

Appendix I

Iowa Electric Post-Scram Review Procedure

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IOWA ELECTRIC LIGHT AND POWER COMPANY DUANE ARNOLD ENERGY CENTER		No. 1410.8 Rev. 0	
POST SCRAM REVIEW		Page 1 of 5	
		Effective Date: February 28, 1984	
Prepared by:	Date:	Approved by:	Date:
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		<i>[Signature]</i>	<i>2/24/84</i>

**ONLY
FOR INFORMATION**

1.0 PURPOSE

This procedure outlines the review process to analyze unscheduled reactor shutdowns and determine if the plant can be restarted safely.

2.0 APPLICABILITY

This procedure applies to automatic and manually initiated scrams that result in control rod insertion.

This procedure may also be used for other situations at the discretion of the Operations Supervisor, Assistant Plant Superintendent-Operations, or Plant Superintendent.

NOTE: This procedure is not applicable to controlled shutdowns.

3.0 DEFINITIONS

The following definitions supplement those found in the Quality Assurance Manual, "Glossary of Terms".

3.1 **Scram** - The automatic or manual simultaneous insertion of all control rods causing reactor shutdown.

4.0 RESPONSIBILITIES AND AUTHORITIES

- 4.1 The Plant Superintendent-Nuclear has the responsibility and authority to review and analyze post scram reports, and approve restart if acceptable.
- 4.2 The Operations Supervisor/Operations Shift Supervisor is responsible to complete the scram report and make recommendations for action and restart.
- 4.3 The Plant Performance Supervisor is responsible to review reactor parameters and make recommendations for action and restart.
- 4.4 The Radiation Protection Supervisor is responsible to evaluate radiological conditions and make recommendations for restart.
- 4.5 The Shift Technical Advisor is responsible to complete the STA Incident Report and make recommendations for restart.
- 4.6 The Maintenance Superintendent is responsible to complete maintenance action requests for scram related equipment problems and make recommendations for restart.
- 4.7 The Technical Support Supervisor is responsible to review all reports and evaluations for consistency and make recommendations for restart to the Plant Superintendent.

IOWA ELECTRIC LIGHT AND POWER COMPANY DUANE ARNOLD ENERGY CENTER	No. 1410.8 Rev. 0
POST SCRAM REVIEW	Page 2 of 5 Effective Date: February 28, 1984

**FOR INFORMATION
ONLY**

5.0 REQUIREMENTS

- 5.1 If a safety limit is exceeded, the reactor shall be placed in cold shut down. Reactor operation shall only be resumed when authorized by the NRC.
- 5.2 A post scram review shall be performed for all automatic and manually initiated scrams that result in control rod insertion.

6.0 INSTRUCTIONS

- 6.1 Each group reports the results of their evaluation, investigation, recommendations (including long term) and concurrence for start up. The format of each group's evaluation or report shall be as determined by that group.

The intent for these reports is to analyze, relative to each area of expertise, the sequence of events and plant response in comparison to expected or designed responses. At all times, the plant should have remained within the safe limits of operation. Any observed anomalies or problems should be identified and an explanation developed. Any recommendations for corrective action both prior to restart and long term should be given in the report.

- 6.2 The group reports shall be forwarded to the Technical Support Supervisor. Transmittal via a simple memorandum as shown in Attachment 1, or other standard transmittal methods, is sufficient. The following are guidelines for the content of each report.

6.2.1 Scram Report (Operations Shift Supervisor)

- o Describe Pre-Event Conditions and Event
- o Denote Operator and Plant Response
- o Collect Plant Data for Event
- o Make Preliminary Determination of Cause
- o Identify Any Observed Anomalies or Problems
- o Make Recommendations for Action and Restart

6.2.2 STA Incident Report (Shift Technical Advisor)

- o Describe Event
- o Denote Plant Response
- o Make Preliminary Determination of Cause
- o Identify Any Observed Anomalies or Problems
- o Make Recommendations for Action and Restart

6.2.3 Plant Performance Evaluation (Plant Performance Supervisor)

- o Evaluate Reactor Parameters
- o Identify Any Observed Anomalies or Problems
- o Make Recommendations for Action and Restart

IOWA ELECTRIC LIGHT AND POWER COMPANY DUANE ARNOLD ENERGY CENTER	No. 1410.8 Rev. 0 Page 3 of 5
POST SCRAM REVIEW	Effective Date: February 28, 1984

**FOR INFORMATION
ONLY**

6.2.4 Maintenance Evaluation (Maintenance Superintendent)

- o Describe Problems and Repairs for Equipment Causing the Scram or Relevant to the Scram
- o Evaluate the Potential for Similar Future Breakdowns
- o Identify Any Observed Anomalies or Problems
- o Make Recommendations for Action and Restart

6.2.5 Radiation Protection Evaluation

- o Evaluate In-Plant Radiological Conditions
- o Evaluate Plant Effluents
- o Evaluate Reactor Coolant Chemistry
- o Evaluate Radwaste Operational Conditions
- o Identify Any Observed Anomalies or Problems
- o Make Recommendations for Restart

6.3 The Technical Support Supervisor will review each report in regard to completeness for content. He will compare the content of the reports against each other to ensure descriptions, evaluations, and recommendations are consistent and compatible with each other and expected response per design. He will ensure a satisfactory resolution is obtained for any discrepancies or incompatibilities noted while comparing each section's report. He will ensure a satisfactory explanation of observed anomalies or problems has been developed. His primary focus is to ensure adequate consideration has been given to determine the root cause, to minimize the potential for future recurrence, to address generic implications and determine the effect on safe operation of the plant. He then summarizes the reports, outlines the corrective action taken and outstanding, and makes a recommendation for restart in a summary to the Plant Superintendent.

As an additional part of this review, he will determine whether sufficient information has been identified and is available in order to generate the required Licensee Event Report.

6.4 The Plant Superintendent-Nuclear, or Assistant Plant Superintendent-Operations, in his absence, approves restart and forwards post scram package to the Operations Department to keep with the startup package. Relevant information developed by this review can be utilized in Licensee Event Report preparation by the Technical Support Supervisor.

6.5 An individual responsible for performing the tasks outlined in this procedure may authorize a designee to perform them in his absence.

6.6 A required post scram review supplements start up requirements and procedures contained in Integrated Plant Operating Instructions.

6.7 Operations Committee

This procedure requires Operations Committee review.

IOWA ELECTRIC LIGHT AND POWER COMPANY DUANE ARNOLD ENERGY CENTER	No. 1410.8 Rev. 0
POST SCRAM REVIEW	Page 4 of 5 Effective Date: February 28, 1984

FOR INFORMATION
ONLY

7.0 RECORDS

- 7.1 Any documents generated by this procedure that become part of the startup package shall be retained with the startup package for the lifetime of the plant.
- 7.2 Copies of relevant information developed during this post scram review utilized in Licensee Event Report (LER) preparation should be retained by the Technical Support Supervisor in his LER files. These records are not quality assurance records.

8.0 REFERENCES

Nuclear Regulatory Commission Generic Letter 83-28, Subject: Required Actions Based on Generic Implications of Salem ATWS Events.

9.0 ATTACHMENTS

Attachment (1) - Summary Memo


Operations Committee Chairman

2/23/84
Date

IOWA ELECTRIC LIGHT AND POWER COMPANY DUANE ARNOLD ENERGY CENTER	No. 1410.8 Rev. 0
POST SCRAM REVIEW	Page 5 of 5 Effective Date: February 28, 1984

ATTACHMENT 1
POST SCRAM SUMMARY MEMO

TO: Technical Support Supervisor
FROM:

DATE:

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