

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER  
INCIDENT REPORT

TO:

FROM:

DATE OF DOCUMENT

DATE RECEIVED

LETTER  
 ORIGINAL  
 COPY

NOTORIZED  
 UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

DESCRIPTION

PLANT NAME:

ENCLOSURE

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED  
SEND DIRECTLY TO KREGER/J. COLLINS

FOR ACTION/INFORMATION

BRANCH CHIEF:	<i>Ziemann</i>
W/3 CYS FOR ACTION	
LIC. ASST.:	<i>Diggs</i>
W/1 CYS	
ACRS 16 CYS HOLDING/SENT	<i>As CAT B</i>

INTERNAL DISTRIBUTION

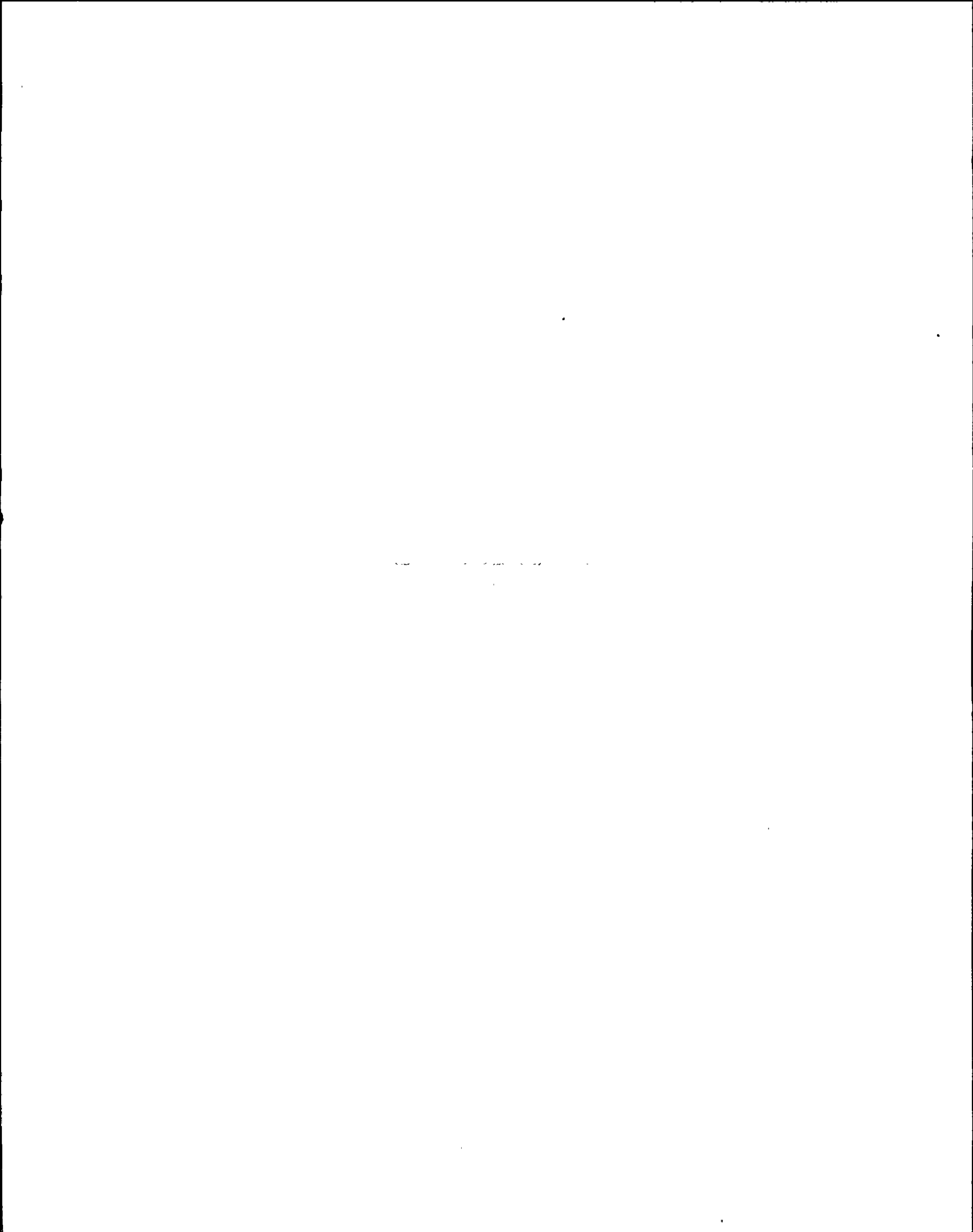
<u>REG FILE</u>				
NRC PDR				
I & E (2)				
MIPC				
SCHROEDER/IPPOLITO				
HOUSTON				
NOVAK/CHECK				
GRIMES				
CASE				
BUTLER				
HANAUER				
TEDESCO/MACCARY				
EISENHUT				
BAER				
SHAO				
VOLLMER/BUNCH				
KREGER/J. COLLINS				

