

OPERATIONS DEPARTMENT INSTRUCTION

N2-ODI-3.04
Rev. 0

STATUS OF CONTROL ROOM ANNUNCIATORS

Approved: K. C. [Signature]

FOR INFORMATION ONLY

1.0 PURPOSE

Improve the ability of Control Room operators to prevent or respond to plant transients by:

- a. Ensuring Control Room personnel are cognizant of Control Room annunciator status and current conditions resulting in annunciator alarms.
- b. Providing the Work Control Department with accurate identification of malfunctioning annunciators, thereby assuring proper work priority.

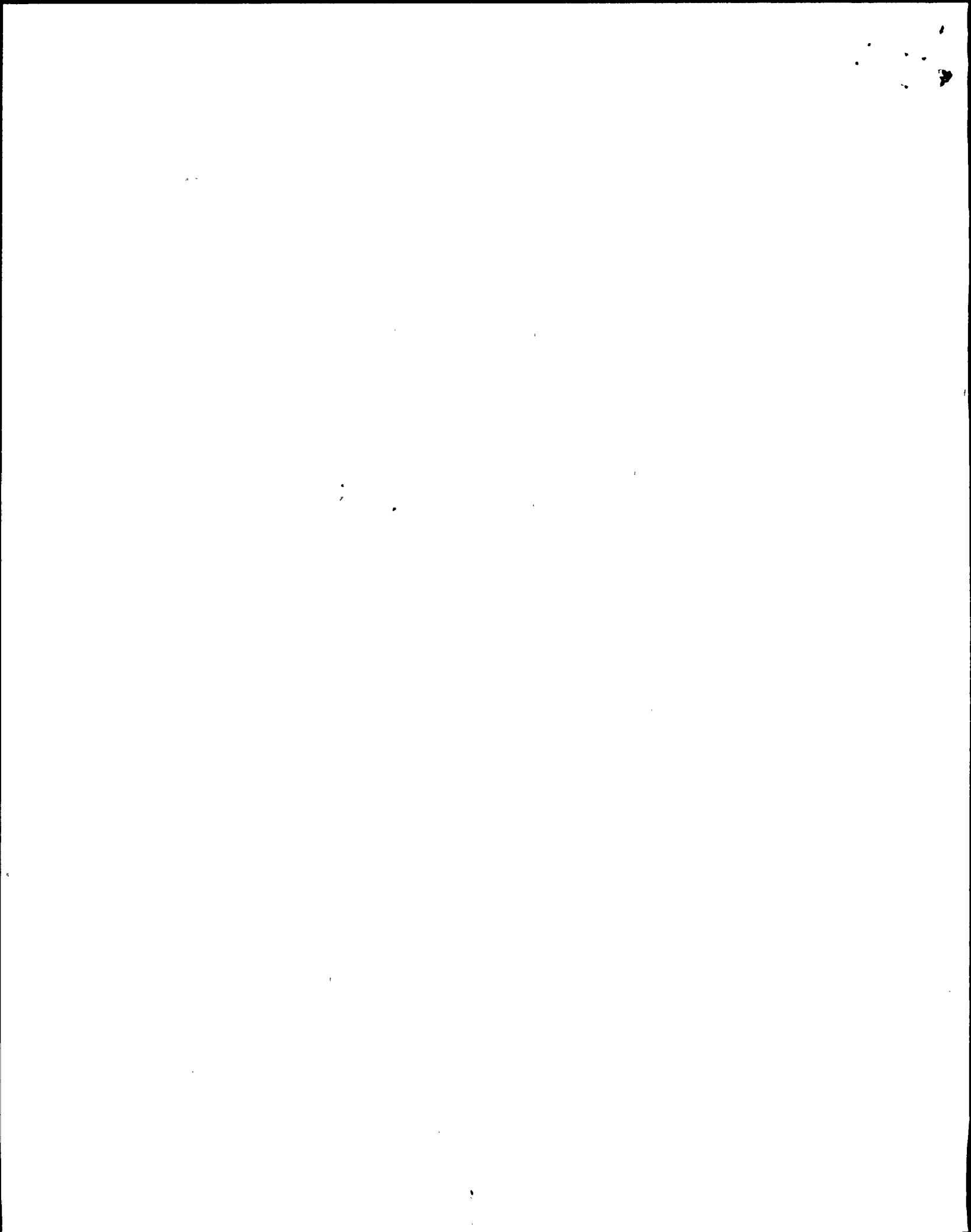
2.0 REFERENCES

Correspondence dated January 9, 1991, NMP2L 1275, from C.D. Terry to U.S. Nuclear Regulatory Commission, regarding results of re-evaluation of normally lit alarms and nuisance alarms

Internal Correspondence, dated February 26, 1991, NMP74647, from Brian Booth to Distribution, Subject: Unit 2 Nuisance Annunciators Project Report

