criteria of 10 CFR 50.73(b) and the guidance present in NUREG-1022 and its supplements.

Table 1 presents the average scores for the sample of LERs evaluated for the unit. In order to place the scores provided in Table 1 in perspective, the distribution of the overall average score for all units/stations that have been evaluated using the current methodology is provided on Figure 1. Figure 1 is updated each month to reflect any changes in this distribution resulting from the inclusion of data for those units/stations that have not been previously evaluated or those that have been reevaluated. (Note: The previous score for those units/stations that are reevaluated is replaced with the score from the latest evaluation). Table 2 and Appendix Table B-1 provide a summary of the information that is the basis for the average scores in Table 1. For example, Indian Point 3's average score for the text of the LERs that were evaluated is 7.4 out of a. possible 10 points. From Table 2 it can be seen that the text score actually results from the review and evaluation of 17 different requirements ranging from the discussion of plant operating conditions prior to the event $[10 \ CFR \ 50.73(b)(2)(ii)(A)]$ to text presentation. The resultant percentage scores in the text summary section of Table 2 provide an indication of how well each text requirement was addressed by the unit for the 14 LERs that were evaluated. Based on similar methodology, the percentage scores for the various sections of the abstract and the items in the coded fields were also computed and are shown in Table 2.

Specific Deficiencies and Observations

As indicated in Table 2, certain requirements or areas within the text, abstract, and coded fields are causing the unit difficulty when preparing LERs. Relatively low percentage scores may indicate that the unit needs additional guidance concerning these requirements, or it may indicate that the unit understands the basic requirement but has either: (1) excluded certain less significant information from a number of the discussions concerning that requirement or (2) totally failed to

а TABLE 1. SUMMARY OF SCORES FOR INDIAN POINT 3

		·			
	Average	High	Low		
Text	7.4	8.5	5.9		
Abstract	8.0	9.1	5.0		
Coded Fields	9.1	10.0	8.5		
Overall	7.7	8.4	6.7		

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



Figure 1. Distribution of LER Scores

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TABLE 2. LER REQUREMENT PERCENTAGE SCORES SR INDIAN POINT 3

TEXT

	Percentage
Requirements [50.73(b)] - Descriptions	Scores ()
<pre>(2)(ii)(A) Plant condition prior to event (2)(ii)(B) Inoperable equipment that contributed (2)(ii)(C) Date(s) and approximate time(s)</pre>	100 (14) b 91 (14)
<pre>(2)(ii)(D) Root cause and intermediate cause(s) (2)(ii)(E) Mode, mechanism, and effect (2)(ii)(F) EIIS codes</pre>	80 (14) 100 (8) 29 (14)
<pre>(2)(ii)(G) Secondary function affected (2)(ii)(H) Estimate of unavailability (2)(ii)(I) Method of discovery</pre>	b . (0) 100 (14)
<pre>(2)(ii)(J)(1) - Operator actions affecting course (2)(ii)(J)(2) - Personnel error (procedural deficiency) (2)(ii)(K) Safety system responses</pre>	96 (4) 71 (7) 76 (12)
<pre>(2)(ii)(L) Manufacturer and model no. information (3) Assessment of safety consequences (4) Corrective actions</pre>	63 (8) 32 (14) 75 (14)
<pre>(5) Previous similar event information (2)(i) Text presentation</pre>	93 (14) 77 (14)

ABSTRACT

	Percentage
Requirements [50.73(b)(1)] - Descriptions	Scores ()
- Major occurrences(immediate cause/effect)	93 (14)
- Plant/system/component/personnel responses	86 (11)
- Root cause information	76 (14)
- Corrective action information	74 (14)
- Abstract presentation	77 (14)

CODED FIELDS

		Percentage
-	Item Number(s) - Descriptions	a Scores ()
1, 2, and 3 -	Plant name(unit #), docket #, page #s	100 (14)
4	Title	68 (14)
5, 6, and 7 -	Event date, LER no., report date	100 (14)
8	Other facilities involved	100 (14)
9 and 10	Operating mode and power level	100 (14)
11	Reporting requirements	100 (14)
12	Licensee contact information	100 (14)
13	Coded component failure information	91 (14)
14 and 15	Supplemental report information	93 (14)

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.

A percentage score for this requirement is meaningless as it is not b. 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.

address the requirement in one or two of the selected LERs. The unit should review the LER specific comments presented in Appendix D to determine why the LER received less than a perfect score for certain requirements. The more important deficiencies and observations for the text, abstract, and coded field sections of the LERs that were evaluated are discussed separately below.

Text Deficiencies and Observations

Eight of the fourteen LERs failed to provide complete root cause information [Requirement 50.73(b)(2)(ii)(D)]. While the score for this requirement improved from 71 percent on the last evaluation to 80 percent on this evaluation, there is still room for improvement. The problem appears to be the same for both evaluations, that is, intermediate causes are discussed adequately, but the discussions fall a step or two short of the root cause. A good root cause discussion is necessary to provide assurance that the corrective actions taken are those that will prevent recurrence of the event or similar events. Simply stating that a component was replaced may not be adequate corrective actions to prevent recurrence. For example, if a system fails to operate because a relay failed, replacing the relay may or may not prevent recurrence. If the relay failed due to a random manufacturing defect, replacement is probably adequate. However, if the relay failed due to excessive moisture, say from a valve with faulty packing above it, then replacing the relay without fixing the packing leak would not be adequate to prevent recurrence. In this example event, a root cause discussion concerning the packing failure would also be appropriate. Simply stated, the cause discussion needs to be detailed enough to indicate what caused the problem so that the reader has sufficient information to determine some probable corrective actions. Similarly the personnel/procedural errors discussion should provide sufficient detail (e.g., training was inadequate, the procedure was deficient because, or a special problem such as fatigue was involved) to indicate what corrective actions might be appropriate.

