

AP.28

POST TRIP TRANSIENT REPORT

1.0 PURPOSE

.1 Pre-Startup Actions

To provide a systematic method for diagnosing the cause(s) of a reactor trip, ascertaining the proper functioning of safety-related and other important equipment during the trip, determining any detrimental effect on plant equipment caused by the trip, and making the determination that the plant can be restarted safely.

.2 Subsequent Actions (Usually Post-Startup)

To provide for a detailed account of the trip, and to develop and adopt long-term corrective actions to be taken.

2.0 REFERENCES

- .1 NO-001 Coordinated Commitment Log
- .2 Adapted from INPO Good Practice OP-211
- .3 Engineering and Quality Control Guidelines, MEG.203
- .4 Technical Specifications 6.2.2.g, 6.5.5.1, 6.9.4.1, 6.10.2.f
- .5 Administrative Procedures 1, 3, 17, 22, 39
- .6 Plant Operations Manual, Procedure A.75 -- Plant Computer
- .7 Code of Federal Regulations, 10 CFR 50.72

3.0 PROCEDURE

.1 Overview

CAUTION:

Instructions for each step shall be followed in this sequence.

- .1 Plant trip or transient occurs.
- .2 The Shift Supervisor initiates this procedure.

Rev. 7
AP.28-1

8506100300 850531
PDR ADDCK 05000312
PDR

PROCEDURE (Continued)

- 3.1 .3 Personnel statements gathered and machine generated data is collected.
- .4 The STA reviews the assembled information for completeness.
- .5 Trip witnesses' shift may end now, at the earliest.
- .6 The Shift Supervisor and STA perform a nuclear safety assessment.
- .7 The Plant Superintendent may allow restart here (at the earliest).
- .8 Engineering and Quality Control Engineer writes a Trip Report.
- .9 The Plant Review Committee discusses and amends the Trip Report and its recommended corrective actions.
- .10 The Plant Superintendent reviews and approves the amended report and its recommended corrective actions.

.2 Plant Trip or Transient

- .1 For the purposes of this procedure, a plant trip is when a generator, turbine, or reactor trip occurs that is not a part of a planned plant progression.
- .2 At the discretion of the Shift Supervisor, this procedure may be initiated for non-trip transients.
- .3 At the discretion of the Engineering and Quality Control Superintendent, this procedure may be entered for a non-trip transient. If their shift had ended, the witnessing Operations crew has no requirement to complete their sections of this procedure.

CAUTION:

If any of the Primary System Safety Valves, PSV-21506, PSV-21507, or PSV-21511, lifted or failed to lift when required, an Occurrence Description Report must be initiated in accordance with AP.22. (Reference Technical Specification 6.9.4.1.j)

.3 Initiation (Pre-Startup)

Notify the NRC in accordance with 10 CFR 50.72.

Once the plant is in a condition where the Shift Supervisor judges that data gathering will not impede the Operator's control of the plant, this procedure is initiated. If plant conditions change, any licensed Operator may interrupt this procedures' performance temporarily.

If it is the Engineering and Quality Control Superintendent's decision to enter this procedure, see Step 3.2.3.

PROCEDURE (Continued)

3.4 Data Gathering

.1 Machine Generated

Time-mark all strip charts adjacent to the pen.

For the pre-startup evaluation, some strip charts need not be retrieved, but can be left in place for the trip report writer. Leave those traces that show a single downwards trend. Strip charts may be snipped and left with the data package, or removed from recorder and copied. If snipped, the chart's remaining roll should have an explanatory note.

CAUTION:

Bailey computer "Sequence of Events" and "Memory Trip Review" functions, if cancelled, are lost. Because the utility typer must be shared for real-time monitoring and trip data gathering, call up only one Bailey function at one time.

- .2 Record the retrieved printouts and strip charts on Enclosure 4.1. Complete Enclosures 4.1 and 4.2.