EXTERNAL DISTRIBUTION

LPDR: <i>Morris, J</i>			
TIC:			
NSIC:			

CONTROL NUMBER

*770760149*



NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

TO:  
  
Mr. James G. Keppler

FROM:  
Commonwealth Edison Company  
Morris, Illinois  
B. B. Stephenson

DATE OF DOCUMENT  
3/11/77

DATE RECEIVED  
3/16/77

LETTER  
 ORIGINAL  
 COPY

NOTORIZED  
 UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED  
  
One

DESCRIPTION

Ltr. trans the following:

**DO NOT REMOVE**

**ACKNOWLEDGED**

(1-P)

PLANT NAME:  
Dresden Unit No. 2

RJL

ENCLOSURE

Licensee Event Report (RO 50-237/1976-74) on 12/28/76 concerning control rod J-2 being withdrawn one notch and the reactivity inserted by this notch, withdrawal resulting in a transient power increase....

(2-P)

**SAFETY**

**FOR ACTION/INFORMATION**

**ENVIRO**

ASSIGNED AD:		ASSIGNED AD:
BRANCH CHIEF:		BRANCH CHIEF:
PROJECT MANAGER:		PROJECT MANAGER:
LIC. ASST. :		LIC. ASST. :

**INTERNAL DISTRIBUTION**

REG FILE	SYSTEMS SAFETY	PLANT SYSTEMS	SITE SAFETY &
NRC PDR	HEINEMAN	TEDESCO	ENVIRO ANALYSIS
I & E	SCHROEDER	BENAROYA	DENTON & MULLER
OELD		LAINAS	
GOSSICK & STAFF	ENGINEERING	IPPOLITO	ENVIRO TECH.
MIPC	MACARRY	KIRKWOOD	ERNST
CASE	BOSNAK		BALLARD
HANAUER	SIHWEIL	OPERATING REACTORS	YOUNGBLOOD
HARLESS	PAWLICKI	STELLO	
			SITE TECH.
PROJECT MANAGEMENT	REACTOR SAFETY	OPERATING TECH.	GAMMILL
BOYD	ROSS	EISENHUT	STEPP
P. COLLINS	NOVAK	SHAO	HULMAN
HOUSTON	ROSZTOCZY	BAER	
PETERSON	CHECK	BUTLER	SITE ANALYSIS
MELTZ		GRIMES	VOLLMER
HELTEMES	AT & I		BUNCH
SKOVHOLT	SALTZMAN		J. COLLINS
	RUTBERG		KREGER

**EXTERNAL DISTRIBUTION**

**CONTROL NUMBER**

LPDR:	NAT. LAB:	BROOKHAVEN NAT. LAB.	770760149
TIC:	REG V. IE	ULRIKSON (ORNL)	
NSIC:	LA PDR		
ASLB:	CONSULTANTS:		
ACRS CYS HOLDING/SENT			





Commonwealth Edison  
Dresden Nuclear Power Station  
R.R. #1  
Morris, Illinois 60450  
Telephone 815/942-2920

BBS Ltr. 200-77

March 11, 1977

**REGULATORY DOCKET FILE COPY**

Mr. James G. Keppler, Regional Director  
Directorate of Regulatory Operations - Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137



Enclosed please find Reportable Occurrence report number 50-237/1976-74. This report is being submitted to your office in accordance with the Dresden Nuclear Power Station Technical Specifications, Section 6.6.B.

