

## EMERGENCY OPERATING PROCEDURE

05-42-90

# ECA-0.1 LOSS OF ALL AC POWER RECOVERY WITHOUT SI REQUIRED

### PURPOSE

This procedure provides actions to use normal operational systems to stabilize plant conditions following restoration of AC emergency power.

#### ENTRY CONDITIONS

· 19100-C, ECA-0.0 LOSS OF ALL AC POWER, Step 27.

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	ACTIONS/EXPECTED R	<u>esponse</u> <u>p</u> Note	ESP	ONSE NOT OBTAINED
	CSFSTs should be t should not be imp Step 9.	nonitored for infor lemented prior to c	mat comp	ion only. FRPs letion of
1.	Check RCP Seal Isol Status:	lation		
	a. RCP seal injecti isolation valves outside contains SHUT:		01	F valves open, R position <u>NOT</u> known, <u>HEN</u> check CCP status:
	<ul> <li>HV-8103A</li> <li>HV-8103B</li> </ul>		1	) IF pump running, THEN go to Step 2.
	<ul> <li>HV-8103C</li> <li>HV-8103D</li> </ul>		2	IF pump NOT running, THEN manually shut valves before starting CCP.
				IF valves can NOT be manually shut,

- b. ACCW return isolation valve outside containment - SHUT:
  - HV-1975

 b. IF valve open, OR position NOT known, THEN check ACCW pump status:

valves.

THEN locally shut

- 1) IF pump running, THEN go to Step 2.
- IF pump NOT running, <u>THEN</u> manually shut valve.

IF valve can NOT be manually shut, THEN manually shut ACCW return isolation valve inside containment:

• HV-1974

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	ACTIONS/EXPECTED	PEDONER			
	NOTIOND/ DATECTED	RESPONSE		RESPON	SE NOT OBTAINED
2.	Check Containment NOT ACTUATED.	Phase A -	2.	Perform	m the following:
				a. Res iso:	et containment lation Phase A.
				b. Esta to d	ablish instrument air containment:
				THEN	instrument air pressur mal, N open containment Lation valve HV-9378 go to Step 3.
				THEN	Instrument air pressure normal, V perform the lowing:
				c i	Start one air compressor by nitiating 13710, SERVICE AIR SYSTEM.
				PII	THEN instrument air pressure is normal, THEN open containment solation valve HV-9378 and go to Step 3.

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	ACTION	<u>S/EXPECTED RE</u>	SPONSE	RESI	PONSE NOT OBTAINED
	The 1 shoul	oads placed o d not exceed	<u>CAUT</u> n the energ the capacit	zized AC en	nergency bus nower source.
			NOT	Е	
	ACCW I remain 220°F	n shut until	ion Valve H RCP seal te	V-1975 or mperature	HV-1974 should is less than
1	Manual. Equipme	Valve Alignme ly Load The Fo ent On The En- gency Bus:	ollowing		
	alig	ck NSCW System nment and sta pumps.	D art two	n i S	lign NSCW System for formal operation by nitiating 13150, NUCLEA ERVICE COOLING WATER YSTEM.
t	alig	k ACCW System nment and sta ACCW pump.	n art	n 1	lign ACCW System for ormal operation by nitiating 13716, UXILIARY COMPONENT

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AC	TIONS/EXPECTED RE	SPONSE	RESPONSE	NOT OBTAINED
		CAUTION		
	Without instrume remain aligned to	nt air availab o RWST.	le CCP suct	ion should
с,	Check CVCS valve alignment and sta CCP:			
	1) Check valve al	lignment:	1) Mar	nually align valves necessary.
	<ul> <li>CCP suction from VCT -</li> </ul>		IF	VCT NOT available.
	<ul> <li>LV-01121</li> <li>LV-01120</li> </ul>		TH	EN establish suction RWST:
	<ul> <li>VCT makeup system - SH</li> </ul>	control ET FOR	•	Open CCP suction valves from RWST:
	GREATER THA BORCN CONCENTRATI AND AUTOMAT	ION		<ul> <li>LV-0112D</li> <li>LV-0112E</li> </ul>
	CONTROL.		•	Shut CCP suction valves from VCT:
	isolation v SHUT:			<ul> <li>LV-0112B</li> <li>LV-0112C</li> </ul>
	<pre>     HV-8105     HV-8106 </pre>			
	<ul> <li>CCP normal miniflow is valves - OF</li> </ul>			
	2) Start One CCP.			
d.	Start containment coolers as necess	fan ary.		