.3 Plant Personnel Statements

After the plant is in a safe, stable condition, the Shift Supervisor shall ensure each individual involved in the trip (e.g., reactor operators, maintenance technicians, etc.) provides a statement concerning his/her involvement in the reactor trip. These statements may be obtained in one of the following ways: 1) self-written statements; 2) interviews with personnel involved in the reactor trip; 3) critique with all involved personnel.

Use Enclosure 4.3. Read and initial statements of nearby personnel so that, with your statement's assistance, an accurate and complete picture results. Restrict statements to facts concerning the event; the facts should be stated chronologically, if possible.

The written statements shall be included in the reactor trip data package to assist in the event reconstruction.

.5 Data Completeness Doublecheck (Pre-Startup)

- .1 The STA will review the collected data.
- .2 Any followup questions are best asked at this time, while the events are fresh in everyone's mind. Use "Remarks" areas for the documentation space.

PROCEDURE (Continued)

3.6 Time to Release Individuals From Shift

The goal is to finish the completeness doublecheck before releasing individuals from their shift. Exceptions are:

- .1 The Shift Supervisor determines that the individual will otherwise work beyond limits of Technical Specification 6.2.2.g.
 - .2 By exemption by the Operations Superintendent or higher management.
- .7 Nuclear Safety Assessment (Pre-Startup)

.1 Analysis of Transient

The Shift Supervisor, or SRO designate, and the duty STA will reconstruct the transient by completing Enclosure 4.4 using the collected data. A chronological description of the event will be developed, using all available data. Pertinent alarms, trips, actuations, and isolations will be listed or marked on the sequence-of-events or alarm type printout. Pertinent plant parameters should be incorporated into the chronological list of events during the reconstruction.

- .2 The trip and transient shall be compared to the expected trip response, based on the training and experience of the duty licensed operators.

CAUTION:

FSAR transients are "worst case" or limiting conditions. Do not assume that because a transient did not result in peak parameters exceeding the FSAR values that the plant response was acceptable.

- .3 If found desirable by the Shift Supervisor, a comparison with previous trip reports or FSAR transients should be made.
- .4 Analysis of Equipment Behavior

NOTE:

Look beyond the obvious indications to diagnose the cause of the trip and evaluate the plant response. Review the available information thoroughly. Look for (1) abnormal indications or degraded trends in equipment performance, (2) events occurring out of the normal or anticipated sequence, (3) failed or degraded response of equipment to control signals, (4) unusual chemistry results or radiation readings, and (5) unanticipated alarms.

- .1 Determine:

PROCEDURE (Continued)

- 3.7 .4 .1 .1 If all major safety-related and other important equipment involved in the trip operated as anticipated or expected, and
- .2 If the trip/transient caused any detrimental effects on plant equipment, and
- .3 The root cause of the trip.

.5 Performance Summary (Pre-Startup)

The maximum and minimum values of selected parameters shall be compared with the Type I and Type II Acceptance Criteria in Enclosure 4.5.

.6 Trip Classification

Based on the results of the analysis and evaluation of the plant trip and subsequent response, the Shift Supervisor or SRO designate, and the Duty STA shall classify the event as one of the following conditions (on Enclosure 4.6):

.1 Type I

The cause of the trip is positively known and has been corrected; all safety-related and other important equipment functioned properly during the trip.

.2 Type II

The cause of the trip is positively known and has been corrected; some safety-related and/or other important equipment did not function properly during the trip; however, the malfunction has either been corrected or the failed equipment is not needed for reactor startup.

.3 Type III

.1 The cause of the trip is not positively known, or

.2 Some safety-related or other important equipment did not function properly and the malfunction has not been corrected, and the failed equipment is needed to start up.

If the Shift Supervisor did not actually perform the trip investigation, he shall review and approve the event investigation and classification.

If the Shift Supervisor and STA cannot agree on classification of the transient, the more conservative classification will be the preliminary choice.

PROCEDURE (Continued)

3.7 .7 Management Notifications

Once the reactor trip event is classified, the Shift Supervisor shall inform the Plant Superintendent. If the event is classified as a Type III, the Shift Supervisor shall also inform the Operations Superintendent and the Duty STA shall inform the Superintendent of Engineering and Quality Control.