The Energy Industry Identification System (EIIS) codes [Requirement 50.73(b)(2)(ii)(F)] were not provided for the systems and/or components mentioned in eleven of the fourteen LERs. Coding for each system or

component referred to in the text (not just for those that failed) needs to be provided.

Discussion of personnel/procedural error [Requirement 50.73(b)(2)(ii)(J)(2)] is an area where the score slipped from the previous evaluation (92%) to below an acceptable level (71%). No particular pattern was noticed, but lack of this kind of information can be related to the inadequate root cause information discussed previously. A review of the specific comments presented in Appendix D will indicate the type of information that was considered missing.

Requirement 50.73(b)(2)(ii)(K) has a marginally acceptable score of 76 percent, which can easily be improved by providing a list of all safety systems that were initiated either automatically or manually. It is not adequate to simply make a statement such as "all safety equipment functioned as designed".

As in the first evaluation, the requirement to provide adequate identification for failed components, Requirement 50.73(b)(2)(ii)(L), was considered to be inadequate. In most cases this requirement can be met by simply providing the manufacturer and model number for each failed component. For certain components (e.g., pipes, fitting, etc.) the material and size of the failed component would be more appropriate information. Whatever information is provided, it should be specific enough to allow the reader to determine if the failed component is the same as one used at his facility. In addition, there are instances where information that identifies components (even though these components didn't fail) could be important to the reader. For example, if the design of a component contributes to the event. it would be helpful to provide information that would enable others to specifically identify the component. An example of such a component might be a valve that opens with a clockwise turn of its handle (which could lead to an improper valve line-up due to a personnel error while operating the valve).

All of the fourteen LERs evaluated were considered to be deficient in the area of providing an assessment of the safety consequences and

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implications of the event, Requirement 50.73(b)(3). No improvement was noted since the last evaluation in this area. Every LER is required to contain a discussion of the safety assessment that should be performed after the event. If the conclusion of this discussion is that "there were not safety consequences", sufficient details must be provided to allow the reader to determine how this conclusion was reached. For example, if it was concluded that there were no consequences because there were other systems (or means) available to mitigate the consequences of the safety system failure, these systems or means should be discussed in the text. In addition, each discussion should include information as to whether or not the occurrence could have happened under a set of initial conditions that would have made the consequences more severe. If the occurrence could not have occurred under a more severe set of conditions, the text should so state.

Another area that has shown no improvement since the last evaluation and is still only marginally acceptable is the corrective actions discussion [Requirement 50.73(b)(4)]. In particular, the discussions did not provide enough detail to determine whether or not the corrective actions are adequate to prevent recurrence of the event or similar events. As discussed for Requirement 50.73(b)(2)(ii)(D), a good root cause discussion is necessary to assess the adequacy of the corrective actions taken to prevent recurrence. Simply stating that a component was replaced or repaired is not an adequate corrective action discussion.

The text presentations, while marginally acceptable could be improved. Short texts are acceptable, but they should not be so abbreviated that pertinent details, as discussed above, are left out. An aid to including all the required information and simplifying the presentation of information would be to present it in an outline format as is suggested in NUREG-1022, Supplement No. 2.

Abstract Deficiencies and Observations

While there are no specific requirements for an abstract, other than those given in 10 CFR 50.73(b)(1), an abstract should, as stated in NUREG-1022, Supplement No. 2, summarize the following information from the text:

1.	Cause/Effect	What happened that made the event reportable.
2.	Responses	Major plant, system, and personnel responses as a result of the event.
3.	Root/Intermediate Cause	The underlying cause of the event. What caused the component and/or system failure or the personnel error.
4.	Corrective Actions	What was done immediately to restore the plant to a safe and stable condition and what was done or planned to prevent recurrence of the event.

Numbers 1, and 2 above were adequately addressed in the abstracts of the LERs reviewed with Item 2 showing a marked improvement since the last evaluation. Numbers 3 and 4, however, are still deficient in many of the LERs. Although the abstract summaries are partially deficient because the text is deficient in these areas, a significant improvement could be made by being sure that the root cause and corrective action information, which is contained in the text, gets adequately summarized in the abstract.

Many of the abstract presentations were short. Improvement in the abstract presentation score could probably be obtained by using more of the space available (i.e., the 1400 spaces).

Coded Fields Deficiencies and Observations

As in the original evaluation, the main deficiency in the area of coded fields involves the titles, Item (4). An improvement in score from 50 to 68 percent was noted, but ten of the 14 titles still failed to adequately provide cause information, three failed to include the result of the event, and five failed to include the link between the cause and result. While the result is considered to be the most important part of the title, cause and link information (as suggested in NUREG-1022, Supplement No. 2) must be included to make a title complete. Example titles are presented in Appendix D for many of the LERs that were considered to have deficient titles.

SUMMARY

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

It should be noted that this is the second time that the Indian Point 3 LERs have been evaluated using this same methodology. The previous evaluation was reported in December of 1985. Table 4 provides a comparison of the scores for both evaluations. While the overall score (7.7) was slightly higher for this evaluation, this score is still below the current industry overall average of 8.4. (Note: The industry overall average is the result of averaging the latest overall average LER score for each unit/station that thas been evaluated using this methodology.)

Areas Comments Root cause Provide sufficient cause information to allow the reader to determine the adequacy of the corrective actions taken to prevent recurrence (e.g., in those cases involving a failed component, not only must the component be replaced but the cause of the failure must be corrected). EIIS should be used in the text for each EIIS code component or system referred to in the text. not just for those that failed. It is not necessary to put the whole code line in the text as is required in Item (13) of the Coded Fields. As with the root cause, details should be Personnel/procedural error explicitly stated (e.g., whether the error is cognitive or procedural, the type of personnel involved, and unusual circumstances, if any, should be discussed). Automatic/manual safety All safety systems that were actuated automatically or manually during the event system response should, as a minimum, be listed in the text. Manufacturer and model number Component identification information (manufacture and model number, if possible or other unique information about the component) should be included in the text whenever a component fails. In addition. (although not specifically required by current regulation) it would be helpful to identify a component if it is suspected of contributing to the event because of its design. All LERs should include a detailed safety Safety assessment information assessment. • The text should discuss whether or not the event could have been worse had it occurred under different, but probable, circumstances and provide information about backup systems that were available to limit the consequences of the event.

