

ATTACHMENT 14

**CPS Procedure 4200.01C002,
"DC Load Shedding During a SBO," Rev 5a**

DC LOAD SHEDDING DURING A SBO

SCOPE OF REVISION:

- IR 1412580 Corrected noun names of circuits on DC MCC 1E and 1F
- Page: 6
- ① Specific Rev. 5a [Jeans] Editorial
 IR 01351102/IER L2 12-27
 Clarify that this load shedding procedure may be utilized on less severe events than a full station black out.

CONTINUOUS USE

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CLASS CODE: *SNNNI*

SQR: *Kevin Zipprich*

APPROVAL DATE: *01/14/2013*

CURRENT CHANGES TO GENERAL REVISION

	<i>Change #</i>	<i>Date</i>	<i>List of Affected Pages</i>
①	<u>5a</u>	<u>11/18/13</u>	<u>1,2</u>
②	<u> </u>	<u> </u>	<u> </u>
③	<u> </u>	<u> </u>	<u> </u>
④	<u> </u>	<u> </u>	<u> </u>
⑤	<u> </u>	<u> </u>	<u> </u>

DC LOAD SHEDDING DURING A SBO

Started: _____ Date: _____ Time: _____

①

NOTE

This procedure may be used in part or in whole for events less severe than a full Station Black Out.

DC LOAD SHEDDING

Within 1 hour of the start of the SBO:

Perform DC Load Shedding on the battery busses which do not have 4160V Bus power available (Div 3 may still have Bus 1C1 powered):

		<u>Initial</u>
Battery 1A (Div 1)	Page 3:	_____
Battery 1B (Div 2)	Page 4:	_____
Battery 1C (Div 3)	Page 5:	_____
Battery 1D (Div 4)	Page 5:	_____

As needed to support extended events, perform DC Load Shedding on the BOP battery busses which do not have 6900V Bus power available:

BOP Battery 1E (supplied by 6900V 1A bus)	Page 6:	_____
BOP Battery 1F (supplied by 6900V 1B bus)	Page 6:	_____

COMMENTS/DISCREPANCIES

Performed by: _____
 (Print Name) (Initials) (Date)

Performed by: _____
 (Print Name) (Initials) (Date)

Performed by: _____
 (Print Name) (Initials) (Date)

REVIEW AND APPROVAL

SMngt: _____
 Title Signature Date

DC LOAD SHED LISTBATTERY 1A (DIV 1)

At DC MCC 1A (1DC13E), AB 781' East,
open the following circuit breakers:

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
1A-11A	7	Emerg Ltg Cab 164, 1LL64E [Emer/Exit lights in AB, FB, and SB]	_____

NOTE

Opening circuit #13 for the Div 1 DG Control Panel will prevent starting of the DG.

This circuit should be re-energized as necessary to support DG recovery efforts.

1A-11A	13	DG 1A Control Pnl, 1PL12JA	_____
1A-12A	18	Opt Isol Cab, 1PL56JA & 1PL56JB [Computer Points]	_____
1A-12A	26	Control Panel 1H13-P661B, LPCS Control Power [Transient Test interface modules in NSPS]	_____
1A-12A	30	Control Panel 1H13-P601, Position for 1E12-R611A/R612A. R609A/B	_____

NOTE

*Opening circuit #32 for the RHR logic will prevent starting of
the Div 1 ECCS when the bus is re-energized.*

This circuit should be re-energized as necessary to support RPV level recovery efforts.

1A-12A	32	Control Panel 1H13-P661, RHR A Control Power [Disables 'A' Half of RHR]	_____
1A-12A	33	Control Panel 1H13-P661, RPS A Control Power [Disables 'A' Half of RPS]	_____
1A-12A	36	Control Pnl, 1G36-P002 [RWCU]	_____

DC LOAD SHED LISTBATTERY 1B (DIV 2)

At DC MCC 1B (1DC14E), AB 781' West,
open the following circuit breakers:

