


Approval <i>Stuart G. ...</i>	Vogtle Electric Generating Plant NUCLEAR OPERATIONS		Procedure No. 10018-C
Date 9-26-89	Unit <u>COMMON</u>		Revision No. 11
			Page No. 1 of 33

FOR INFORMATION ONLY

05-132-90

ANNUNCIATOR CONTROL

READ AND DESTROY

1.0 PURPOSE

This procedure provides for the control of the Control Room annunciators, both for out of service annunciators and the implementation of the Dark Board Concept. It provides instructions for the control of recording, removing, identifying, and replacing of plant annunciator cards.

2.0 SCOPE

- 2.1 The impact and cause of invalid alarms will be evaluated and appropriate action initiated.
- 2.2 This procedure applies to annunciator cards removed, as authorized by the Unit Shift Supervisor (USS) for conditions such as:
  - a. Instrument loop malfunctions,
  - b. Related component maintenance,
  - c. Abnormal system lineups.
- 2.3 This procedure applies to annunciator cards removed, as authorized by the Operations Superintendent, for "non-functional" annunciators that are associated with components or systems which have been deleted from plant design or placed on indefinite hold.
- 2.4 Annunciator cards removed and replaced by an approved procedure, Maintenance Work Order or Equipment Clearance Sheet, need not be recorded.
- 2.5 Disabling annunciator inputs by other than pulling cards shall be controlled by 00307-C, "Temporary Modifications" or 00306-C, "Temporary Jumper And Lifted Wire Control".

9202200433 920116  
PDR ADOCK 05000424  
S PDR

### 3.0 DEFINITIONS

#### 3.1 DARK BOARD CONCEPT

The Dark Board Concept is to control and reduce the number of lighted Control Room annunciators during normal power operation.

#### 3.2 ALARM LIGHT BOARD (ALB) TABLES

Listing of Control Room annunciators not having Compensatory Actions. This listing contains the following information about each window:

a. Multiple Input (MI)

An annunciator which has more than one input.

b. Safety Related (SR)

An annunciator which is associated with a Safety Related Component/System.

c. Reflash (RF)

A critical annunciator that will silence when acknowledged but will remain lit and will either periodically re-alarm to remind the operator of the abnormal condition or will re-alarm if another abnormal condition occurs.

d. Equipment Protection (EP)

An annunciator which has no other associated annunciators to alert the operator to a degrading condition or no automatic equipment protective feature, i.e., pump trip, and operator action would be required.

e. Non-Functional Annunciator

A disabled annunciator that is associated with components or systems which have been deleted from plant design or placed on indefinite hold. Non-functional Annunciator Windows are color coded blue.

f. Disabled Annunciator

An annunciator that has been temporarily removed from service due to malfunction or causing a nuisance, but which should be operational.

4.0 RESPONSIBILITY

- 4.1 The USS is responsible for implementing the Dark Board Concept for his unit, including:
- a. Investigating, resolving, and taking appropriate action within the scope of this procedure for the cause for any lighted annunciator, using Figure 4 and the ALB Tables (when ARP has No Compensatory Action section),
  - b. Recording and maintaining list of disabled annunciators on Figure 2,
  - c. Posting stickers for disabled annunciators (Figure 1),
  - d. Having bi-weekly Recording Disabled Annunciators reviews conducted,
  - e. Recording and maintaining the record of Compensatory Operator Actions on Figure 5 for SR and EP annunciators out of service,
  - f. Writing RERs for SR and EP annunciators expected to be out of service for more than three weeks, requesting that Engineering notify the shift of allowable time that the annunciator may remain out of service (when ARP has No Compensatory Action section),
  - g. Writing MWOs for disabled annunciators as appropriate.
- 4.2 The Operations Superintendent is responsible for Non-functional Annunciators, including:
- a. Designating and authorizing removal of Non-functional Annunciators,
  - b. Ensuring that a Safety Evaluation is performed for each Non-functional Annunciator prior to its removal from service,
  - c. Ensuring that Non-functional Annunciator cards are pulled and the associated annunciator windows are color coded blue,
  - d. Maintaining the list of Non-functional Annunciators on Figure 6.

