ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8803080322 DOC.DATE: 88/03/04 NOTARIZED: NO DOCKET #
FACIL:50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylva 05000387
50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylva 05000388
AUTH.NAME AUTHOR AFFILIATION
KEISER,H.W. Pennsylvania Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
BRADY,B. Trends & Patterns Analysis Branch

SUBJECT: Submits requested addl info re NPRDS component identifiers for reactor protection sys components.

DISTRIBUTION CODE: A001D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 7
TITLE: OR Submittal: General Distribution

NOTES:1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000387
1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000388

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD1-2 LA	1	0	PD1-2 PD	5	5
	THADANI,M	1	1			
INTERNAL:	ARM/DAF/LFMB	1	0	NRR/DEST/ADS7E4	1	1
	NRR/DEST/CEB8H7	1	1	NRR/DEST/MTB 9H	1	1
	NRR/DEST/RSB 8E	1	1	NRR/DOEA/TSB11F	1	1
	NRR/PMAS/ILRB12	1	1	OGC 15-B-18	1	0
	REG FILE 01	1	1	RES/DE/EIB	1	1
EXTERNAL:	LPDR	2	2	NRC PDR	1	1
	NSIC	1	1			
NOTES:		3	3			

Adj: Bennett ltr 1 encl 1
Brady

TOTAL NUMBER OF COPIES REQUIRED: LTTR ~~24~~ 25 ENCL ~~21~~ 22

RIDS/ADDS

PP&L Pennsylvania Power & Light Company
Two North Ninth Street • Allentown, PA 18101 • 215/770-5151

Harold W. Keiser
Vice President-Nuclear Operations
215/770-7502

MAR 4 1988

Ms. Bennett Brady, AEOD
Trends and Patterns Analysis Branch
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
RESPONSE TO NPRDS REQUEST
PLA-2985 FILE R41-2

Docket Nos. 50-387
and 50-388

Dear Ms. Brady:

In response to your request dated February 11, 1988, attached are the PP&L NPRDS component identifiers for RPS components in GE's NEDC-30851P.

Very truly yours,

H. W. Keiser
Vice President-Nuclear Operations

Attachment

cc: NRC Document Control Desk (original)
NRC Region I
Mr. M. C. Thadani, NRC Project Manger
Mr. F. I. Young, NRC Resident Inspector

Add: Bennett Ltr, Encl
Brady
1 1
A001

RPS COMPONENTS IN
NEDC-30851P
GENERAL ELECTRIC COMPANY

COMPONENT	GENERIC ID	NPRDS UTILITY COMPONENT IDs U1	U2	COMMENTS
Contactor and Relays				
Contactor (GE)	K14X*	C72A-K14A through H	C72A-K14A through H	
Relay	K1X	C72A-K1A through D	C72A-K1A through D	CRD SDV High Wtr. Level
	K4X	C72A-K4A through D	C72A-K4A through D	Pri. Cont. High Pressure
	K5X	C72A-K5A through D	C72A-K5A through D	RX Stm Dome High Pressure
	K6X	C72A-K6A through D	C72A-K6A through D	RX Vessel Low Wtr. Lv
	K9X	C72A-K9A through D	C72A-K9A through D	Turb. 1st Stage Pressure
	K11X	C72A-K11A through D	C72A-K11A through D	MSIV w/Trb Byps Vlv Clos.
	K15X	C72A-K15A through D	C72A-K15A through D	Push Buttons Man. SCRAM
	K24X	C72A-K24A through D	C72A-K24A through D	Mode Switch
	K44X	N/A	N/A	
Relay	K3X	C72A-K3A through H	C72A-K3A through D	MSIV Valve Closure
	K7X	C72A-K7A through D	C72A-K7A through D	MSL High Radiation
	K8X	C72A-K8A through H	C72A-K8A through H	Turb. CV Fast Clos. (EHC)
	K10X	C72A-K10A through H	C72A-K10A through H	Turb. Stop Vlv. Closure
	K12X	C72A-K12A through H	C72A-K12A through H	Neutron Monitor. Trips
Limit Switches				
MSIV Closure	F022X	ZS14122A through D	ZS214122A through D	
	F028X	ZS14128A through D	ZS24128A through D	
TB Stop Valve Closure	SV0S-X	ZS-10141A7 through D7 ZS-10141A8 through D8	ZS20141A7 through D7 ZS20141A8 through D8	
Level/Pressure Switches				
TB Control Valve Closure SDV Level	N005X	PSL139N005A through D	PSL-2N005A through D	