.8 Restart Decision (Pre-Startup)

.1 Type I and II Events

Based upon this classification, the Shift Supervisor can recommend restart of the reactor. Complete Enclosure 4.6.

.2 Type III Event

The Operations Superintendent and Engineering and Quality Control Superintendent will direct the further investigation of the trip to determine necessary corrective action before restart. The Plant Superintendent, the Operations Superintendent, and the Superintendent of Engineering and Quality Control will evaluate the classification.

NOTE:

Sources of expertise that should be considered include nuclear steam supply vendors, vendor engineers onsite engineering staff, corporate engineering staff, and other experienced operations and maintenance personnel.

The Operations Superintendent and Engineering and Quality Control Superintendent will analyze the event reconstruction, emphasizing the root cause of the trip and the resolution of abnormal or degraded indications. Use available expertise to resolve questions concerning the cause and plant response. Supply the following information to the Plant Superintendent:

- .1 The actual or most probable cause of the trip;
- .2 The maintenance and testing necessary before reactor restart including additional measures to verify the most probable cause;
- .3 Additional monitoring or trending required during and/or after reactor restart;
- .4 Necessary briefings to operations and/or maintenance personnel concerning specific equipment indications or possible malfunctions; and
- .5 The conditions necessary for a reactor restart.

PROCEDURE (Continued)

3.8 .3 Plant Superintendent Evaluation and Decision

The Plant Superintendent shall evaluate the recommendation made by the personnel performing the trip investigation. For Type III Events, the Plant Superintendent should consider convening the PRC to review the trip investigation prior to reactor restart.

The Plant Superintendent shall ensure the following was done before allowing reactor restart:

- .1 The most probable cause of the trip is known and corrected.
- .2 Major safety-related and other important equipment functioned properly during the transient, or corrective maintenance and satisfactory testing has been performed or will be completed when plant conditions permit.
- .3 The plant response during the event has been analyzed and the plant responded as anticipated, or abnormalities are understood and corrected as required by Technical Specifications except as described below.

If the cause of the trip has not been positively identified, the Plant Superintendent shall determine if the cause and the circumstances surrounding the cause have been analyzed adequately. Adequate measure must be implemented to prevent repetitive challenges to safety systems during future power operations.

.9 Trip Report Writing (Usually Post-Startup)

The Engineering and Quality Control Superintendent appoints the Trip Report Writer. Once the Operations Superintendent allows, the Writer acquires custody of all collected data: either originals or xerographic copies are acceptable. The Trip Report Writer shall ensure that snipped strip charts are later stored in the same boxes as the original rolls. A trip report number will be obtained from the Surveillance Scheduler or the Engineering and Quality Control Secretary and entered on the Trip Data Form. The number issuer will complete a Commitment Transferral Form and forward it to the Nuclear Operations Department Commitment Coordinator for a three (3) week followup on the Coordinated Commitment Log. The post-trip review data package will be reviewed to determine its significance to plant safety and reliability. During the generation of the Trip Report, the event will be evaluated to produce recommendations for corrective actions (e.g., procedure changes, design modifications, operator and plant staff training). A comparison should be made with previous similar trips in order to identify abnormal or degraded conditions. Engineering and Quality Control Guideline MEG.203 contains information on the Trip Report itself.

.10 PRC Review

PROCEDURE (Continued)

3.10 .1 Type I and II Events

The Trip Report shall be reviewed by the PRC. This review is not required prior to reactor restart.

.2 Type III Event

If directed by the Plant Superintendent, the PRC will review a Type III Event before a reactor restart is commenced. In any case, a condition III Trip Report will receive a PRC review.

.3 PRC amendments may be made on Enclosure 4.7 without retyping the report. Justify amendments to recommended corrective actions.

.11 Plant Superintendent Review and Approval (Usually Post-Startup)

Submit the amended report to the Plant Superintendent for approval of the recommended corrective actions.