PROCEDURE NO. VEGP	10018-C	REVISION 11	PAGE NO. 4 of 33
-----------------------	---------	----------------	---------------------

5.0 DISABLED/NON-FUNCTIONAL ANNUNCIATOR LOGS

- 5.1 Each card pulled from an annunciator panel, except for Non-functional Annunciators, will be entered in the unit Record of Disabled Annunciators (Figure 2).
- 5.2 Each Non-functional Annunciator card pulled from an annunciator panel will be listed in the unit Record of Non-Functional Annunciators (Figure 6).
- 5.3 The control number assigned to a sticker will be a three part number designating unit number, year issued, and the consecutive number of the sticker in that year. Example: 1-87-143 would be the one hundred, forty third sticker issued in 1987 for unit one or common equipment.
- 5.4 Cards pulled from annunciator panels assigned a common unit designator are recorded in the Unit 1 log.
- 5.5 As sheets in a log book are completed, remove them from the log and submit to Document Control for retention.
- 5.6 Record associated annunciator corrective action in the applicable disabled annunciator log. If MWO or RER number is not known, just record "MWO" or "RER". If no corrective action is required, record "NA" and reason why.

6.0 LOG ENTRIES

6.1 REMOVAL OF ANNUNCIATOR CARDS

6.1.1 Disabled Annunciators

When an annunciator card is removed, post a sticker on the annunciator window and enter the annunciator window number, engraving, reason, sticker number, and date disabled on the Record of Disabled Annunciators, the Shift Supervisor initials to verify the entry.

6.1.2 Non-Functional Annunciators

When an annunciator is designated as a Non-functional Annunciator, the annunciator card is removed and the annunciator window is color coded blue. The date is entered on the Record of Non-Functional Annunciators. The associated Safety Evaluation should be placed in the log behind the Record of Non-Functional Annunciators, Figure 6.

VEGP

10018-C

11

5 of 33

## 6.2 REPLACEMENT OF ANNUNCIATOR CARDS

### 6.2.1 Disabled Annunciators

When an annunciator card is replaced, and the sticker removed, the Unit Shift Supervisor enters the date and initials the Record of Disabled Annunciators.

### 6.2.2 Non-Functional Annunciators

When the annunciator card is replaced, the blue color code is removed from the associated annunciator window and the date is entered on the Record of Non-Functional Annunciators, Figure 6.

## 6.3 DELETED ANNUNCIATOR CARDS

### NOTE

Permanent deletion of an Annunciator Card constitutes a design change and must be approved as prescribed in 00400-C, "Plant Modifications".

If an annunciator is permanently removed from service, the USS enters the word "DELETED" and the Design Change number in the space provided for the replacement date.

## 7.0 COLOR CODED ANNUNCIATORS

The following Control Room Annunciators, color coded green because they are expected to be lighted during normal power operation, are exempt from the "Dark Board Concept":

- a. ALB-10-AG1 - SOURCE RANGE HI VOLTAGE FAILURE
- b. ALB-10-E04 - BANK D FULL ROD WITHDRAWAL
- c. ALB-11-A04 - RCP 1 OIL LIFT PMP LO PRESS
- d. ALB-11-B04 - RCP 2 OIL LIFT PMP LO PRESS
- e. ALB-11-C04 - RCP 3 OIL LIFT PMP LO PRESS
- f. ALB-11-D04 - RCP 4 OIL LIFT PMP LO PRESS
- g. ALB-34-E06 - STARTER 1(2)CD115N TROUBLE
- h. ALB-34-E07 - STARTER 1(2)DD116N TROUBLE
- i. ALB-34-F06 - INVERTER 1(2)CD115 TROUBLE
- j. ALB-34-F07 - INVERTER 1(2)DD116 TROUBLE

## 8.0 REVIEW OF DISABLED/NON-FUNCTIONAL ANNUNCIATORS

### 8.1 DISABLED ANNUNCIATOR

8.1.1 The USS or his designee makes an administrative review of the disabled annunciators or annunciator inputs bi-weekly.