TABLE 3. AREAS MOST NEEDING IMPROVEMENT FOR INDIAN POINT 3 LERS

TABLE 3. (Continued)

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Areas	Comments			
Corrective actions	Be sure to discuss details concerning actions taken as opposed to just stating that repairs were made. These details should address both the actions necessary to fix the immediate problem and the actions taken to prevent recurrence of the event or similar events.			
Text presentation	Improvement in text presentation could be made by using a consistent outline format such as the one suggested in NUREG-1022, Supplement No. 2.			
Abstracts	Root cause and corrective action information was often inadequate or was not included. Be sure to summarize all major points concerning these requirements that are discussed in the text.			
Abstract presentation	Use the full 1400 spaces whenever possible.			
Coded fields				
a. Titles	Title should be written such that they better describe the event. In particular, include cause information in all titles.			
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Report Date	December-85	<u>May-87</u>
Text average	7.2	7.4
Abstract average	7.7	8.0
Coded fields average	8.5	9.1
Overall LER average	7.5	7.7

TABLE 4. COMPARISON OF LER SCORES FROM PREVIOUS EVALUATION

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REFERENCES

- Office for Analysis and Evaluation of Operational Data, <u>Licensee Event</u> <u>Report System</u>, NUREG-1022 Supplement No. 2, U.S. Nuclear Regulatory Commission, September 1985.
- Office for Analysis and Evaluation of Operational Data, <u>Licensee Event</u> <u>Report System</u>, NUREG-1022, U.S. Nuclear Regulatory Commission, September 1983.
- 3. Office for Analysis and Evaluation of Operational Data, <u>Licensee Event</u> <u>Report System</u>, NUREG-1022 Supplement No. 1, U.S. Nuclear Regulatory Commission, February 1984.

APPENDIX A

LER SAMPLE SELECTION INFORMATION FOR INDIAN POINT 3

TABLE A-1.	LER	SAMPLE	SELECTION	FOR	INDIAN	POINT	3
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Sample Number	LER Number	Comments
1	86-001-00	SCRAM
2	86-002-00	SCRAM
3	86-003-00	SCRAM
4	86-004-00	SCRAM
5	86-005-00	SCRAM
6	86-006-00	SCRAM
7	86-007-00	ESF
8.	86-008-00	
9	86-009-00	
10	86-010-00	SCRAM
11	86-011-00	SCRAM
12	86-012-00	SCRAM
1.35	87-001-00	SCRAM
14	87-002-00	SCRAM, ESF

APPENDIX B

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EVALUATION SCORES OF INDIVIDUAL LERS FOR INDIAN POINT 3

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TABLE B-1. EVALUATION SCORES OF INDIVIDUAL LERS FOR INDIAN POINT 3

			LER S	ample Nur	a nber			
	1	2	3	4	5	6	7	8
Text	7.9	7.6	7.8	6.4	8.0	7.0	8.0	7.3
Abstract	9.1	8.9	8.4	8.9	8.8	9.0	8.8	5.0
Coded Fields	8.8	9.0	10.0	9.4	9.0	9.0	9.5	8.5
Overall	8.4	8 1	8.2	7.5	8.3	7.8	8.4	6.7
			LER S	ample Nur	a nber			
	9	10	11	12	13	14	15	Average
Text	7.1	6.0	5.9	7.0	8.2	8.5		7.4
Abstract	6.4	8.4	8.2	9.0	8.4	5.4	•	8.0
Coded Fields	8.5	9.0	9.0	10.0	8.9	8.5		9.1
Overall	7.0	7.0	6.9	7.9	8.4	7.6		7.7
a. See Append	dix A fo	or a lis	t of the	correspo	onding Ll	ER numbe	rs.	

APPENDIX C

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DEFICIENCY AND OBSERVATION COUNTS FOR INDIAN POINT 3

TABLE C-1. TEXT DEFICIENCIES AND OBSERVATIONS FOR INDIAN POINT 3

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	Number of Deficie Obser	LERs with ncies and vations
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	Totals ^a	<u>Totals (</u>) ^b
50.73(b)(2)(ii)(A)Plant operating conditions before the event were not included or were inadequate.		0 (14)
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 (1)
50.73(b)(2)(ii)(C)Failure to include sufficient date and/or time information.		5 (14)
 a. Date information was insufficient. b. Time information was insufficient. 	2 3	
50.73(b)(2)(ii)(D)The root and/or intermediate cause of the component or system failure was not included or was inadequate.		8 (14)
a. Cause of component failure was not	8	
included or was inadequate. b. Cause of system failure 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 (8)
a. Failure mode was not included or was inadequate.	£*	
b. Mechanism (immediate cause) was not included or was inadequate.	N	
c. Effect (consequence) was not included or was inadequate.		

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	Number of Deficie Obser	LERs with ncies and vations
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	<u>Totals</u>	Totals () ^b
50.73(b)(2)(11)(F)The Energy Industry Identification System component function identifier for each component or system was not included.		11 (14)
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)
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 time of the failure until the train was returned to service was not included.		(0)
50.73(b)(2)(ii)(1)The method of discovery of each component failure, system failure, personnel error, or procedural error was not included or was inadequate.		0 (14)
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.	r	