COMPONENT	GENERIC ID	NPRDS UTILITY COMPONENT IDs		COMMENTS
Transmitter/Trip Units				
RX High Pressure	N078X	PS-142N023A through D	PS-2N023A through D	
	N678X	N/A	N/A	
RX Low Water Level	N080X	LIS142N024A through D	LIS-2N024A through D	
	N680X	N/A	N/A	
RX High Water Level	N683X	(See Note 1)	(See Note 1)	
1st Stg. TB Pressure	N052X	PSH139N003A through D	PSH-2N003A through D	
	N652X	N/A	N/A	
DW High Pressure	N050X	PSH151N002A through D	PSH-2N002A through D	
	N650X	N/A	N/A	
SDV High Level	N012X	LIS142N013A through D	LSH-2N013A through D	
	N601X			
Flux and Radiation Sensors				
APRM	APRMX	(See Attachment A)	(See Attachment A)	
	MSL Rad. K40X	RE-139N006A through D	RE-2N006A through D	(Note 2)
	K41X	C72A-K41	C72A-K41	SDV Vent. Vlv Closed
RX Mode Switch	RX1	(See Note 3)	(See Note 3)	

*Is used to denote letters A, B, C etc., corresponding to different logic channels.

NOTE 1

Susquehanna does not have an RPS input for the RX High Water Level. RX High Water Level does cause a Turbine trip which in turn causes the Reactor SCRAM (if power is greater than 30%) on TB Stop Valve Closure. The RX High Water Level Switches that do this are in the data base as PDT-1N004A, B, C for Unit 1 and PDT-2N004A, B, C for Unit 2; both are scoped in the CCA system.

NOTE 2

RE-139N006A through D (Unit 1) and RE-2N006A through D (Unit 2) are scoped in the SDCMCA system.

NOTE 3

The Reactor Mode Switch is scoped "Reportable upon Failure". These switches have not failed at SSES since commercial, so are not in the data base at this time.

ATTACHMENT A

The APRM neutron monitoring system provides contacts to actuate the K12A - H relays. These contacts are relay contacts, which relays are found in the Ion Chamber Power Supply (ICPS) pages PS31, PS32, PS41, PS22, PS51 respectively. These relays are driven by the Thermal Trip card Z71 (Thermal Trip) and by the Quad Trip card Z35 (Downscale, INOP, Upscale Neutron Trips). Table A-1 shows the NPRDS 2CUNITID's for the Thermal Trip and Quad Trip cards, trip relays (in the ICPS page) and the respective RPS relays they actuate.

Table A-2 gives the first three components for the APRM channel. The Detector, High Voltage Power Supply and LPRM card (amplifier) are given. The components between these and the trip cards are not shown.

TABLE A-1

Neutron Monitoring RPS
Input Components found in NPRDS (Typical for Units 1 and 2) Data base

APRM Channel	APRM Thermal[1] Trip (Z71)	APRM Quad[2] Trip (Z35)	(APRM) Trip Relays[3] Located in ICPS Page: Downscale	INOP	Neut. Upscale	Thermal Upscale	RPS Relay Actuated by APRM Trip Relay's Contacts
A	AR31-Z71	-	-	-	-	C51-PS31-K19	C72A-K12A
	-	AR31-Z35	C51-PS31-K3	C51-PS31-K2	C51-PS31-K1		
B	AR32-Z71	-	-	-	-	C51-PS32-K19	C72A-K12B
	-	AR32-Z35	C51-PS32-K3	C51-PS32-K2	C51-PS32-K1		
C	AR41-Z71	-	-	-	-	C51-PS41-K19	C72A-K12C
	-	AR41-Z35	C51-PS41-K3	C51-PS41-K2	C51-PS41-K1		
D	AR22-Z71	-	-	-	-	C51-PS22-K19	C72A-K12D
	-	AR22-Z35	C51-PS22-K3	C51-PS22-K2	C51-PS22-K1		
E	AR51-Z71	-	-	-	-	C51-PS51-K19	C72A-K12E
	-	AR51-Z35	C51-PS51-K3	C51-PS51-K2	C51-PS51-K1		
F	AR12-Z71	-	-	-	-	C51-PS12-K19	C72A-K12F
	-	AR12-Z35	C51-PS12-K3	C51-PS12-K2	C51-PS12-K1		
E	AR51-Z71	-	-	-	-	C51-PS51-K20	C72A-K12G
	-	AR51-Z35	C51-PS51-K9	C51-PS51-K8	C51-PS51-K7		
F	AR12-Z71	-	-	-	-	C51-PS12-K20	C72A-K12H
	-	AR12-Z35	C51-PS12-K9	C51-PS12-K8	C51-PS12-K7		