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3.0

DEFINITIONS

Annunciator Status Database - A personal computer based record of lit Control Room annunciator windows and annunciator windows that require repair or modification. The following information, as applicable, is entered for each annunciator:

- Window number and description
- Window status ("L" for lit, "E" for extinguished, or "I" for intermittent)
- Date added to the database
- Date repairs or modifications completed
- Computer point(s) bringing in the alarm
- Identified problems
- Identification of support department(s)
- Associated documentation
- Remarks/Comments

Annunciator Status Report - A current summary of annunciators tracked in the Annunciator Status Database. A report is periodically issued to the Control Room and the Work Control Department.

4.0 PROCEDURE

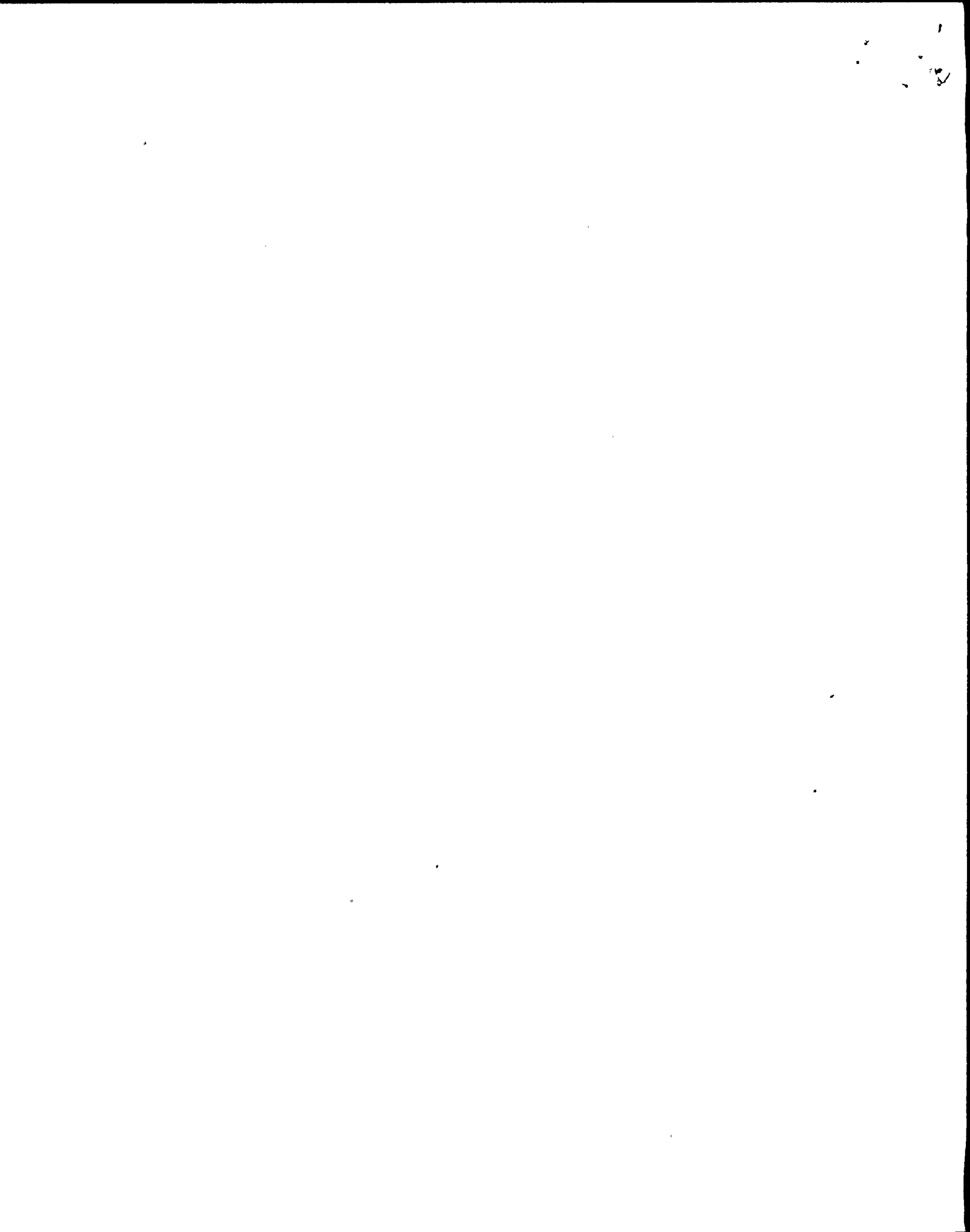
4.1 Inform Operators of Annunciator Status