NOTE:

Quality Assurance tracks the implementation of the recommended corrective actions.

.12 Dissemination to the Industry (Time Frame Independent of Startup)

The Supervisor of Regulatory Compliance will determine what, if any, information on the trip will be useful to the industry, and is responsible for its dissemination via Nuclear Network, subject to Plant Superintendent approval.

.13 Retention

The trip report and data package shall be retained for the life of the plant. (Reference: Technical Specification 6.10.2.f)

4.0 ENCLOSURES

.1 Trip Data

.2 Secondary Safety and Dump Valves Temperature Stickers Data Sheet

.3 Plant Personnel Statements

.4 Analysis and Evaluations

.5 Performance Summary

.6 Event Type

.7 Trip Report Amendment and Approval

ENCLOSURE 4.1

TRIP DATA

Trip No. _____

NOTE:

Of prime importance are those values or observations that are only obtainable from witnesses. Operator's statements must be completed before the end of their shift except as waived by the Operations Superintendent or higher management or Technical Specification 6.2.2.g would be violated.

1. Plant Conditions Immediately Prior to Trip:

2. Testing/Maintenance or Contributing/Complicating Factors Prior to Transient:

NONE/AS FOLLOWS

ENCLOSURE 4.1 (Continued)
TRIP DATA

3. Standby Equipment Response/Status:

CAUTION:

Circle only one status per period.

	During Pre-Trip Transient	At Trip	During Post-Trip Transient	How, Why, and Remarks
HPI Pump A	On/Off	On/Off	On/Off	
MU Pump	On/Off	On/Off	On/Off	
HPI Pump B	On/Off	On/Off	On/Off	
SFV-23811 HPI Nozzle	Open/Shut	Open/Shut	Open/Shut	
SFV-23809 HPI Nozzle	Open/Shut	Open/Shut	Open/Shut	
SFV-23812 HPI Nozzle	Open/Shut	Open/Shut	Open/Shut	
SFV-23810 HPI Nozzle	Open/Shut	Open/Shut	Open/Shut	
Aux Feed Pump P-318	On/Off	On/Off	On/Off	
Aux Feed Pump P-319	On/Off	On/Off	On/Off	
Secondary Safety Valves	Open/Shut	Open/Shut	Open/Shut	
Atmospheric Dump Valves	Open/Shut	Open/Shut	Open/Shut	
Turbine Bypass Valves	Open/Shut	Open/Shut	Open/Shut	
A-OTSG BTU Limits	In/Normal	In/Normal	In/Normal	
B-OTSG BTU Limits	In/Normal	In/Normal	In/Normal	

ENCLOSURE 4.1 (Continued)
TRIP DATA

3. Standby Equipment Response/Status: (Continued)

	During Pre-Trip Transient	At Trip	During Post-Trip Transient	How, Why, and Remarks
Big Boiler E-360	Run/Off	Run/Off	Run/Off	
Small Boiler E-365	Run/Off	Run/Off	Run/Off	
Throttle Stops	Not C1/C1 On HISS Indication	Not C1/C1	Not C1/C1	
Governor Valves	Not C1/C1 On HISS Indication	Not C1/C1	Not C1/C1	
RH Stops	Not C1/C1 On HISS Indication	Not C1/C1	Not C1/C1	
RH Intercepts	Not C1/C1 On HISS Indication	Not C1/C1	Not C1/C1	

4. Other Equipment Response:

	Taken to Manual Anytime	Performance Acceptable	Remarks
Rx - SG Master	Yes/No	Yes/No	
ΔT_c	Yes/No	Yes/No	
Rx Master	Yes/No	Yes/No	
Diamond CRD	Yes/No	Yes/No	
Loop "A" FW Demand	Yes/No	Yes/No	