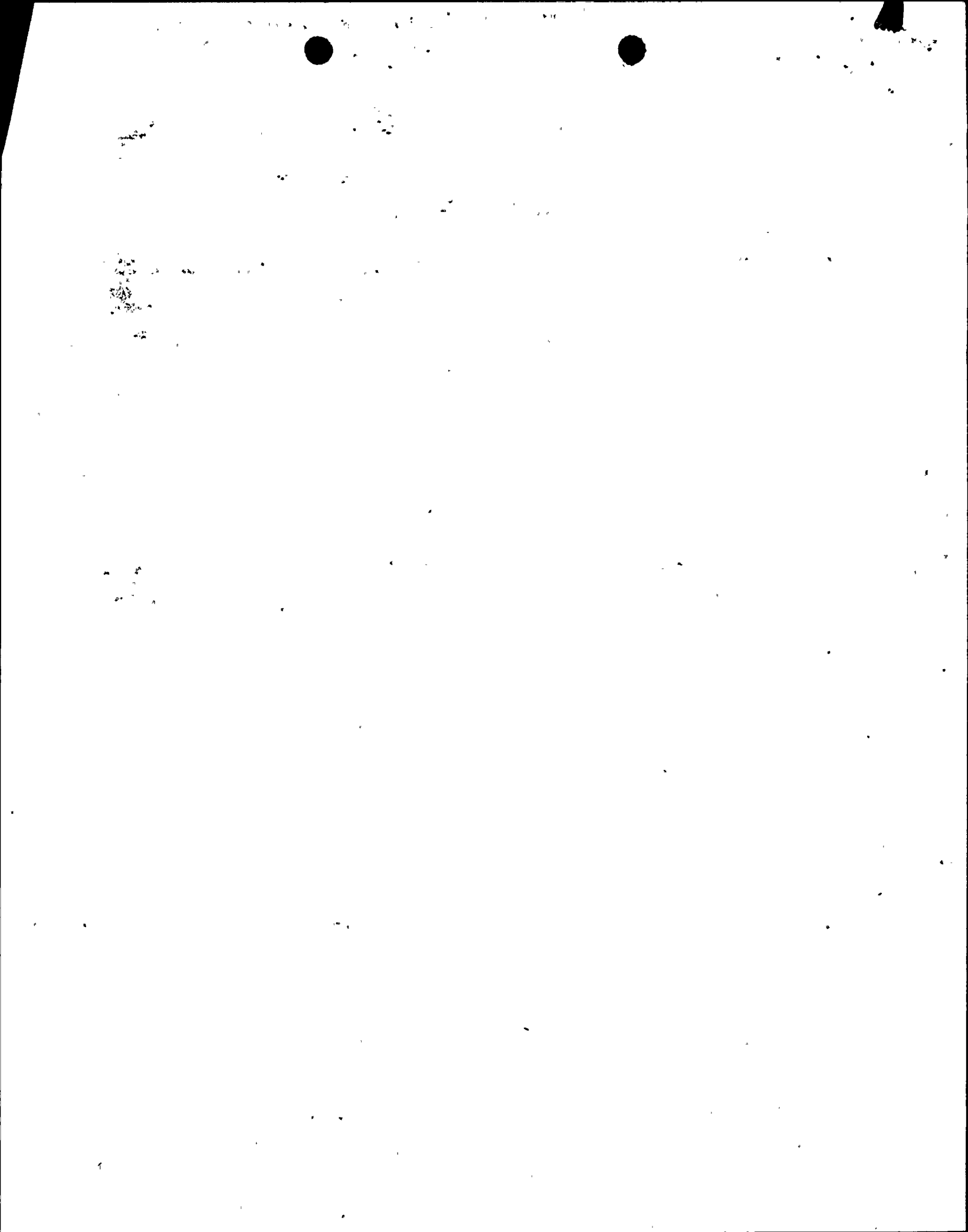
B. B. Stephenson  
Station Superintendent  
Dresden Nuclear Power Station