4.1.1 Applicability

- a. All Control Room annunciators except annunciators on Fire Panel 2CEC-PNL849
- b. During steady-state power operations

4.1.2 The Shift Technical Advisor (STA) shall:

- a. Investigate causes of annunciator alarms as required.
- b. Maintain the Annunciator Status Database.
 - 1. All annunciators requiring repair or modifications shall be entered in the database.
 - 2. Annunciators should be entered in the database when it becomes evident that the annunciator will be in alarm beyond the current operations shift.
 - 3. Enter annunciator data using Attachment 1, "Guidelines for Annunciator Status Database Data Entry."



4.1.2.b (Cont)

4. An annunciator added to the database due to a valid alarm may be removed from the database once the initiating condition has cleared and the alarm has extinguished. All other annunciators should be maintained in the database for one month following completion of any corrective work (i.e., equipment repair, modifications, setpoint changes, etc.) to ensure all personnel are aware of the changed status.
- c. Perform a Control Room panel walkdown prior to the operator shift turnover briefing to verify the status of the Control Room annunciators.
- d. During the shift turnover briefing, inform the operators of all annunciator status changes that have occurred since the shift's last work period.
- e. Issue the Annunciator Status Report to the SSS and CSO desks at completion of the midshift.

4.2 Inform the Work Control Department of Annunciator Status

4.2.1 Applicability

- a. All Control Room annunciators except annunciators on Fire Panel 2CEC-PNL849
- b. All modes of operation

4.2.2 The STA shall provide an Annunciator Status Report to the Work Control Department a minimum of once per week. The report should contain only those items requiring support from other than Operations shift personnel.

4.3 Annunciator Related Work Requests

4.3.1 Applicability

- a. All Control Room annunciators except annunciators on Fire Panel 2CEC-PNL849.
- b. All modes of operation.