ENCLOSURE 4.1 (Continued)
TRIP DATA

4. Other Equipment Response: (Continued)

	Taken to Manual Anytime	Performance Acceptable	Remarks
Loop "B" FW Demand	Yes/No	Yes/No	_____
"A" Feed Pump	Yes/No	Yes/No	_____
"B" Feed Pump	Yes/No	Yes/No	_____
"A" Main Feed Valve	Yes/No	Yes/No	_____
"B" Main Feed Valve	Yes/No	Yes/No	_____
"A" Startup Valve	Yes/No	Yes/No	_____
"B" Startup Valve	Yes/No	Yes/No	_____
"A" Turbine Bypasses	Yes/No	Yes/No	_____
"B" Turbine Bypasses	Yes/No	Yes/No	_____
"A" Atmospheric Dump Valves	Yes/No	Yes/No	_____
"B" Atmospheric Dump Valves	Yes/No	Yes/No	_____
Secondary Code Safeties	N/A	Yes/No	_____
Condenser Vacuum	N/A	Yes/No	_____

ENCLOSURE 4.1 (Continued)
TRIP DATA

5. Transient Reactor Coolant System Bounding Values:

NOTE:

If initial value, signify with an asterisk (*).

<u>RCS Parameter</u>	<u>Maximum</u>	<u>Minimum</u>
RCS Loop A Pressure (PSIG)	_____	_____
RCS Loop B Pressure (PSIG)	_____	_____
Pressurizer Level (INCHES)	_____	_____
Observed Subcooling Margin (°F)	_____	_____
RCS Average Cooldown Rate °F	-----	-----

If RCS pressure decrease below 1650 psig, complete the following SFAS Analog Channel Status.

SFAS Analog Channels	HPI Trip Lamp	LPI Trip Lamp
Channel A	bright/dim	bright/dim
Channel B	bright/dim	bright/dim
Channel C	bright/dim	bright/dim

SFAS Digital Channels	Analog A Trip Lamp	Analog B Trip Lamp	Analog C Trip Lamp	Channel Trip Lamps
1B-HPI	bright/dim	bright/dim	bright/dim	bright/dim
2B-LPI	bright/dim	bright/dim	bright/dim	bright/dim
3A-HPI	bright/dim	bright/dim	bright/dim	bright/dim
4A-LPI	bright/dim	bright/dim	bright/dim	bright/dim

6. Control Rod Breaker Assessment:

If the Bailey Computer "Sequence of Events" or the alarm typer printouts is irretrievable, explain why:

ENCLOSURE 4.1 (Continued)
TRIP DATA

6. Control Rod Breaker Assessment: (Continued)

RPS Channel Trip Time (From Bailey Computer Group 4)

Initial Trip Channel: Channel _____ Parameter _____ Time _____

Second Trip Channel: Channel _____ Parameter _____ Time _____

From Alarm Typer: CRD Trip Confirm (Z004): Time _____

NOTE:

Acceptance criterion is: not more than 2 seconds difference. The Bailey Computer's design can allow an indicated two second difference for simultaneous events.

Control Rod Breaker Opening Time: Subtract Time _____
Second Trip Channel From Trip Confirm

CRD Breaker Lamp Status on RPS Cabinets:

Cabinet A (A-AC Breaker) Trip Light Bright/Dim

Cabinet B (B-AC Breaker) Trip Light Bright/Dim

Cabinet C (C-DC Breaker and E Contactor) Trip Light Bright/Dim

Cabinet D (D-DC Breaker and F Contactor) Trip Light Bright/Dim

7. Transient Secondary Plant Bounding Values:

Lowest OTSG Startup Range Levels Observed

OTSG A: _____ OTSG B: _____

Lowest OTSG Pressures Observed

OTSG A: _____ OTSG B: _____

Worst Condenser Vacuums Observed

HP: _____ LP: _____

REMARKS: _____

ENCLOSURE 4.1 (Continued)
TRIP DATA

8. List Equipment Damaged During the Transient:

9. REMARKS: Work Request No. _____ completed to replace temperature recording stickers on Secondary Safety Valves and Atmospheric Dump Valves.