[1]Thermal Trip Cards are in the data base as a IBISSW's

[2]The Quad Trip Cards are in the data base as a INTCPM

[3]The Trip Relays are in as RELAY

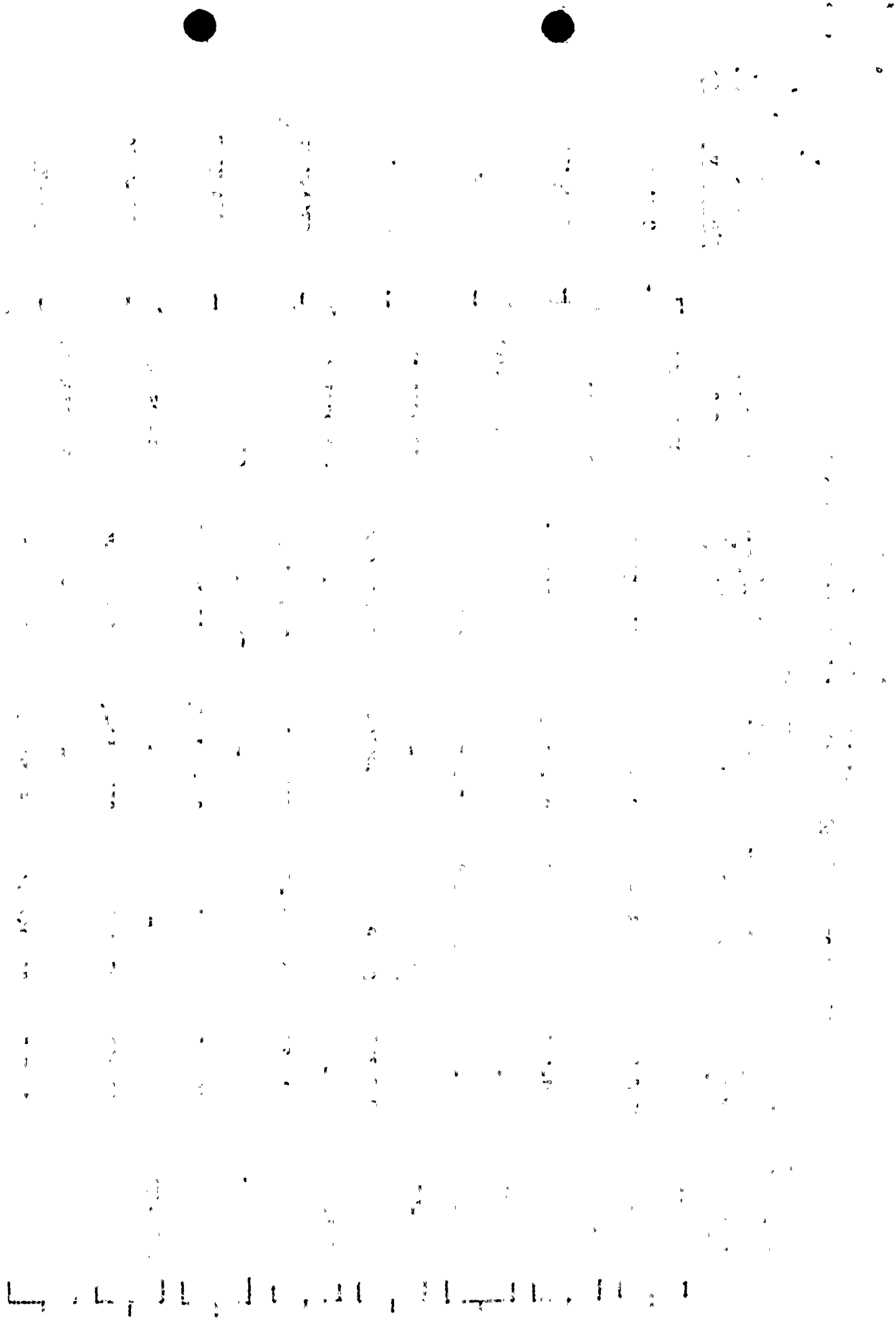

TABLE A-2

NPRDS components from the detector through the LPRM card for the APRM channels

APRM A

LPRM(APRM CH A) DETECTOR	APRM CH. A HIGH VOLTAGE PWR SUP	APRM CHANNEL A LPRM CARDS
32-49B	PS31-PS1	AR31-Z1
16-33B	PS31-PS2	AR31-Z2
48-33B	PS31-PS3	AR31-Z3
32-17B	PS31-PS4	AR31-Z4
16-49D	PS31-PS7	AR31-Z7
48-49D	PS31-PS8	AR31-Z8
32-33D	PS31-PS9	AR31-Z9
16-17D	PS31-PS10	AR31-Z10
48-17D	PS31-PS11	AR31-Z11
24-57A	PS31-PS13	AR31-Z13
08-41A	PS31-PS14	AR31-Z14
40-41A	PS31-PS15	AR31-Z15
24-25A	PS31-PS16	AR31-Z16
56-25A	PS31-PS17	AR31-Z17
40-09A	PS31-PS18	AR31-Z18
40-57C	PS31-PS19	AR31-Z19
24-41C	PS31-PS20	AR31-Z20
56-41C	PS31-PS21	AR31-Z21
08-25C	PS31-PS22	AR31-Z22
40-25C	PS31-PS23	AR31-Z23
24-09C	PS31-PS24	AR31-Z24

APRM B

LPRM(APRM)CH B DETECTOR	APRM. CH B HIGH VOLTAGE PWR SUP	APRM CHANNEL B LPRM CARDS
08-49B	PS32-PS1	AR32-Z1
40-49B	PS32-PS2	AR32-Z2
24-33B	PS32-PS3	AR32-Z3
56-33B	PS32-PS4	AR32-Z4