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<u>-</u> - · · ·	Number of Deficien Observ	LERs with ncies and vations	
	Sub-paragraph	Paragraph	
Description of Deficiencies and Observations	<u> </u>	<u>Totals (</u>	<u>م</u>
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.		1 (4)	
50.73(b)(2)(11)(J)(2)The discussion of each personnel error was not included or was inadequate.		4 (7)	
a. OBSERVATION: A personnel error was implied by the text, but was not	1		
 b. <u>50.73(b)(2)(i)(J)(2)(i)</u>-Discussion as to whether the personnel error was cognitive or procedural was not included or was inadeguate. 	2		
c. <u>50.73(b)(2)(ii)(J)(2)(ii)</u> Discussion as to whether the personnel error was contrary to an approved procedure, was a direct result of an error in an approved procedure, or was associated with an activity or task that was not covered by an approved procedure was not included or was inadequate.	0		
d. <u>50.73(b)(2)(ii)(J)(2)(iii)</u> Discussion of any unusual characteristics of the work location (e.g., heat, noise) that directly contributed to the personnel error was not included or was inadequate	1		
e. <u>50.73(b)(2)(ii)(J)(2)(iv)</u> Discussion of the type of personnel involved (i.e., contractor personnel, utility licensed operator, utility nonlicensed operator, other utility personnel) was not included or was inadequate.] *		

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	Number of Deficier Obser	LERs with ncies and vations
Description of Definionsies and Observations	Sub-paragraph	Paragraph
<u>$50.73(b)(2)(ii)(K)$</u> Automatic and/or manual safety system responses were not included or were inadequate.		<u>10tais ()</u> 6 (12)
<u>50.73(b)(2)(11)(L)</u> The manufacturer and/or model number of each failed component was not included or was inadequate.		3 (8)
50.73(b)(3)An assessment of the safety consequences and implications of the event was not included or was inadequate.		14 (14)
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	
 DBSERVATION: 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. 	3	
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.	r	10 (14)

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Number of L Deficienc Observa		LERs with ncies and vations
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	Totals ^a	<u>Totals (</u>) ^b
a. A discussion of actions required to correct the problem (e.g., return the component or system to an operational condition or correct the personnel error) was not included or was inadequate.	0	
 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.	1.	
50.73(b)(5)Information concerning previous similar events was not included or was inadequate.	-	1 (14)
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	Number of LERs with Deficiencies and Observations		
Description of Deficiencies and Observations	Sub-paragraph Totals ^a	Paragraph Totals () ^b
50.73(b)(2)(1)Text presentation inadequacies.		3 (14)	
a. OBSERVATION: A diagram would have aided in understanding the text discussion.	1		
b. Text contained undefined acronyms and/or plant specific designators.	2		
c. The text contains other specific deficiencies relating to the readability.	0		

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

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

TABLE C-2. ABSTRACT DEFICIENCIES AND OBSERVATIONS FOR INDIAN POINT 3

	Number of LERs with Deficiencies and Observations	
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	Totals ^a	<u>Totals (</u>) ^b
A summary of occurrences (immediate cause and effect) was not included or was inadequate.		2 (14)
A summary of plant, system, and/or personnel responses was not included or was inadequate.		5 (11)
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.	1	
A summary of the root cause of the event was not included or was inadequate.		7 (14)
A summary of the corrective actions taken or planned as a result of the event was not included or was inadequate.		9 (14)

		Number of LERs with Deficiencies and Observations	
Description of Def	iciencies and Observations	Sub-paragraph Totals ^a	Paragraph Totals () ^b
Abstract presentat	ion inadequacies.		8 (14)
a. OBSERVATION: information The abstract summary of t text should summarized i	The abstract contains not included in the text. is intended to be a he text, therefore, the discuss all information n the abstract	1	
b. The abstract 1400 spaces.	was greater than	0	
c. The abstract acronyms and designators	contains undefined /or plant specific	0	
d. The abstract deficiencies summarizatio	contains other specific (i.e., poor on, 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, the sub-paragraph totals do not necessarily add up to the paragraph total.

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

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TABLE C-3. CODED FIELDS DEFICIENCIES	AND	OBSERVATIONS	FOR	INDIAN	POINT	3
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	Number of Deficier Observ	LERs with ncies and vations
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	Totalsa	Totals () ^b
Facility Name		0 (14)
 a. Unit number was not included or incorrect. b. Name was not included or was incorrect. 		
 Additional unit numbers were included but not required. 		
Docket Number was not included or was incorrect.		0 (14)
Page Number was not included or was incorrect.	· .	0 (14)
Title was left blank or was inadequate.		11 (14)
a. Root cause was not given or was	10	
b. Result (effect) was not given or	3	
was inadequate. c. Link was not given or was inadequate.	5	
Event Date		0 (14)
 a. Date not included or was incorrect. b. Discovery date given instead of event date. 		
LER Number was not included or was incorrect.		0 (14)
Report Date	* *	0 (14)
 a. Date not included. b. OBSERVATION: Report date was not within thirty days of event date (or discovery date if appropriate). 	v	
Other Facilities information in field is inconsistent with text and/or abstract.		0 (14)
Operating Mode was not included or was		0 (14)

	Number of Deficie Obser	LERs with ncies and vations
	Sub-paragraph	Paragraph
Description of Deficiencies and Observations	Totals ^a	Totals () ^b
Power level was not included or was inconsistent with text or abstract.		0 (14)
Reporting Requirements		0 (14)
 a. The reason for checking the "OTHER" requirement was not specified in the abstract and/or text. b. OBSERVATION: It may have been more appropriate to report the event under a different paragraph. c. OBSERVATION: It may have been appropriate to report this event under additional unchecked paragraph. 	an	· · · · · · · · · · · · · · · · · · ·
Licensee Contact		0 (14)
 a. Field left blank. b. Position title was not included. c. Name was not included. d. Phone number was not included. 	• •	
Coded Component Failure Information		2 (14)
a. One or more component failure	0	
<pre>sub-fields were left blank. b. Cause, system, and/or component code is inconsistent with text.</pre>	1	
c. Component failure field contains data	0	
d. Component failure occurred but entire field left blank.	1	

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· · · ·	Number of LERs with Deficiencies and Observations		
Description of Deficiencies and Observations	Sub-paragraph Totals ^a	Paragraph <u>Totals ()^b</u>	
Supplemental Report		2 (14)	
a. Neither "Yes"/"No" block of the supplemental report field was checked.	0		
b. The block checked was inconsistent with the text.	2	•	
Expected submission date information is inconsistent with the block checked in Item (14).		0 (14)	