10. Required Computer Printouts:

Attached

- | | | | |
|------------|---|----------------------------|-------|
| 1. Bailey: | Alarm Summary | -- Function 13, Group 1 | _____ |
| | Memory Trip Review | -- Function 13, Group 3 | _____ |
| | Sequence of Events | -- Function 13, Group 4 | _____ |
| | Contact Status Summary | -- Function 13, Group 5 | _____ |
| | Bad Input Summary | -- Function 13, Group 7 | _____ |
| | Deleted Point Summary | -- Function 13, Group 8 | _____ |
| | Deleted Monitor Summary | -- Function 13, Group 9 | _____ |
| | Long Term Data Collection | -- OP A.75, Attachment 4.3 | _____ |
| 2. | Com Rm PET: Secondary Code and ADV Printout | | _____ |

Completed By _____

11. Strip Charts Retrieved (Circle)

NOTE:

Retrieving all before startup is not required.

XR-00403	Percent FP	PR-21092	RCS Press WR
XR-00205	Log N	LR-21503	Przr Lvl
TR-21023	T _C	PR-20543	Hdr Press
FR-21027	RC Flow	FR-30119	Stm Flow
TR-21031	Th	FR-20535	FW Flow A
TR-21025	Tave	FR-20536	FW Flow B
PR-21037	RCS Press A	LR-20503	SG A Lvl
PR-21038	RCS Press B	LR-20504	SG B Lvl
		XR-30504	Turbine

ENCLOSURE 4.2
SECONDARY SAFETY AND DUMP VALVES
TEMPERATURE STICKERS DATA SHEET
("X out" Heat-blackened dots)

ATMOSPHERIC DUMP VALVES

PV-20571
A /0000/ /0000/
B /0000/ /0000/
C /0000/ /0000/

PV-20562
A /0000/ /0000/
B /0000/ /0000/
C /0000/ /0000/

SECONDARY SAFETIES

		C	B	A	C	B	A			180-250F	310-340F	Setpoint
		PV-20571			PV-20562							
								PSV-20545		/0000/	/0000/	1050 psi
								PSV-20547		/0000/	/0000/	1050 psi
								PSV-20549		/0000/	/0000/	1070 psi
								PSV-20551		/0000/	/0000/	1070 psi
								PSV-20553		/0000/	/0000/	1090 psi
								PSV-20533		/0000/	/0000/	1102 psi
								PSV-20555		/0000/	/0000/	1090 psi
								PSV-20557		/0000/	/0000/	1090 psi
								PSV-20559		/0000/	/0000/	1102 psi

ENCLOSURE 4.2
SECONDARY SAFETY AND DUMP VALVES
TEMPERATURE STICKERS DATA SHEET
("X out" Heat-blackened dots)

ATMOSPHERIC DUMP VALVES

PV-20571
A /0000/ /0000/
B /0000/ /0000/
C /0000/ /0000/

PV-20562
A /0000/ /0000/
B /0000/ /0000/
C /0000/ /0000/

SECONDARY SAFETIES

C B A			C B A			180-250F	310-340F	Setpoint
PV-20571			PV-20562					
			PSV-20545			/0000/	/0000/	1050 psi
			PSV-20547			/0000/	/0000/	1050 psi
			PSV-20549			/0000/	/0000/	1070 psi
			PSV-20551			/0000/	/0000/	1070 psi
			PSV-20553			/0000/	/0000/	1090 psi
			PSV-20533			/0000/	/0000/	1102 psi
			PSV-20555			/0000/	/0000/	1090 psi
			PSV-20557			/0000/	/0000/	1090 psi
			PSV-20559			/0000/	/0000/	1102 psi

* FUEL BUILDING *								
* Δ *								
* N *								

			PSV-20558			/0000/	/0000/	1102 psi
			PSV-20556			/0000/	/0000/	1090 psi
			PSV-20554			/0000/	/0000/	1090 psi
			PSV-20552			/0000/	/0000/	1090 psi
			PSV-20550			/0000/	/0000/	1070 psi
			PSV-20534			/0000/	/0000/	1102 psi
			PSV-20548			/0000/	/0000/	1070 psi
			PSV-20546			/0000/	/0000/	1050 psi
			PSV-20544			/0000/	/0000/	1050 psi

ENCLOSURE 4.3

PLANT PERSONNEL STATEMENTS

Attach statements from personnel involved with the trip concerning the events that preceded and followed the trip. Individual or group statements on how they remember the trip events are acceptable.