08-17B	PS32-PS5	AR32-Z5
40-17B	PS32-PS6	AR32-Z6
24-49D	PS32-PS7	AR32-Z7
08-33D	PS32-PS9	AR32-Z9
40-33D	PS32-PS10	AR32-Z10
24-17D	PS32-PS11	AR32-Z11
56-17D	PS32-PS12	AR32-Z12
32-57A	PS32-PS13	AR32-Z13
16-41A	PS32-PS14	AR32-Z14
48-41A	PS32-PS15	AR32-Z15
32-25A	PS32-PS16	AR32-Z16
16-09A	PS32-PS17	AR32-Z17
48-09A	PS32-PS18	AR32-Z18
16-57C	PS32-PS19	AR32-Z19
32-41C	PS32-PS21	AR32-Z21
16-25C	PS32-PS22	AR32-Z22
48-25C	PS32-PS23	AR32-Z23
32-09C	PS32-PS24	AR32-Z24

APRM C

LPRM(APRM)CH.C DETECTOR	APRM. CH C HIGH VOLTAGE PWR SUP	APRM. CHANNEL C LPRM CARDS
24-57B	PS41-PS1	AR41-Z1
08-41B	PS41-PS2	AR41-Z2
40-41B	PS41-PS3	AR41-Z3
24-25B	PS41-PS4	AR41-Z4
56-25B	PS41-PS5	AR41-Z5
40-09B	PS41-PS6	AR41-Z6
40-57D	PS41-PS7	AR41-Z7
24-41D	PS41-PS8	AR41-Z8
56-41D	PS41-PS9	AR41-Z9
08-25D	PS41-PS10	AR41-Z10
40-25D	PS41-PS11	AR41-Z11
24-09D	PS41-PS12	AR41-Z12
16-49A	PS41-PS13	AR41-Z13
48-49A	PS41-PS14	AR41-Z14
32-33A	PS41-PS15	AR41-Z15
16-17A	PS41-PS16	AR41-Z16
48-17A	PS41-PS17	AR41-Z17
32-49C	PS41-PS19	AR41-Z19
16-33C	PS41-PS20	AR41-Z20
48-33C	PS41-PS21	AR41-Z21
32-17C	PS41-PS22	AR41-Z22