BBS:jo

Enclosure

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
File/NRC

770760149



# LICENSEE EVENT REPORT

CONTROL BLOCK: 

--	--	--	--	--	--	--	--	--	--

PLEASE PRINT ALL REQUIRED INFORMATION

LICENSEE NAME: 

0	1	T	L	D	R	S	2
---	---	---	---	---	---	---	---

 LICENSE NUMBER: 

0	0	-	0	0	0	0	0	-	0	0
---	---	---	---	---	---	---	---	---	---	---

 LICENSE TYPE: 

4	1	1	1	1
---	---	---	---	---

 EVENT TYPE: 

0	1
---	---

CATEGORY: 

0	1
---	---

 CONT REPORT TYPE: 

T
---

 REPORT SOURCE: 

L
---

 DOCKET NUMBER: 

0	5	0	-	0	2	3	7
---	---	---	---	---	---	---	---

 EVENT DATE: 

1	2	2	8	7	6
---	---	---	---	---	---

 REPORT DATE: 

0	3	1	0	7	7
---	---	---	---	---	---

### EVENT DESCRIPTION

0	2
---	---

 During start-up operations, control rod J-2 was withdrawn one notch. The reactivity  

0	3
---	---

 inserted by this notch withdrawal resulted in a transient power increase. A  

0	4
---	---

 reactor scram on IRM high flux prevented the transient from attaining a measur-  

0	5
---	---

 able stable period; however, period instrumentation indicated transient readings  

0	6
---	---

 of approximately 5 seconds. (Continued)

SYSTEM CODE: 

Z	Z
---	---

 CAUSE CODE: 

F
---

 COMPONENT CODE: 

Z	Z	Z	Z	Z	Z
---	---	---	---	---	---

 PRIME COMPONENT SUPPLIER: 

Z
---

 COMPONENT MANUFACTURER: 

Z	9	9	9
---	---	---	---

 VIOLATION: 

Y
---

### CAUSE DESCRIPTION

0	8
---	---

 A combination of existing conditions such as the control rod pattern, moderator  

0	9
---	---

 density, and local xenon concentration apparently resulted in an unexpectedly  

1	0
---	---

 high reactivity worth for the notch. The resulting transient increase tripped  

1	1
---	---

 (Continued)

FACILITY STATUS: 

C
---

 % POWER: 

0	0	0
---	---	---

 OTHER STATUS: 

NA
----

 METHOD OF DISCOVERY: 

A
---

 DISCOVERY DESCRIPTION: 

Reactor Short Period, Scram
-----------------------------

FORM OF ACTIVITY RELEASED: 

Z
---

 CONTENT OF RELEASE: 

Z
---

 AMOUNT OF ACTIVITY: 

NA
----

 LOCATION OF RELEASE: 

NA
----

### PERSONNEL EXPOSURES

NUMBER: 

0	0	0
---	---	---

 TYPE: 

Z
---

 DESCRIPTION: 

NA
----

### PERSONNEL INJURIES

NUMBER: 

0	0	0
---	---	---

 DESCRIPTION: 

NA
----

### OFFSITE CONSEQUENCES

1	5
---	---

 NA

### LOSS OR DAMAGE TO FACILITY

TYPE: 

Z
---

 DESCRIPTION: 