Name _____ Position _____

Include the plant conditions prior to the trip, your indications that a problem existed, actions taken as a result of those indications, noted equipment malfunctions or inadequacies, and any identified procedure deficiencies. Also, include any information you consider important to review this unscheduled reactor trip and actions to prevent recurrence.

(Read and initial those statements of the individuals that were near your location. If there are conflicts, provide more detail of what you saw. All observations of equipment malfunctions will be investigated. Use additional sheets if necessary.)

ENCLOSURE 4.4

ANALYSIS AND EVALUATIONS

PROBABLE CAUSE OF TRIP _____

Comments: _____

UNEXPECTED ASPECT OF TRANSIENT BEHAVIOR
(if event compared with previous similar
transient, note the transient with which
compared)

Compared With

Previous trip on _____ / _____

Date

Time

FSAR Transient page number _____

IDENTIFICATION OF SYSTEMS WITH INADEQUATE PERFORMANCE

System/Component

Description of Problem

ENCLOSURE 4.4 (Continued)
ANALYSIS AND EVALUATIONS

SRO _____ Name _____ Date _____ / _____ Time _____

Signature _____

Duty STA _____ Name _____ Date _____ / _____ Time _____

Signature _____

ENCLOSURE 4.5
PERFORMANCE SUMMARY

	<u>Maximum</u>	<u>Minimum</u>
(a) RCS Pressure	Loop A _____ B _____	Loop A _____ B _____
(b) RCS Th	Loop A _____ B _____	Loop A _____ B _____
(c) RCS Tc	Loop A _____ B _____	Loop A _____ B _____
(d) SG Press	Loop A _____ B _____	Loop A _____ B _____
(e) SG Level	Loop A _____ B _____	Loop A _____ B _____

TYPE I AND TYPE II TRIP ACCEPTANCE CRITERIA (Circle)

(a) RCS Pressure Remained Above Setpoint For Automatic SFAS Trip	Yes	No
(b) RCS Pressure Remained Below Setpoint For PZR Code Safety Valve Actuation	Yes	No
(c) RCS Temp. Decreased Less than 100% F/hr (Tech Spec)	Yes	No
(d) Reactor Coolant Was Contained Within The Primary RCS and PRT	Yes	No
(e) Indicated PZR Level Remained On Scale	Yes	No
(f) Indicated SG Level Remained Between 18" indicated (S/U) and 93% (Operate Range)	Yes	No
(g) RPS Channels Did Not Fail to trip Properly	Yes	No
(h) On RPS Trip, All CRD Breakers Tripped and the Reactor tripped within two seconds of demand (Enclosure 4.1)	Yes	No
(i) Adequate Subcooling Margin Existed	Yes	No

Comments:

ENCLOSURE 4.6

EVENT TYPE

Classify trip as Type I, II, or III according to guidelines in procedure.

The event on _____ at _____ is a type _____
Date Time I, II, III

Signature indicates agreement with condition.

Shift Supervisor Date / Time

STA Date / Time

Notification

Plant Superintendent notified of event classification _____
Date / Time

Comments:

PERMISSION TO START UP

Plant Superintendent notified and permission granted to start up the reactor.

Shift Supervisor Date / Time

Duty STA Date / Time

ENCLOSURE 4.7

TRIP REPORT AMENDMENTS AND APPROVAL

Prepared By _____ Date _____
Engineering/Quality Control

PRC Amendments and Remarks: _____

PRC review of event on _____, meeting number _____

Minutes of the meeting(s) are attached

PRC Chairman Date

Plant Superintendent Remarks: _____

Approved _____ Date _____
Plant Superintendent

END