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

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

APPENDIX D

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LER COMMENT SHEETS FOR INDIAN POINT 3

Section	Comments
1. LER Number:	86-001-00
Scores: Text =	7.9 Abstract = 9.1 Coded Fields = 8.8 Overall = 8.4
Text	 <u>50.73(b)(2)(i1)(D)</u>The reasons for the relay binding, valve operator binding, and leaky elbow were not discussed. Almost a one-to-one correlation exists between root cause and corrective actions to prevent recurrence. An adequate root cause discussion, therefore, helps the reader to understand the corrective actions taken.
	A supplemental report would be appropriate to describe the results of the investigation into the valve operator binding problem if these results significantly change the reader's perception of the event and/or require additional corrective actions be taken.
	2. <u>50.73(b)(2)(ii)(F)</u> Only the Energy Industry Identification System code for each component/system mentioned in the text needs to be provided (e.g., for isolation valve provide [ISV]). This requirement applies to all components/systems referred to in the text (i.e., the codes for turbine and trap were not provided), not just failed components.
•	3. <u>50.73(b)(3)</u> Discussion of the assessment of the safety consequences and implications of the event is not included. Only one safety statement was made and that was that the leak was not a safety concern, but no justification for this statement was given.
	4. <u>50.73(b)(4)</u> In the case of the valve operators, it is not clear if the component replacement was of the same manufacturer and model number or an upgraded unit. An adequate root cause discussion (see text comment 1) is needed to help justify why, if the replacement part is of the same make and model as the failed component, it will not fail again for the same reason.

Section		Comments
1. LER Number:	86-0	001-00 (Continued)
Abstract	1.	The root cause and corrective actions summaries are deficient for the same reasons as discussed for the text.
Coded Fields	۱.	<u>Item (4)</u> Title: Link (surveillance testing) is not included. A more appropriate title might be "Low Steam Generator Reactor Trip during Surveillance Testing due to a Faulty Test Relay".
	2.	<u>Item (14)</u> The block checked appears to be inconsistent with information provided in the text (See text comment number 1).

Section		Comments
2. LER Number:	86-1	002-00
Scores: Text =	7.6	Abstract = 8.9 Coded Fields = 9.0 Overall = 8.1
Text	1.	50.73(b)(2)(ii)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.
	2.	50.73(b)(2)(11)(K)Discussion of automatic and/or manual safety system responses is inadequate. All safety systems that responded as a result of this event should be named.
· · ·	3.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what are considered the most severe conditions, it would be helpful to state so in the text. Is the vibration data testing performed only at startup? Would the air entrainment in the feedwater flow transmitter sensing lines always cause a negative flow indication such that under more severe conditions a real flow mismatch might not be detected?
	4.	50.73(b)(4)A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) is inadequate. Should a procedure change be implemented that would warn the operators of the potential for flow instability in transmitters during testing at low flow rates?
Abstract	1.	50.73(b)(1)Mention of the safety systems that responded as a result of the event is not included.
	2.	50.73(b)(1)Summary of corrective.actions taken or p-lanned as a result of the event is inadequate for the same reasons discussed in text comment number 4.
Coded Fields	1.	<u>Item (4)</u> Title: Root cause and link are not included. A better title might be: "Reactor Trip Due to Improper Venting of Flow TransmitterPersonnel Error".

Section		Comments		
3. LER	Number:	86-0	003-00	
Scores:	Text =	7.8	Abstract = 8.4 Coded Fields = 10.0 Overall = 8.2	
Text		1.	50.73(b)(2)(ii)(D)The root and/or intermediate cause discussion concerning the Crane check valve is inadequate. Why were the setscrews not in contact with the disc pivot pins? Was this a wear or a design problem?	
		2.	50.73(b)(2)(ii)(J)(1)Were the operator actions concerning the speed increase on MBFP No. 31 and the trip of MBFP No. 32 in accordance with plant procedures?	
		3.	50.73(b)(2)(ii)(K)Discussion of automatic and/or manual safety system responses is inadequate. All safety systems that "operated correctly" as a result of the trip should be named.	
		4.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is not included. The text should (for example) say "There were no safety consequences as a result of this event because ". In addition, there should be some discussion as to whether or not the implications of the event could have been worst under a different, but probable, set of initial conditions (e.g., a higher power level).	
		5.	<u>50.73(b)(4)</u> Are there any other identical check valves in other safety systems in the plant (other than the one in the discharge line for MBFP No. 31)?	
	•	6.	OBSERVATION: A diagram or figure would aid in understanding the event. A flow diagram that shows the check valve in the system and a schematic that shows the internals of the check valve would have aided the readers' understanding of this event.	
Abstrac	t	1.	50.73(b)(1)Summary of personnel responses is inadequate. The abstract does not state that the MBFP No. 32 was shutdown because it was "seen to increase speed rapidly" as was stated in the text.	
		2.	<u>50.73(b)(1)</u> Summary of cause information is inadequate. The abstract does not state why the valve disc became loose (disengaged).	

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Section	Comments			
	· · · ·			

3. LER Number: 86-003-00 (Continued)

1.

3. <u>50.73(b)(1)</u>--Summary of corrective actions taken or planned as a result of the event is inadequate. The abstract does not mention the similar valve that will be inspected during the upcoming refueling outage.

 Additional space is available within the abstract field to provide the necessary information but it was not utilized.

Coded Fields

No comments.