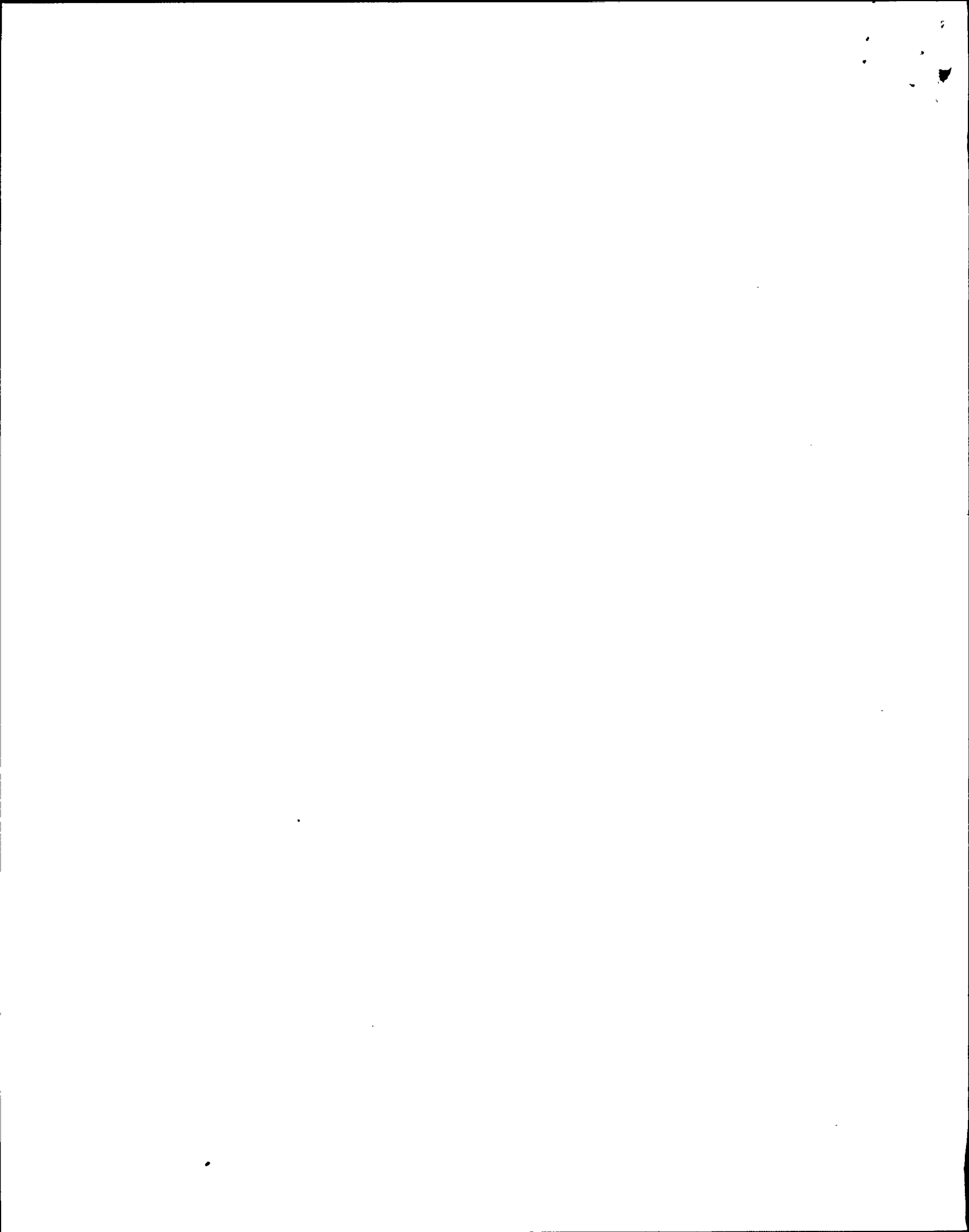
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4.3.2 Operations personnel shall:

- a. Request annunciator related work in accordance with AP-5.5.1, Work Request. In addition to the guidance provided by AP-5.5.1, the following specific items shall be included in the annunciator related work request.
 1. The Work Request shall be conspicuously marked "Annunciator Related" to ensure the work item will be given appropriate priority.
 2. The computer point bringing in the annunciator shall be included in Section 10, Failure Description and Location.
 3. Section 10 shall also include a request to "ensure annunciator is extinguished" so that this Work Request will be worked specifically to clear the annunciator.

Attachment 2 is an example of the above items entered in an annunciator related Work Request.