NA
----

### PUBLICITY

1	7
---	---

 NA

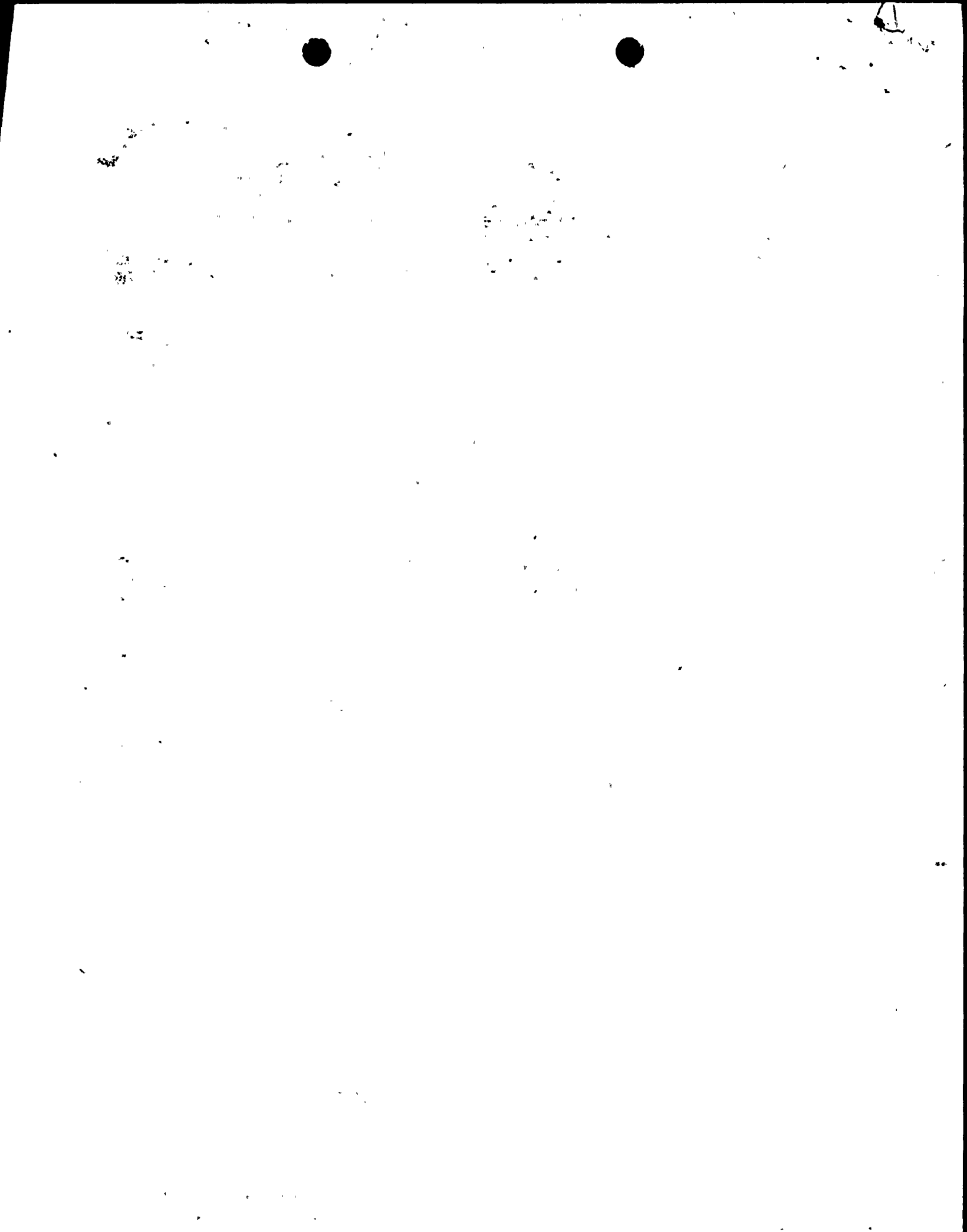
### ADDITIONAL FACTORS

1	8
---	---

 NA

1	9
---	---

NAME: James G. Toscas PHONE: Ext. 464





EVENT DESCRIPTION (Continued)

Analysis indicated that the reactivity insertion was substantially below the limit of  $0.013 \Delta K$  required by Tech Spec section 3.3.B.3.a., and that the equivalent stable period was 10 to 20 seconds. Furthermore, the withdrawal was performed in accordance with G.E. control rod withdrawal sequencing rules for reactor power levels below 20%. Since the reactor protection systems functioned as designed, this event was considered to be of little safety significance. This is the first reported occurrence of this nature at Dresden. (50-237/1976-74)

CAUSE DESCRIPTION (Continued)

the reactor before the operator could reinsert the control rod or adjust instrument ranges.