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Section	Comments			
4. LER Number:	86-0	04-00		
Scores: Text =	6.4	Abstract = 8.9 Coded Fields = 9.4 Overall = 7.5		
Text	1.	Submittal of an LER without a text is acceptable; however, the abstract must then meet all the requirements of a text and still be less than 1400 spaces. The following comments apply to the abstract that was evaluated as if it were a text.		
	2.	50.73(b)(2)(ii)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.		
	3.	50.73(b)(2)(ii)(J)(2)(i)Discussion as to whether the personnel error was cognitive or procedural is not included. How long did the operator take versus how long is allowable? Did the operator think there was enough time to take the proper action?		
· · ·	4.	50.73(b)(2)(ii)(K)Any safety systems which actuated as a result of this event should, as a minimum, be listed.		
	5.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is not included.		
	6.	50.73(b)(4)Will other operators be made aware of this event and/or is a warning needed in the procedure?		
	7.	50.73(b)(5)Information concerning previous similar events is not included. If no previous similar events are known, the text should so state.		
Abstract	1.	No comment.		
Coded Fields	1.	<u>Item (4)</u> Title: The root cause (personnel error) is not stated clearly.		

Section		Comments
5. LER Number:	: 86-0	005-00
Scores: Text =	= 8.0	Abstract = 8.8 Coded Fields = 9.0 Overall = 8.3
Text	1.	50.73(b)(2)(ii)(D)The root and/or intermediate cause discussion concerning the relay contact misalignment is inadequate. Was the misalignment a result of mishandling or mechanical fatigue?
	2.	50.73(b)(2)(ii)(K)Discussion of automatic and/or manual safety system responses is inadequate. As a minimum any safety systems that actuated as a result of the event should be listed. A general statement that all equipment operated correctly is inadequate in the text.
	3.	<u>50.73(b)(3)</u> OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what are considered the most severe conditions, it would be helpful to state so in the text.
Abstract	1.	50.73(b)(1)A statement that all safety systems operated correctly is appropriate in the abstract (see text comment 2).
	2.	<u>50.73(b)(1)</u> Summary of root cause information is inadequate for the same reasons discussed in text comment number 1.
Coded Fields	1.	<u>Item (4)</u> Title: Cause and link are not included. A better title might be: "Reactor Trip During Turbine Testing Caused by Misaligned Contact on Turbine Overspeed Protection Relay".
		د. مشعق

Section Comments -6. LER Number: 86-006-00 Coded Fields = 9.0Scores: Text = 7.0Abstract = 9.00verall = 7.8Text 1. 50.73(b)(2)(ii)(C)--Time information is not adequate to provide the reader with a time history of the event (e.g., at what time was the No. 32 condensate pump discovered to have high motor current?). 2. · 50.73(b)(2)(11)(D)--The root cause of the event (procedural inadequacy) can only be inferred from the corrective action discussion. 3. 50.73(b)(2)(11)(F)--The Energy Industry Identification System code for each component and/or system referred to in the text is not included. 4. 50.73(b)(3)--Discussion of the assessment of the safety consequences and implications of the event is not included. 5. 50.73(b)(4)--Discussion of corrective actions taken or planned is inadequate. Was a test conducted to ensure that the condensate system would operate properly if a condensate pump is secured with the condensate booster pumps in "trip-pullout"? Does training need to be addressed by corrective actions. given that the operators were unable to prevent the 2 SG water levels from decreasing to the trip setpoint? Are the booster pumps to be placed in trip-pullout just prior to the shutting down of a condensate pump or at a certain power level? 6. The term "trip-pullout" appears to be plant specific and should be defined or could be replaced with a more widely used term such as "bypassed" or "deenergized". متعلا Abstract 50.73(b)(1)--The cause and corrective action's 1. information in the abstract is deficient for the same reasons provided in the text comments 2 and 5. Coded Fields 1. Item (4)--Title: Cause information (Procedura) Deficiency) is not included.

Section	Comments			
7. LER Number:	86-007-00			
Scores: Text = 4	3.0 Abstract = 8.8 Coded Fields = 9.5 Overall = 8.4			
Text	 <u>50.73(b)(2)(11)(F)</u>The Energy Industry Identification System code for each component and/or system referred to in the text is not included. 			
	 <u>50.73(b)(3)</u>Discussion of the assessment of the safety consequences and implications of the event is not included. 			
Abstract	 <u>50.73(b)(1)</u>Summary of root cause is inadequate. The abstract does not indicate that an operator intentionally injected water into the steam generator without considering the effect on the surveillance test in progress. 			
• •	2. Additional space is available within the abstract field to provide the necessary information but it was not utilized.			
Coded Fields	 <u>Item (4)</u>Title: Root cause (personnel error) needs to be clearly stated, since an inadvertent actuation could occur from other causes such as a power surge. 			

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Section			Comments
8. LER	Number:	86-0	008-00
Scores:	Text =	7.3	Abstract = 5.0 Coded Fields = 8.5 Overall = 6.7
Text		1.	50.73(b)(2)(ii)(C)Dates of the IE Information Notice 86-53 and the Generic Letter 85-15 would be useful to include in the text.
		2.	<u>50.73(b)(2)(ii)(D)</u> The root and/or intermediate cause discussion concerning the implied personnel errors with respect to the installation of heat shrinkable tubing and unqualified connectors, as well as, the cause of the degradation of the cable insulation on the pressurizer PORV acoustical monitoring system is inadequate.
		3.	<u>50.73(b)(2)(ii)(F)</u> The Energy Industry Identification System code for each component and/or system referred to in the text is not included.
		4.	50.73(b)(2)(ii)(J)(2)It appears that personnel error and/or procedural deficiency may be involved in this event, but it is not discussed. See comment number 2 above.
		5.	50.73(b)(2)(ii)(L)Identification (e.g., manufacturer and model no.) of the failed component(s) discussed in the text is not included for the degraded pressurizer PORV cable insulation discussed in Section F of the text.
		6.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The availability of other systems, components, or means (e.g., personnel actions, procedural requirements, etc.) capable of mitigating the consequences of the event were not discussed. If no other systems, components, or means are available, it would be helpful to state so in the text. Alternate components for the containment high range radiation monitors, if any, are not discussed.
		7.	Acronym(s) and/or plant specific designator(s) are undefined (e.g., JCO and PORV).