- b. When initiating a Work Request, generate a deficiency tag in accordance with AP-5.5.2, Deficiency Tagging System.
 1. The deficiency tag (sticker) shall be placed at the associated annunciator window.
 2. The deficiency sticker shall include the applicable annunciator window, computer point, and Work Request number.
- c. Prior to routing to Work Control, forward annunciator related Work Requests to the STA for review and entry into the Control Room Annunciator Status Database.



ATTACHMENT 1
GUIDELINES FOR ANNUNCIATOR STATUS
DATABASE DATA ENTRY

WINDOW NUMBER

Enter the applicable six digit window number.

WINDOW DESCRIPTION

Enter the annunciator description from the applicable window.

WINDOW STATUS

Enter one of the following:

"L" for lit annunciators.

"E" for extinguished annunciators. This does not signify the annunciator is operable, since maintenance may be required due to failure to alarm when required.

"I" for intermittently lit annunciators. Annunciators which alarm intermittently should not be entered in the database unless a modification, work request, or other means of resolving the condition is initiated.

DATE ADDED

Date annunciator is entered in database

DATE CLEARED

Date window is extinguished (status = E) and the associated work from the support department is complete.

COMPUTER POINT

Enter the computer point(s) that brought in the alarm.

IDENTIFIED PROBLEMS

Enter appropriate description of annunciator problem. If possible give direct cause of lit annunciator.

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SUPPORT REQUIRED

List appropriate support departments required to correct a defective annunciator. The primary entries in this field will be "I&C", "ELEC", and "MECH" for specific maintenance departments, and "ENG" for Engineering. Entry in this field must be consistent since it will be searched to generate the Annunciator Status Report for Work Control. The specific maintenance department should be entered if known. If the specific maintenance department is not known, enter "MAINT" and edit this entry once the appropriate maintenance department is determined.

Some annunciators in alarm will be valid and will require no support department.

Also, if an annunciator is lit as a result of plant maintenance, no support department is required since the annunciator is functioning as designed, and no entry should be made.

Example: Electrical Maintenance requires a pump control to be in pull-to-lock, resulting in an annunciator alarm. The annunciator should be entered in the database if it meets condition 4.1.2.b.2 of this instruction. However, Electrical Maintenance should not be entered in the SUPPORT REQUIRED field.

ASSOCIATED DOCUMENTATION

Enter Work Requests, Modifications, or other documents related to a lit or defective annunciator.

When an associated document for an annunciator is closed out, that Work Request entry (WR number) should be deleted and the SUPPORT REQUIRED field should be edited to delete the supporting department related to that document.

Example: A lit annunciator has a Work Request entered in the ASSOCIATED DOCUMENTATION field, with "I&C" entered in the SUPPORT REQUIRED field. The WR is completed and closed out, therefore that Work Request number should be deleted from the ASSOCIATED DOCUMENTATION field and since I&C has completed its support function, "I&C" should be removed from the SUPPORT REQUIRED field. If the annunciator remains lit, another WR may be initiated.

REMARKS/COMMENTS

Enter any relevant information concerning progress towards correcting a defective annunciator.