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effectcd</u>	<u>Initial</u>
1B-4A	10	Emergency Ltg Cab #188, 1LL88E [Emer/Exit lights in MCR and CB]	_____
<u>NOTE</u>			
<i>Opening circuit #14 for the Div 2 DG Control Panel will prevent starting of the DG.</i>			
<i>This circuit should be re-energized as necessary to support DG recovery efforts.</i>			
1B-4A	14	DG 1B Control Pnl, 1PL12JB	_____
1B-4A	15	Emergency Ltg Cab #165, 1LL65E [Emer/Exit lights in RW]	_____
1B-4A	16	Emergency Ltg Cab #166, 1LL66E] [Emer/Exit lights in CB	_____
1B-5A	17	6.9KV Swgr 1B (1AP05EA), RR Pump 1B Brk 3B Control Power	_____
1B-5A	18	125V DC Dist Pnl 7A (Power to FP Dist Pnls)	_____
1B-5A	20	Control Panel 1H13-P851, Various Annunciators [VC, VD, VH, VG, VP, VQ, VX, VY]	_____
1B-5A	22	Opt Isol Cab 1PL57JA & 1PL57JB, Various Computer Points	_____
1B-5A	24	Control Panel 1H13-P851, Various Annunciators [AP, CC, CM, CY/MC, DC, DO, FC, FP, HG, IA/SA, LD, MS, RE/RF, SF, SM, SX]	_____
1B-5A	26	Control Panel 1H13-P662, NSPS Control Power [Transient Test interface modules in NSPS]	_____

☞ Battery 1B (Div 2) breakers continued on next page.

DC LOAD SHED LISTBATTERY 1B (DIV 2) (cont'd)

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
1B-5A	30	Control Panel 1H13-P601, Position for 1E12-R611B/612B, R608A/B	_____

NOTE

Opening circuit #32 for the RHR logic will prevent starting of the Div 2 ECCS when the bus is re-energized.

This circuit should be re-energized as necessary to support RPV level recovery efforts.

1B-5A	32	Control Panel 1H13-P662, RHR B Control Power [Disables 'B' Half of RHR]	_____
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BATTERY 1C (DIV 3)

At NSPS Power Distribution Panel C (C71-P001C),
CB 781' Div 3 Switchgear Room, open the following circuit breaker:

<u>Panel</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
C71-P001C	9	Power & Start Up Range Neutron & Rad Mon H13-P671	_____

BATTERY 1D (DIV 4)

At DC MCC 1D (1DC15E), CB 781' Div 4 NSPS Inv Room,
open the following circuit breaker:

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
1D-3A	1	Emergency Lighting Cabinet 163 (1LL163E) [Emer/Exit lights in CNMT]	_____

DC LOAD SHED LISTBATTERY 1E (BOP)

At DC MCC 1E (1DC16E), Distribution Panel Cubicle 4A and 5A open the following circuit breakers:

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
1E-4A	16	RPS Solenoid Power Inverter 1C71-S004A	_____
1E-5A	17	125V DC Dist Panel RW-G (1DC19E)	_____
1E-5A	18	125V DC Dist Panel RW-B (1DC18E)	_____
1E-5A	19	125V DC Dist Panel RW-M (1DC20E)	_____
① 1E-5A	22	RWCU Pumps 1A And 1C Control Power	_____
① 1E-5A	23	Junction Box EH (1MP01KB) (Alterrex Excitation System)	_____
1E-5A	24	RFPT 1B Term Box EH (1PL75JB)	_____
1E-5A	25	MP Transformer 1A (1MP04EA)	_____
1E-5A	26	RFPT 1A Term Box EH (1PL75JA)	_____
1E-5A	27	MP Transformer 1C (1MP04EC)	_____
1E-5A	29	1TG03K, Turning Gear Permissive	_____

BATTERY 1F (BOP)

At DC MCC 1F (1DC17E), Distribution Panel Cubicle 4A and 5A, open the following circuit breakers:

<u>MCC/Cubicle</u>	<u>Ckt</u>	<u>Load Effected</u>	<u>Initial</u>
1F-4A	16	Emergency Lighting Cabinet #162	_____
1F-5A	18	RPS Solenoid Power Inverter 1C71-S004B	_____
1F-5A	19	125V DC Dist Panel CB-B (1DC21E)	_____
1F-5A	20	125V DC Dist Panel TB-B (1DC23E)	_____
1F-5A	21	125V DC Dist Panel CB-M (1DC22E)	_____
1F-5A	27	MP Transformer 1B (1MP04EB)	_____
1F-5A	28	MP Transformer 1D (1MP04ED)	_____
① 1F-5A	29	RWCU Pump 1B Control Power	_____
1F-5A	30	Exciter Cubicle 1MP05S	_____