Following a normal scram recovery, start-up operations were resumed. Although the notch withdrawal of CRD J-2 was postponed until a later step in the control rod withdrawal sequence, all CRD movements remained in keeping with the G.E. start-up CRD withdrawal sequencing rules described above. Additionally, the nuclear engineers discussed the incident and developed methods of avoiding future potentially undesirable notch pulls under similar conditions.

As the result of an administrative oversight, this event was initially classified as a non-reportable occurrence. On 2/25/77, the station was notified that the occurrence was reportable because it represented a short-term reactivity increase corresponding to a reactor period of less than 5 seconds (Tech Spec section 6.6.B.1.d). As a result of this incident, administrative and supervisory personnel were reacquainted with this particular reporting requirement.

RECEIVED DOCUMENT  
PROCESSING UNIT

1977 MAR 16 PM 3 51



Commonwealth Edison  
Dresden Nuclear Power Station  
R.R. #1  
Morris, Illinois 60450  
Telephone 815/942-2920

*D. LANHAM*

BBS Ltr. 200-77

March 11, 1977

Mr. James G. Keppler, Regional Director  
Directorate of Regulatory Operations - Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

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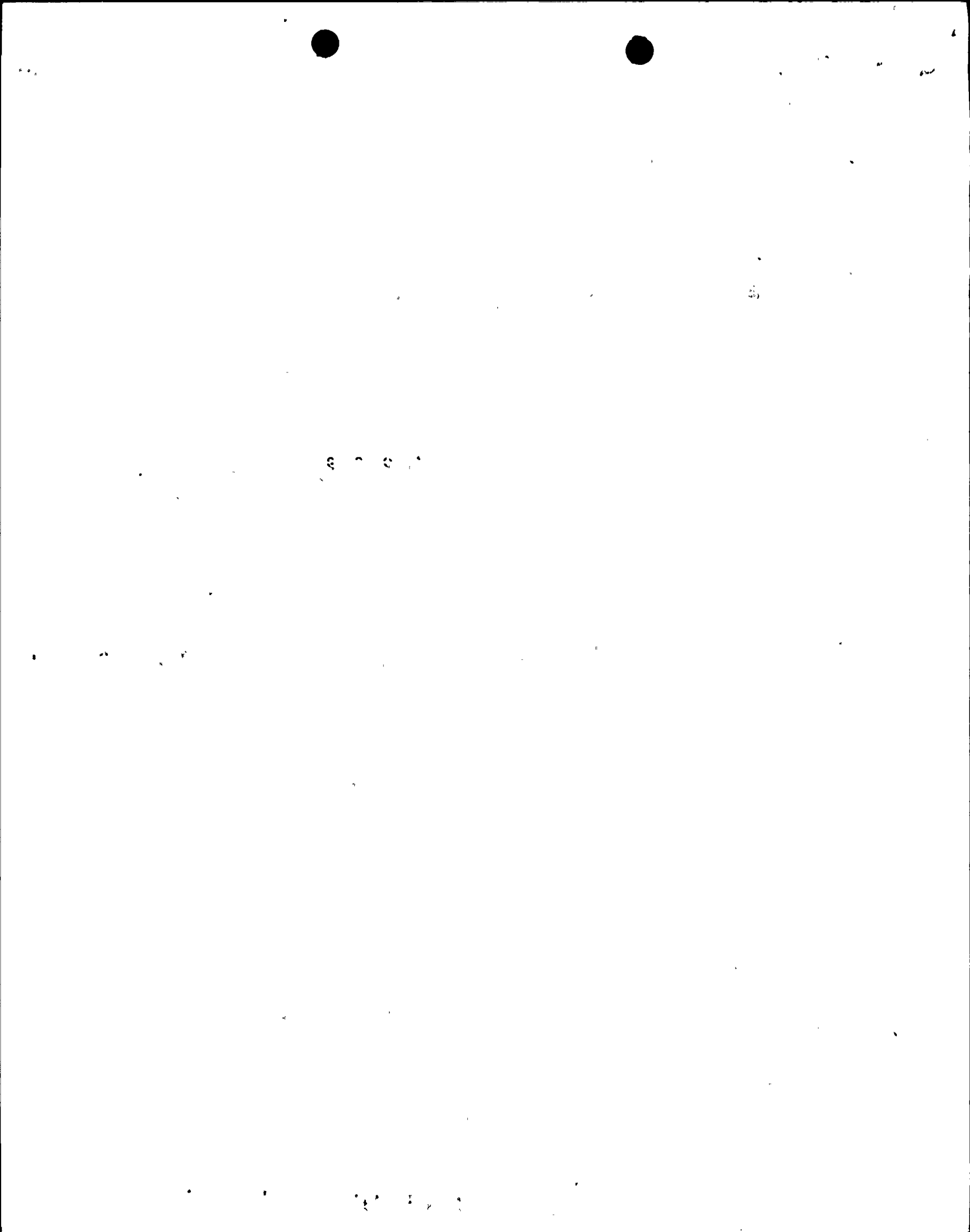
B. B. Stephenson  
Station Superintendent  
Dresden Nuclear Power Station