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				er en sen an de sen en e
	ACTIONS/EXPECT	ED RESPONSE	RESI	PONSE NOT OBTAINED
		NO	TE	
	Without instru established up	ment air avai sing Attachmen	lable charg: t A.	ing should be
4.	Establish Charg	ing Flow:		
	a. Set HC-0182 seal flow (F	to maximum NV-0182 - SHUT	).	
	b. Open chargin isolation va	ng line lves:		
	<ul> <li>HV-8105</li> <li>HV-8106</li> </ul>			
	c. Establish ch using contro FV-0121 and	1 valves		
5.	Check ECCS Flow Required:	Not		
	a. RCS subcooli GREATER THAN [38°F FOR AD	ng monitor - 24°F VERSE CNMT].	. L R	So to 19102-C, ECA-0.2 LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED.
	b. PRZR level - THAN 91 [361 ADVERSE CNMT	FOR	ъ. с	Control charging flow to maintain PRZR level.
			u T E P	F PRZR level can <u>NOT</u> be maintained, THEN go to 19102-C, CA-0.2 LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED.
	Check PRZR leve THAN 197 [507 FO CNMT].	l - GREATER OR ADVERSE	6. Cont nece	rol charging flow as assary.

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ACTIONS/EXPECTED RE	SPONSE	RE	SPONSE NOT OBTAINED
	CAUTION		
<ul> <li>Alternate water necessary if CSI</li> </ul>	sources for AFW level lowers t	pum o le	ps will be ss than 15%.
gpm, the MDAFW p	CNMT] and AFW	flow	is less than 570 ally loaded on the
	NOTE		
If MDAFW pump oper should be maintain automatic start.	ation is not re ed in PULL-TO-L	quire OCK 1	ed, pump switches to prevent
heck Intact SG Lev	els:		
GREATER THAN 51		a,	Maintain AFW flow great than 570 gpm until narr range level GREATER THA 5% [27% FOR ADVERSE CNM in at least one SG.
			IF AFW flow NOT greater than 570 gpm, THEN establish AFW flow from the MDAFW pumps by initiating 13610, AUXILIARY FEEDWATER SYSTEM.
	range		
	<ul> <li>Alternate water necessary if CST</li> <li>If SG narrow ran [27] FOR ADVERSE gpm, the MDAFW p AC Emergency Bus</li> <li>If MDAFW pump oper should be maintain automatic start.</li> <li>heck Intact SG Lev</li> <li>Narrow range lev GREATER THAN 51 [271 FOR ADVERSE CNMT].</li> <li>Control AFW flow maintain narrow r level between 51</li> </ul>	<ul> <li>Alternate water sources for AFW necessary if CST level lowers to</li> <li>If SG narrow range level lowers (27% FOR ADVERSE CNMT) and AFW gpm, the MDAFW pumps should be AC Emergency Bus to supply wate</li> <li><u>NOTE</u></li> <li>If MDAFW pump operation is not reshould be maintained in PULL-TO-Lautomatic start.</li> <li>heck Intact SG Levels: <ul> <li>Narrow range level - GREATER THAN 5% (27% FOR ADVERSE CNMT).</li> </ul> </li> <li>Control AFW flow to maintain narrow range level between 5%</li> </ul>	CAUTION Alternate water sources for AFW pum necessary if CST level lowers to le If SG narrow range level lowers to [271 FOR ADVERSE CNMT] and AFW flow gpm, the MDAFW pumps should be manu AC Emergency Bus to supply water to <u>NOTE</u> If MDAFW pump operation is not requir should be maintained in PULL-TO-LOCK automatic start. heck Intact SG Levels: Narrow range level - a. GREATER THAN 52 [271 FOR ADVERSE CNMT]. Control AFW flow to maintain narrow range level between 51

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	ACTIONS/EXPECTED	RESPONSE	RESP	ONSE NOT OBTAINED
8.	Establish SG Pres Control:	sure		
	a. Set each SG AR controller to r existing SG pro	naintain		
	b. Place each SG a controller in a mode.	ARV Automatic		
	c. Locally return to remote contr	SG ARVs		
).	Place Following Pu Switches In AUTO:	ump		
	<ul> <li>SI pumps.</li> <li>RHR pumps.</li> <li>CS pumps.</li> </ul>			

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ACT	IONS/EXPECTED RE	SPONSE	RE	SPONSE NOT OBTAINED
		CAUTION		
	RCP thermal barr slowly to minimi ACCW System.	tier cooling shou ze potential ste	ld am	be established flashing of the
1	RCP seal injecti minimize RCP the failures.	on should be est rmal stresses an	abl d p	ished slowly to otential seal
• 4	as a part of sub should not be st	sequent recovery arted prior to a	ac st	tions, RCPs atus evaluation.
		NOTE		
10 L L				
LUL	s may now be im	plemented as nec	888	ary.
	s may now be im blish RCP Seal		888	ary.
Esta a. C t		Cooling: o. l		Restore seal injection
Esta a. C t T b. O s	blish RCP Seal heck RCP seal N emperature - LE	Cooling: o. 1 SS ion		
Esta a. C t T b. O s a c. C f	blish RCP Seal heck RCP seal N emperature - LE HAN 220°F. pen seal inject upply valves on	Cooling: o. 1 SS ion ection	a.	Restore seal injection flow using Attachment B IF charging was established using Attachment A, THEN maintain 8 to 13 g seal injection flow by
Esta a. C t T b. O s a c. C f H	blish RCP Seal heck RCP seal N emperature - LE HAN 220°F. pen seal inject upply valves on ffected RCP. ontrol seal inj low using FV-01	Cooling: o. 1 SS ion ection 21 and	a.	Restore seal injection flow using Attachment B IF charging was established using Attachment A, THEN maintain 8 to 13 g seal injection flow by using appropriate secti