8.1.2 The bi-weekly Review of Disabled Annunciators ensures that the Record of Disabled Annunciators accurately reflects the status of the Control Room annunciator panels, and verifies the continued need for each disabled annunciator. The reviewer also:

- a. Ensures that an RER was submitted to Engineering for those SR and EP annunciators not expected to be restored within three weeks, per Figure 4,
- b. Verifies sticker placement current with disabled annunciator status,
- c. Reviews incomplete MWO or RER and updates the numbers from the out-of-service Control Room instrument list, or other sources, to the log,
- d. Indicates "bi-weekly review complete" on the first blank line of the Record of Disabled Annunciators, dates and signs his name.

### 8.2 NON-FUNCTIONAL ANNUNCIATORS

The Operations Superintendent reviews the Record of Non-Functional Annunciators annually to ensure that outstanding Non-Functional Annunciators are valid.

## 9.0 ANNUNCIATOR ALARM HORN ADJUSTMENT

9.1 The Control Room Annunciator Electronic Horns are set so that simultaneous alarms on different boards and panels are distinguished by different sounds. Figure 3 identifies the pitch and warble adjustments for each panel. The alarm intensity is such that operators can reliably discern the alarm tone above ambient Control Room noise. A nominal value of 10db above average ambient noise is generally adequate.

PROCEDURE NO. VEGP	10018-C	REVISION	11	PAGE NO.	7 of 33
-----------------------	---------	----------	----	----------	---------

10.0 - REFERENCES

10.1 PROCEDURES

10.1.1 00306-C, "Temporary Jumper And Lifted Wire Control"

10.1.2 00307-C, "Temporary Modifications"

10.1.3 00400-C, "Plant Modifications"

10.1.4 NUREG 0700

10.2 MANUALS

1/26AV01-283, "RONAN Installation and Operation  
Instruction Manual"

END OF PROCEDURE TEXT

TABLE 1

I-ALB-30

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X				D01		X			
A02		X				D02		X			
A03						D03					
A04						D04					
A05		X				D05					
A06		X				D06					
A07		X				D07					
A08		X				D08		X	X		
A09		X				D09		X	X		
A10						D10	X				
B01						E01	X				
B02		X				E02	X				
B03		X				E03	X				
B04		X				E04	X				
B05						E05	X				
B06						E06	X				
B07		X				E07	X				
B08						E08	X				
B09						E09	X				
B10		X				E10	X				
C01		X				F01	X				
C02						F02	X				
C03		X				F03	X				
C04		X				F04	X				
C05		X				F05	X				
C06		X				F06	X				
C07						F07	X				
C08						F08	X				
C09		X				F09	X				
C10		X				F10	X				



TABLE 2

2-ALB-30

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01	X					D01	X				
A02	X					D02		X			
A03		X				D03		X			
A04		X				D04					
A05		X				D05					
A06		X				D06		X			
A07		X				D07					
A08	X					D08					
A09		X				D09	X				
A10		X				D10		X			
B01		X				E01	X				
B02		X				E02	X				
B03		X				E03	X				
B04	X					E04	X				
B05		X				E05	X				
B06		X				E06	X				
B07		X				E07	X				
B08		X				E08	X				
B09		X				E09	X				
B10		X				E10	X				
C01						F01	X				
C02		X				F02	X				
C03		X				F03	X				
C04		X				F04	X				
C05						F05	X				
C06						F06	X				
C07						F07	X				
C08						F08	X				
C09						F09	X				
C10	X					F10	X				

TABLE 3

1/2-ALB-31

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01						D01					
A02	X					D02					
A03						D03					
A04						D04		X			
A05						D05					
A06						D06		X			
B01						E01	X				
B02						E02					
B03						E03					
B04						E04					
B05						E05					
B06						E06					
C01						F01		X			
C02						F02					
C03						F03	X				
C04						F04					
C05						F05					
C06						F06	X				