BBS:jo

Enclosure

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
File/NRC

MAR 15 1977



# LICENSEE EVENT REPORT

CONTROL BLOCK:   

(PLEASE PRINT ALL REQUIRED INFORMATION)

01	I	L	D	R	S	2	0	0	-	0	0	0	0	0	-	0	0	4	1	1	1	1	0	1	
7	8	9	14	15	25	26	26	30	31	32															
01	CONT			T	L	0	5	0	-	0	2	3	7	1	2	2	8	7	6	0	3	1	0	7	7
7	8	57	58	59	60	61	61	68	69	69	74	74	75	75	80										

**EVENT DESCRIPTION**

02 | During start-up operations, control rod J-2 was withdrawn one notch. The reactivity  
7 8 9 | 80

03 | inserted by this notch withdrawal resulted in a transient power increase. A  
7 8 9 | 80

04 | reactor scram on IRM high flux prevented the transient from attaining a measur-  
7 8 9 | 80

05 | able stable period; however, period instrumentation indicated transient readings  
7 8 9 | 80

06 | of approximately 5 seconds. (Continued)  
7 8 9 | 80

07	Z	Z	F	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	9	9	9	9	Y
7	8	9	10	11	12	13	14	15	16	17	17	43	44	45	46	47	48	48	

**CAUSE DESCRIPTION**

08 | A combination of existing conditions such as the control rod pattern, moderator  
7 8 9 | 80

09 | density, and local xenon concentration apparently resulted in an unexpectedly  
7 8 9 | 80

10 | high reactivity worth for the notch. The resulting transient increase tripped  
7 8 9 | 80

(Continued)

11	C	0	0	0	NA	A	Reactor Short Period, Scram			
7	8	9	10	11	12	13	44	45	46	80

12	Z	Z	NA	NA	NA		
7	8	9	10	11	44	45	80

**PERSONNEL EXPOSURES**

13	0	0	0	NA		
7	8	9	11	12	13	80

**PERSONNEL INJURIES**

14	0	0	0	NA	
7	8	9	11	12	80

**OFFSITE CONSEQUENCES**

15 | NA  
7 8 9 | 80

**LOSS OR DAMAGE TO FACILITY**

16	Z	NA		
7	8	9	A10	80

**PUBLICITY**

17 | NA  
7 8 9 | 80

**ADDITIONAL FACTORS**

18 | NA  
7 8 9 | 80

19 |  
7 8 9 | 80

NAME: James G. Toscas PHONE: Ext. 464



EVENT DESCRIPTION (Continued)

Analysis indicated that the reactivity insertion was substantially below the limit of  $0.013\Delta K$  required by Tech Spec section 3.3.B.3.a., and that the equivalent stable period was 10 - 20 seconds. Furthermore, the withdrawal was performed in accordance with G.E. control rod withdrawal sequencing rules for reactor power levels below 20%. Since the reactor protection systems functioned as designed, this event was considered to be of little safety significance. This is the first reported occurrence of this nature at Dresden. (50-237/1976-74)

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(10/10/10/10/10)

10/10