Section	Comments
8. LER Number:	86-008-00 (Continued)
Abstract	 <u>50.73(b)(1)</u>Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The term, "various discrepancies", does not adequately summarize those discussed in Sections A through F of the text.
	 <u>50.73(b)(1)</u>Summary of root cause information for the discrepancies identified in the text is not included.
	3. <u>50.73(b)(1)</u> Summary of corrective actions taken or planned as a result of the event is inadequate. The summary of how the various discrepancies were corrected is not mentioned.
	 Abstract does not adequately summarize the text. More space could be used to summarize the text if the statement concerning reportability was eliminated.
Coded Fields	 <u>Item (4)</u>Title: Information concerning causes (personnel error and unspecified insulation degradation) and the link (field inspection as result of IE Notice 86-53) is not included, and the result (Technical Specification violation) is inadequate.

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Section		Comments			
9. LER	Number:	86-0	009-00		
Scores:	Text =	7.1	Abstract = 6.4 Coded Fields = 8.5 Overall = 7.0		
Text		1.	50.73(b)(2)(11)(C)When were the pumps demonstrated operable by surveillance testing (1.e., prior to or as a result of this event)? See second sentence of the fifth paragraph on page 2 of 3.		
		2.	50.73(b)(2)(ii)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.		
		3.	50.73(b)(2)(ii)(J)(2)Discussion of the personnel error/procedural deficiency is inadequate. What was the nature of the "miscommunication"? Unless this is the first time the pre-warmup check-off list procedure was performed, this procedure must have been adequate to align the switches properly prior to this event.		
•		4.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. What would have been the minimal consequences of a design basis loss of coolant accident at the plant conditions at the time of discovery (or at 349 degrees)? (See second sentence of the first paragraph on page 3 of 3.) Were there other systems available to mitigate the consequences?		
·	·	5.	50.73(b)(4)Discussion of corrective actions taken or planned is inadequate. Specifically, how will the procedures be revised to minimize miscommunications in the future. Neither the cause nor the corrective action discussion tell the reader anything about the "miscommunication".		
		6.	50.73(b)(5)OBSERVATION: For an event to be considered a "similar" event does not mean that it would have had to be reported in an LER. Some similar events may not have met the criteria for LER reportability.		
Abstract	t	1.	50.73(b)(1)Summary of corrective actions taken or planmed as a result of the event is not included.		

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9. LER Number: 86-009-00 (Continued)

2. Additional space is available within the abstract field to provide the necessary information but it was not utilized.

Coded Fields

 <u>Item (4)</u>--Title: Result is not included and the cause and link are inadequate. A better title might be "Miscommunication (Personnel Error) During Performance of Pre-Warmup Check-Off List Results In Both Containment Spray Pumps Being Technically Inoperable".

Section			Comments		
10. LER	Number:	86-	010-00		
Scores:	Text =	6.0	Abstract = 8.4 Coded Fields = 9.0 Overall = 7.0		
Text		1.	50.73(b)(2)(ii)(D)The root and/or intermediate cause discussion concerning the moisture leak is inadequate. Did a conduit or a seal failure allow the water to leak in?		
	•	2.	50.73(b)(2)(ii)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.		
	•	3.	50.73(b)(2)(ii)(L)Identification (e.g., manufacturer and model no.) of the failed component(s) discussed in the text is not included. If it is not possible to give a manufacturer or model number for a failed component, such as might be the case for the underground conduit, then its size and material type might be helpful information to include in the LER.		
	•	4.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is not included.		
		5.	50.73(b)(4)Discussion of corrective actions taken or planned is inadequate. More detail should be provided about equipment that was repaired or replaced, instead of just stating that equipment was repaired or replaced as necessary. The effectiveness of the corrective actions in preventing recurrence of the event is not obvious from this text discussion. For example, the text states that some conduit was placed above ground, but the reader is left to assume that the conduit being placed above ground is the same section that failed and that it will be swbjected to less severe conditions (i.e., rain and flooding will not be a problem).		
			The cause discussion should be extensive enough to demonstrate the adequacy of the corrective actions taken to prevent recurrence. Simply replacing a failed component may not be adequate, if the condition that caused the failure can still act on the new component.		

Section	Comments			
10. LER Number:	86-1	86-010-00 (Continued)		
Abstract	1.	50.73(b)(1)Summary of corrective actions taken or planned as a result of the event is inadequate. The fact that some conduit was placed above ground was not mentioned.		
	2.	Additional space is available within the abstract field to provide the necessary information but it was not utilized.		
Coded Fields	1.	<u>Item (4)</u> Title: Cause information (conduit leak) is not included.		
	2.	<u>Item (13)</u> Component failure occurred but entire field is blank.		

Section		Comments
11. LER Numb	er: 86-0	011-00
Scores: Text	= 5.9	Abstract = 8.2 Coded Fields = 9.0 Overall = 6.9
Text	1.	50.73(b)(2)(11)(C)Approximate date for the next scheduled outage is not included.
	2.	50.73(b)(2)(11)(D)The root and/or intermediate cause discussion concerning the eccentric seal on No. 32 MBFP is inadequate. What caused the seal to become eccentric?
	3.	50.73(b)(2)(11)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.
	4.	$\frac{50.73(b)(2)(11)(K)}{K}$ Discussion of automatic and/or manual safety system responses is inadequate. If safety systems, other than the turbine generator, responded during the event they should be listed. A general statement that all equipment (in particular, safety systems) operated correctly is inadequate in the text.
	5.	50.73(b)(2)(11)(L)Identification (e.g., manufacturer and model no.) of the failed seal discussed in the text is not included.
	6.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The consequences of the event had it occurred under more severe conditions were not discussed. If the event occurred under what are considered the most severe conditions, it would be helpful to state so in the text. OBSERVATION: The availability of other systems, components, or means (e.g. personnel actions, procedural requirements, etc.) capable of mitigating the consequences of the event were not discussed. If no other systems, components, or means are available, it would be helpful to state so in the text.
	7.	50.73(b)(4)A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) is inadequate. Corrective actions discussion concerning the correction of the cause of the seal eccentricity is not included. Could the eccentric seal problem become worse during normal operation if it's not corrected before the next scheduled outage?