TABLE 4

1/2-ALB-32

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01						D01					
A02						D02					
A03						D03					
A04	X					D04					
A05	X					D05	X				
A06	X					D06		X			
A07		X				D07					
A08		X				D08		X			
B01						E01					
B02						E02					
B03						E03					
B04						E04					
B05	X					E05		X		X	
B06						E06		X			
B07		X				E07					
B08	X					E08		X			
C01						F01		X		X	
C02						F02		X		X	
C03						F03		X		X	
C04						F04		X		X	
C05	X					F05		X		X	
C06						F06		X		X	
C07		X				F07		X			
C08	X					F08	X				

TABLE 5

1/2-ALB-33

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X		X		D01		X		X	
A02		X		X		D02		X		X	
A03		X		X		D03		X		X	
A04		X		X		D04		X		X	
A05		X		X		D05		X		X	
A06		X		X		D06		X		X	
A07		X		X		D07		X		X	
B01		X		X		E01		X		X	
B02		X		X		E02(1)		X		X	
B03		X		X		E03		X		X	
B04		X		X		E04		X		X	
B05		X		X		E05		X		X	
B06		X		X		E06		X		X	
B07		X		X		E07		X		X	
C01		X		X		F01		X		X	
C02		X		X		F02		X		X	
C03		X		X		F03		X		X	
C04		X		X		F04		X		X	
C05		X		X		F05		X		X	
C06		X		X		F06		X		X	
C07		X		X		F07(1)		X		X	

(1) SPARE ON UNIT 2.

TABLE 6

1/2-ALB-34

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X		X		D01		X	X	X	
A02		X		X		D02		X	X	X	
A03		X		X		D03		X	X	X	
A04		X		X		D04		X	X	X	
A05		X		X		D05		X	X	X	
A06		X	X	X		D06	X				
A07		X	X	X		D07		X	X	X	
B01		X	X	X		E01		X	X	X	
B02		X	X	X		E02		X	X	X	
B03		X	X	X		E03		X	X	X	
B04		X	X	X		E04	X				
B05		X	X	X		E05		X	X	X	
B06		X	X	X		E06		X	X	X	
B07		X	X	X		E07		X	X	X	
C01		X	X	X		F01	X				
C02		X	X	X		F02		X	X	X	
C03		X	X	X		F03		X	X	X	
C04	X					F04		X	X	X	
C05		X	X	X		F05		X	X	X	
C06		X	X	X		F06		X	X	X	
C07		X	X	X		F07		X	X	X	

TABLE 7

1/2-ALB-35

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01			X	X		D01					
A02			X	X		D02					
A03				X		D03					
A04				X		D04					
A05			X	X		D05			X		
A06				X		D06				X	
A07		X	X	X		D07			X		
A08			X	X		D08	X				
A09		X	X	X		D09	X				
A10			X			D10		X	X		
B01						E01		X	X	X	
B02		X	X			E02				X	
B03						E03					
B04						E04			X	X	
B05		X	X	X		E05			X		
B06						E06			X	X	
B07		X		X		E07			X		
B08				X		E08			X	X	
B09			X	X		E09				X	
B10			X	X		E10			X		
C01				X		F01		X	X		
C02				X		F02			X		
C03						F03		X			
C04						F04		X	X		
C05		X	X			F05			X		
C06			X			F06		X			
C07			X	X		F07			X		
C08						F08					
C09		X	X	X		F09					
C10		X	X			F10					

TABLE 8

1/2-ALB-36

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X	X	X		D01		X	X		
A02		X	X	X		D02		X	X		
A03		X	X	X		D03		X	X		
A04		X				D04					
B01		X	X	X		E01		X			
B02		X	X	X		E02			X		
B03		X				E03			X		
B04		X	X			E04			X		
C01		X	X			F01(1)		X			
C02		X	X			F02			X		
C03		X	X			F03		X			
C04			X	X		F04		X			

(1) SPARE ON UNIT 2.