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ATTACHMENT 2

* * ANNUNCIATOR RELATED * *

N NIAGARA NINE MILE M MOHAWK POINT	WORK REQUEST	1 DATE / /	2 W.R. NO. 154635
3. DEPARTMENT TO DO WORK <input type="checkbox"/> <input type="checkbox"/> ELECTRICAL MAINTENANCE <input type="checkbox"/> <input type="checkbox"/> MECHANICAL MAINTENANCE <input type="checkbox"/> <input type="checkbox"/> INSTRUMENTATION & CONTROL <input type="checkbox"/> <input type="checkbox"/> COMPUTER <input type="checkbox"/> <input type="checkbox"/> ISI <input type="checkbox"/> <input type="checkbox"/> SECURITY I & C <input type="checkbox"/> <input type="checkbox"/> FIRE <input type="checkbox"/> <input type="checkbox"/> METER & TEST <input type="checkbox"/> <input type="checkbox"/> OTHER _____	4. PRIORITY OF WORK <input type="checkbox"/> EMERGENCY <input type="checkbox"/> URGENT (<1 DAY) <input type="checkbox"/> NECESSARY (<7 DAYS) <input type="checkbox"/> AS TIME PERMITS (>7 DAYS) <input type="checkbox"/> NEXT UNIT OUTAGE <input type="checkbox"/> NEXT REFUELING OUTAGE	5. UNIT: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> SITE 6. SYSTEM CODE _____ 7. COMPONENT NUMBER _____ 8. BIP NUMBER _____ 18. SAFETY CLASS <input type="checkbox"/> SR <input type="checkbox"/> Q <input type="checkbox"/> NSR 19. EQ <input type="checkbox"/> YES <input type="checkbox"/> NO 20. ASME COMPONENT <input type="checkbox"/> YES <input type="checkbox"/> NO 21. CLEANNESS CLASS _____	

9. EQUIPMENT TITLE: _____

10. FAILURE DESCRIPTION AND LOCATION 11. NPRDS. SYMPTOM CODE DESCRIPTION _____

Annunciator 851112 in alarm from computer pt GMHAC12. Hz purity setpt is <90%. Local indication shows purity at 100%. Troubleshoot to clear alarm.

12. ORIGINATOR _____ DATE _____/_____/_____
 13. APPROVED _____ DATE _____/_____/_____

14. W.R. RECEIVED _____ DATE _____/_____/_____
 15. PROCEDURE NOS. / _____/_____/_____/_____/_____/_____/_____/_____/_____/_____ NOT REQUIRED

16. QA NOTIFIED BY SUPV. _____ DATE _____/_____/_____ TIME _____ QA NAME _____

17. ACCOUNT	ACCOUNT	SUB LEDGER	ACTIVITY/ORDER	COST CENTER	BUD CAT	COST COMP	LOCATION	SUB ACCT	PRDJ. COST	ACCT NO.

22. QA REVIEW QA _____ DATE _____/_____/_____ 23. INSPECTION REQUIRED YES NO NOT

24. STAGED BY _____ DATE _____/_____/_____ PARTS PROCEDURE DRWG MARKUP RWP NA NOT

25. ASSIGNED TO _____ DATE _____/_____/_____

26. NOTIFICATIONS: QC DATE _____/_____/_____ TIME _____ NA QA INIT _____ SSS DATE _____/_____/_____ TIME _____

27. CORRECTIVE ACTION 28. NPRDS CORRECTIVE ACTION CODE DESCRIPTION _____

29. CAUSE OF FAILURE 30. NPRDS FAILURE CODE DESCRIPTION _____

31. ATTACHMENTS MATERIAL ISSUES PROCEDURE CHECKLISTS INSPECTION REPORTS LAS _____

32. MARK UP NO'S / _____/_____/_____ RWP NO'S / _____/_____/_____ QCIR NO'S _____ NCR NO'S _____

33. CORRECTIVE ACTION COMPLETED BY _____ DATE _____/_____/_____

34. SUPERVISOR REVIEW BY _____ DATE _____/_____/_____ NOT

35. WORK ACCEPTED BY QA _____ NA DATE _____/_____/_____ NOT

36. PMT REVIEW BY _____ ASSS/SSS SUPV. DATE _____/_____/_____ NOT

37. PMT PROCEDURE NO'S. _____/_____/_____/_____/_____/_____ PMT TEST REPORT NOT REQUIRED NOT

38. PMT COMPLETE VERIFIED BY _____ NA DATE _____/_____/_____ NOT

39. ACCEPTED BY _____ SSS SUPV. DATE _____/_____/_____ NOT

40. NPRDS NA SYSTEM CODE _____ INIT. _____ 41. INDEXED BY OOC, CONT. INIT. _____ NOT

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SYMBOL NUMBER 33-32 033 A09 85

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