Section		Comments
11. LER Number:	86-	011-00 (Continued)
Abstract	1.	50.73(b)(1)A statement that all safety systems operated correctly is appropriate in the abstract (See text comment 4).
	2.	50.73(b)(1)Summary of root cause information concerning the eccentric seal is inadequate for the same reason discussed in text comment number 2.
	3.	50.73(b)(1)Summary of corrective actions taken or planned as a result of the event is inadequate for the same reason discussed in text comment number 7.
Coded Fields	1.	<u>Item (4)</u> Title: Root cause of eccentric oil seal is not included.

Section		Comments		
12. LER 1	12. LER Number: 86-012-00			
Scores:	Text = 7.0	Abstract = 9.0 Coded Fields = 10.0 Overall = 7.9		
Text	1.	50.73(b)(2)(ii)(C)When were the post trip procedures completed?		
	2.	50.73(b)(2)(ii)(F)The Energy Industry Identification System code for each component and/or system referred to in the text is not included.		
	3.	50.73(b)(2)(11)(J)(2)Discussion of the personnel error/procedural deficiency is inadequate. Why did the panel slip? Is it extremely heavy or was only one person handling it? What type of personnel were handling the panel?		
	4.	50.73(b)(2)(ii)(K)Discussion of automatic and/or manual safety system responses is inadequate. What safety systems were affected (if any) by the loss of power? Did any safety systems actuate (or have to be manually actuated) as a result of the trip from 100% power? If so, they should be named.		
	5.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. What are the safety implications of this event? For example, did the main electrical generator output breakers not being opened immediately have any safety implications? Was the "fail-safe" position for the affected valves also the "fail-safe" position for these valves relative to plant safety?		
	6.	50.73(b)(4)Discussion of corrective actions taken or planned is inadequate. More details concerning the design modification would be helpful.		
Abstract	1.	OBSERVATION: The abstract is intended to be a summary of the text; therefore, the text must include all information summarized in the abstract. This abstract contains information that was not included in the text.		
	2.	Abstract contradicts the text (e.g., bistables vs. — relays).		
Coded Fie	lds 1.	No comments.		

Section		Comments	
13. LER Number: 87-001-00			
Scores:	Text = 8.2	Abstract = 8.4 Coded Fields = 8.9 Overall = 8.4	
Text	1.	<u>50.73(b)(2)(ii)(C)</u> When did the No. 33 ABFP trip and when was it returned to service?	
	2.	50.73(b)(2)(ii)(D)Could the precipitation have been prevented by changing the oil periodically? Why was	
		the setpoint low (personnel error)? It appears from the corrective actions that the setpoint had never been checked after once being set.	
	3.	50.73(b)(2)(ii)(F)The Energy Industry Identification System codes were not included for components/systems referred to in the text. Codes are to be provided for all components/systems referred to in the text, not just the ones that failed.	
	4.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. The safety assessment should justify why No. 31 ABFP and the availability of No. 32 ABFP is enough to assure the safety of the plant. This may be no more than a statement that only one auxiliary feed pump is required by the Technical Specifications to remove decay heat.	
	5.	50.73(b)(4)A supplemental report would be appropriate to describe the results of the evaluation into replacing the control oil system if these results significantly change the reader's perception of the event and/or require additional corrective actions be taken.	
Abstract	۱.	50.73(b)(1)Summary of corrective actions taken or planned as a result of the event is inadequate. The evaluation into replacing the control oil system and the addition of a procedure to periodically reset the discharge pressure limiter were not mentioned.	
	2.	Additional space is available within the abstract field to provide the necessary information but it was not utilized.	

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Section	Comments

13. LER Number: 87-001-00 (Continued)

Coded Fields 1. <u>Item (13)</u>--As in the auxiliary feedwater system, the main feedwater pump only tripped; it did not fail. The most appropriate component for which there is a code appears to be the orifice.

 <u>Item (14)</u>--The block checked appears to be inconsistent with information provided in the text (See text comment number 5).

Section		Comments	
14. LER	Number: 87	-002-00	
Scores:	Text = 8.5	Abstract = 5.4 Coded Fields = 8.5 Overall = 7.6	
Text	1.	50.73(b)(2)(11)(D)The root and/or intermediate cause discussion concerning the broken retaining ring on main steam safety valve MS-46-2 is inadequate. Why was the ring broken? Was high temperature the cause for the shorted solenoid valve coil on SOV-1197?	
•	2.	50.73(b)(3)Discussion of the assessment of the safety consequences and implications of the event is inadequate. OBSERVATION: The availability of other systems, components, or means (e.g. personnel actions, procedural requirements, etc.) capable of mitigating the consequences of the event were not discussed. If no other systems, components, or means are available, it would be helpful to state so in the text. Was the condenser overpressurization expected, given the SI actuation and subsequent circulating water pump trips?	
	3.	50.73(b)(4)A discussion of actions required to reduce the probability of recurrence (i.e, correction of the root cause) is inadequate. See text comment number 1.	
Abstract	1.	50.73(b)(1)Summary of occurrences [immediate cause(s) and effects(s)] is inadequate. The "other system abnormalities" are not listed.	
	2.	<u>50.73(b)(1)</u> Summary of the root cause information for the other system abnormalities is inadequate.	
	3.	50.73(b)(1)Summary of corrective actions taken or planned as a result of the event is inadequate for the other system abnormalities.	
	4.	Abstract does not adequately summarize the text. Additional space is available within the abstract field to provide the necessary information but it was not utilized.	
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Section Comments

14. LER Number: 87-002-00 (Continued)

Coded Fields 1. <u>Item (4)</u>--Title: Cause information (shorted solenoid coil, broken retaining ring, failed inverter) is not included and the result (condenser overpressurization) is inadequate.