APRM D

LPRM (APRM CH D) DETECTOR	APRM CH D HIGH VOLTAGE PWR SUP	APRM CHANNEL D LPRM CARDS
32-57B	PS22-PS1	AR22-Z1
16-41B	PS22-PS2	AR22-Z2
48-41B	PS22-PS3	AR22-Z3
32-25B	PS22-PS4	AR22-Z4
16-09B	PS22-PS5	AR22-Z5
48-09B	PS22-PS6	AR22-Z6
16-57D	PS22-PS7	AR22-Z7
32-41D	PS22-PS9	AR22-Z9
16-25D	PS22-PS10	AR22-Z10
48-25D	PS22-PS11	AR22-Z11
32-09D	PS22-PS12	AR22-Z12
24-49A	PS22-PS13	AR22-Z13
08-33A	PS22-PS15	AR22-Z15
40-33A	PS22-PS16	AR22-Z16
24-17A	PS22-PS17	AR22-Z17
56-17A	PS22-PS18	AR22-Z18
08-49C	PS22-PS19	AR22-Z19
40-49C	PS22-PS20	AR22-Z20
24-33C	PS22-PS21	AR22-Z21
56-33C	PS22-PS22	AR22-Z22
08-17C	PS22-PS23	AR22-Z23
40-17C	PS22-PS24	AR22-Z24

APRM E

LPRM(APRM CH E) DETECTOR	APRM CH E HIGH VOLTAGE PWR SUP	APRM CHANNEL E LPRM CARDS
16-49B	PS51-PS1	AR51-Z1
48-49B	PS51-PS2	AR51-Z2
32-33B	PS51-PS3	AR51-Z3
16-17B	PS51-PS4	AR51-Z4
48-17B	PS51-PS5	AR51-Z5
32-49D	PS51-PS7	AR51-Z7
16-33D	PS51-PS8	AR51-Z8
48-33D	PS51-PS9	AR51-Z9
32-17D	PS51-PS10	AR51-Z10
40-57A	PS51-PS13	AR51-Z13
24-41A	PS51-PS14	AR51-Z14
56-41A	PS51-PS15	AR51-Z15
08-25A	PS51-PS16	AR51-Z16
40-25A	PS51-PS17	AR51-Z17
24-09A	PS51-PS18	AR51-Z18
24-57C	PS51-PS19	AR51-Z19
08-41C	PS51-PS20	AR51-Z20
40-41C	PS51-PS21	AR51-Z21
24-25C	PS51-PS22	AR51-Z22
56-25C	PS51-PS23	AR51-Z23
40-09C	PS51-PS24	AR51-Z24

APRM F

LPRM(APRM)CH F DETECTOR	APRM CH.F HIGH VOLTAGE PWR SUP	APRM CHANNEL F LPRM CARDS
24-49B	PS12-PS1	AR12-Z1
08-33B	PS12-PS3	AR12-Z3
40-33B	PS12-PS4	AR12-Z4
24-17B	PS12-PS5	AR12-Z5
56-17B	PS12-PS6	AR12-Z6
08-49D	PS12-PS7	AR12-Z7
40-49D	PS12-PS8	AR12-Z8
24-33D	PS12-PS9	AR12-Z9
56-33D	PS12-PS10	AR12-Z10
08-17D	PS12-PS11	AR12-Z11
40-17D	PS12-PS12	AR12-Z12
16-57A	PS12-PS13	AR12-Z13
32-41A	PS12-PS15	AR12-Z15
16-25A	PS12-PS16	AR12-Z16
32-09A	PS12-PS17	AR12-Z17
32-57C	PS12-PS18	AR12-Z18
16-41C	PS12-PS19	AR12-Z19
48-41C	PS12-PS20	AR12-Z20
32-25C	PS12-PS21	AR12-Z21
16-09C	PS12-PS22	AR12-Z22
48-09C	PS12-PS23	AR12-Z23
48-25A	PS12-PS24	AR12-Z24