TABLE 9

1/2-ALB-37

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X	X	X		D01		X	X		
A02		X	X	X		D02		X	X		
A03		X	X	X		D03		X	X		
A04		X				D04					
B01		X	X	X		E01		X			
B02		X	X	X		E02	X				
B03		X				E03	X				
B04		X	X			E04	X				
C01		X	X			F01	X				
C02		X	X			F02(1)		X			
C03		X	X			F03		X			
C04		X	X	X		F04		X			

(1) SPARE ON UNIT 2.



TABLE 10

1/2-ALS-38

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01			X	X		D01					
A02			X	X		D02					
A03				X		D03					
A04				X		D04					
A05			X	X		D05			X		
A06				X		D06				X	
A07		X	X	X		D07			X		
A08			X	X		D08	X				
A09		X	X	X		D09	X				
A10			X			D10		X	X		
B01						E01		X	X	X	
B02		X	X			E02				X	
B03						E03					
B04						E04			X	X	
B05		X	X	X		E05			X		
B06						E06			X	X	
B07		X		X		E07			X		
B08				X		E08			X	X	
B09			X	X		E09				X	
B10			X	X		E10			X		
C01				X		F01		X	X		
C02				X		F02			X		
C03						F03		X			
C04						F04		X	X		
C05		X	X			F05			X		
C06			X			F06		X			
C07			X	X		F07			X		
C08						F08					
C09		X	X	X		F09					
C10		X	X			F10					

TABLE 11

1-ALB-39

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X		X		D01		X		X	
A02		X		X		D02		X		X	
A03		X		X		D03		X		X	
A04	X					D04		X		X	
A05		X		X		D05		X		X	
A06	X					D06	X				
B01		X		X		E01		X		X	
B02		X		X		E02		X		X	
B03		X		X		E03	X				
B04		X		X		E04	X				
B05		X		X		E05	X				
B06	X					E06	X				
C01		X		X		F01		X		X	
C02		X		X		F02		X		X	
C03		X		X		F03	X				
C04		X		X		F04	X				
C05		X		X		F05	X				
C06	X					F06	X				

TABLE 12

1/2-ALB-50

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01						D01	X				
A02		X				D02		X			
A03						D03	X				
A04						D04	X				
A05						D05	X				
A06						D06	X				
A07				X		D07				X	
A08				X		D08				X	
A09	X					D09	X				
A10	X					D10	X				
B01				X		E01					
B02		X				E02					
B03						E03	X				
B04		X	X	X		E04	X				
B05		X	X	X		E05	X				
B06				X		E06	X				
B07						E07	X				
B08						E08	X				
B09(1)		X		X		E09	X				
B10(1)		X		X		E10	X				
C01						F01					
C02	X					F02	X				
C03	X					F03	X				
C04			X	X		F04	X				
C05			X	X		F05	X				
C06	X					F06	X				
C07				X		F07	X				
C08				X		F08	X				
C09(1)				X		F09	X				
C10(1)				X		F10	X				

(1) SPARE ON UNIT 2.

TABLE 13

1/2-ALB-51

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01				X		D01	X				
A02				X		D02					
A03				X		D03				X	
A04				X		D04				X	
A05				X		D05				X	
B01				X		E01				X	
B02				X		E02					
B03				X		E03				X	
B04				X		E04	X				
B05				X		E05				X	
C01				X		F01		X			
C02				X		F02		X			
C03				X		F03	X				
C04				X		F04	X				
C05				X		F05	X				

TABLE 14

1/2-ALB-52

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01				X		D01				X	
A02			X	X		D02	X				
A03			X	X		D03	X				
A04	X					D04	X				
A05						D05					
A06						D06					
A07				X		D07					
A08		X		X		D08					
A09						D09					
A10			X	X		D10	X				
B01				X		E01	X				
B02		X	X	X		E02	X				
B03		X	X	X		E03	X				
B04	X					E04					
B05				X		E05				X	
B06				X		E06				X	
B07						E07				X	
B08				X		E08		X			
B09						E09					
B10			X	X		E10	X				
C01				X		F01	X				
C02			X	X		F02	X				
C03			X	X		F03					
C04	X					F04					
C05						F05					
C06						F06					
C07						F07				X	
C08						F08					
C09						F09					
C10	X					F10	X				

TABLE 15

1/2-ALB-53

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01			X	X		D01	X				
A02			X	X		D02		X			
A03			X	X		D03		X			
A04		X				D04					
A05		X				D05					
A06						D06					
A07			X			D07		X	X		
A08			X			D08		X	X		
A09						D09					
A10						D10					
B01			X	X		E01	X				
B02						E02			X	X	
B03						E03					
B04						E04				X	
B05						E05				X	
B06						E06				X	
B07			X	X		E07		X	X	X	
B08			X	X		E08		X	X	X	
B09						E09					
B10						E10	X				
C01	X					F01					
C02			X			F02			X		
C03			X			F03					
C04						F04			X		
C05						F05			X		
C06						F06			X		
C07		X	X			F07			X	X	
C08		X	X			F08			X	X	
C09						F09					
C10	X					F10	X				

TABLE 16

1-ALB-54

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X		X		D01		X		X	
A02		X		X		D02	X				
A03		X				D03					
A04		X				D04					
A05		X		X		D05					
A06		X		X		D06					
A07		X		X		D07					
BC1				X		E01				X	
B02				X		E02					
B03						E03				X	
B04						E04				X	
B05						E05		X		X	
B06						E06					
B07						E07				X	
C01						F01		X			
C02	X					F02		X			
C03						F03				X	
C04						F04				X	
C05		X		X		F05					
C06		X		X		F06					
C07		X		X		F07				X	

TABLE 17

1-ALB-60

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X				D01				X	
A02		X		X		D02		X			
A03						D03		X			
A04						D04					
A05						D05					
A06						D06		X		X	
B01		X				E01		X			
B02				X		E02		X			
B03						E03					
B04						E04					
B05						E05					
B06						E06		X		X	
C01				X		F01		X			
C02		X		X		F02		X			
C03						F03		X		X	
C04		X				F04		X		X	
C05		X				F05	X				
C06		X				F06					



TABLE 18

1/2-ALB-61

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01		X	X	X		D01					
A02		X	X	X		D02					
A03						D03					
A04						D04	X				
A05		X				D05	X				
A06						D06		X			
B01						E01		X			
B02						E02	X				
B03						E03					
B04						E04					
B05		X				E05					
B06						E06		X			
C01	X					F01		X			
C02		X		X		F02					
C03						F03					
C04						F04					
C05	X					F05					
C06		X				F06		X			

TABLE 19

1/2-ALB-62

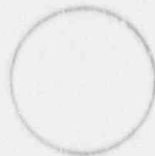
WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01						D01	X				
A02						D02			X		
A03	X					D03	X				
A04	X					D04	X				
A05						D05	X				
A06						D06	X				
B01						E01	X				
B02						E02					
B03	X					E03	X				
B04	X					E04	X				
B05						E05		X			
B06	X					E06	X				
C01						F01		X			
C02			X			F02		X		X	
C03	X					F03	X				
C04	X					F04	X				
C05						F05		X	X		
C06						F06		X	X		

TABLE 20

1/2-ALB-63

WINDOW	SPARE	MI	SR	EP	RF	WINDOW	SPARE	MI	SR	EP	RF
A01				X		D01				X	
A02	X					D02	X				
A03						D03					
A04						D04		X			
A05		X		X		D05	X				
A06		X		X		D06		X			
B01				X		E01		X			
B02	X					E02	X				
B03						E03	X				
B04						E04					
B05	X					E05	X				
B06(1)		X				E06		X			
C01				X		F01		X			
C02	X					F02	X				
C03						F03	X				
C04		X				F04	X				
C05	X					F05	X				
C06(1)		X		X		F06	X				

(1) SPARE ON UNIT 2.



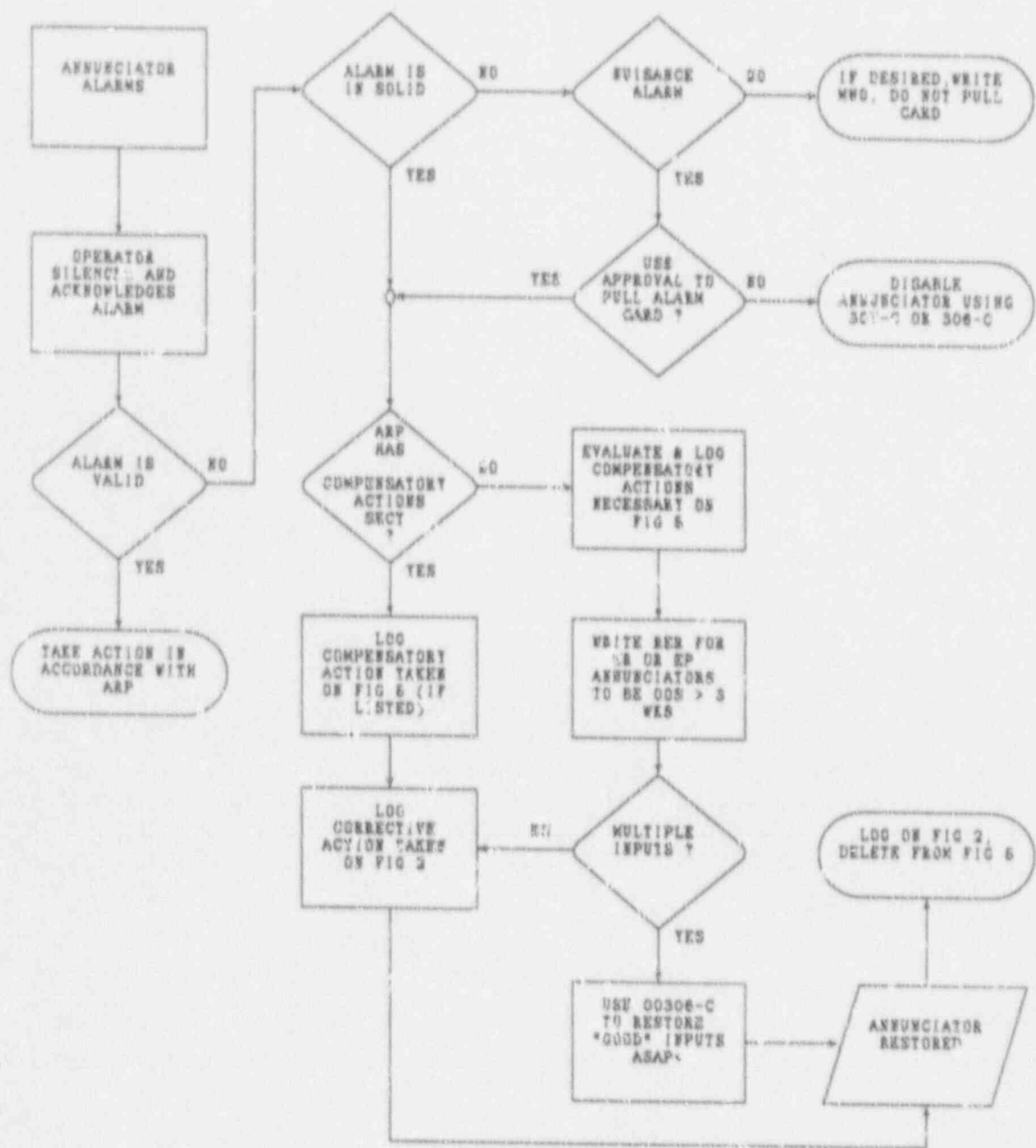
3/4" Green DOT

FIGURE 1



H C T I P	WOL	QEAB		QHVC
	EC-DRE	QMCB		
	IO-I			QPCP
		LOW	MEDIUM	HIGH
WARBLE				

Figure 3



\*ASAP - If the input(s) cannot be repaired during the shift when discovered, then use jumpers or lifted wire to clear the bad input(s) during the next shift.

Figure 4