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	ACTIONS/EXPECTED R	ESPONSE	RESPONS	SE NOT OBTAINED
11.	Check IF RCP Seal 1 Flow Should Be Established:	Return		
	a. RCS pressure - ( THAN 100 PSIG.	GREATER	a. Go t	to Step 12.
	b. Establish flow:			
	<ol> <li>Open RCP seal header isolat valves:</li> </ol>			
	o HV-8100 o HV-8112			
	<ol> <li>Verify seal r from each RCF NORMAL FOR RC</li> </ol>	PSEAL	2) C	pen RCP seal leakoff alves as necessary:
	NUMBER 1 DIFF PRESSURE.	ERENTIAL	:	HV-8141A (RCP 1) HV-8141B (RCP 2) HV-8141C (RCP 3) HV-8141D (RCP 4)
		NOTE		
	Without instrument established using	air availab Attachment C	le letdown s	hould be
2.	Check If Letdown Ca Be Established:	n		
	a. Check PRZR level GREATER THAN 192 [502 FOR ADVERSE CNMT].		nece leve (50%	rol charging as shary. WHEN PRZR I GREATER THAN 192 FOR ADVERSE CNMT] do Step 12b.
			Cont	inue with Step 13.
	b. Establish letdow initiating 13006 CHEMICAL AND VOL		by i	blish excess letdown nitiating 13008, ICAL AND VOLUME

- CONTROL SYSTEM STARTUP AND NORMAL OPERATION.

	URE NO.	REVISION	AND IN ADDRESS OF TAXABLE PARTY AND IN ADDRESS	and Canal and South and S	PAGE NO.
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	ar de genere a banner. Metre i de adre ar en ante de la compañía de ante a de arte de la compañía de la compañí			Alara metro di Standard	And the second
	ACTIONS/EXPECTED RE	SPONSE	R	ESPONSE	NOT OBTAINED
3.	Control Charging An Letdown Flow To Mai PRZR Level Between 19% (50% FOR ADVERS	ntain			
	CNMT] And 50%.	i station			
	Establish PRZR Pres Control:	sure			
	a. Check letdown - SERVICE.	IN	a	. Use P PRZR press	RZR heaters and one PORV to maintain RCS ure.
				00 00	Step 15.
	<ul> <li>b. Use PRZR heaters auxiliary spray maintain RCS pres</li> </ul>	to			
		CAUTIO	ON		
	On natural circular associated interloc	tion. RTD by	Thase t	emperat rate.	ures and
5. 1	On natural circulat associated interloc Verify Natural Circu	tion, RTD by cks will be	ypass t inaccu	rate.	
	Verify Natural Circu RCS subcooling mo	tion, RTD by cks will be ulation:	ypass t inaccu 15. R f	aise ra	ures and te of dumping steam act SGs until natura ion is verified.
	associated interio	ulation:	ypass t inaccu 15. R f	aise ra	te of dumping steam act SGs until natura
	Verify Natural Circu RCS subcooling mo GREATER THAN 24°H	tion, RTD by cks will be ulation: pnitor - F [38°F ].	ypass t inaccu 15. R f	aise ra	te of dumping steam act SGs until natura
	Verify Natural Circu RCS subcooling mo GREATER THAN 24°H FOR ADVERSE CNMT] SG pressures - ST	tion, RTD by cks will be ulation: onitor - F [38°F 1. TABLE eratures-	ypass t inaccu 15. R f	aise ra	te of dumping steam act SGs until natura
	Verify Natural Circu RCS subcooling mo GREATER THAN 24°H FOR ADVERSE CNMT SG pressures - ST OR LOWERING.	tion, RTD by cks will be ulation: nitor - F [38°F 1. TABLE eratures- NG.	ypass t inaccu 15. R f	aise ra	te of dumping steam act SGs until natura

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	ACTIONS/EXPECTED RE:	SPONSE	RESPONSE	NOT OBTAINED
16.	Check If Source Rang Detectors Should Be Energized:	ge		
	<ul> <li>a. Check intermediat range flux - LESS</li> <li>10<sup>-10</sup> AMPS.</li> </ul>		amps,	flux less than $10^{-10}$ do Step 16b and c.
	IO AMPS.			ue with Step 17.
	b. Verify source ran detectors - ENERC	nge SIZED.	b. Manual range	ly energize source detectors.
	c. Transfer nuclear recorder to sourc range scale.	e		
		NOTE		
	Without RCPs in ser uniformly in the RC	vice, boric aci S.	d will not	mix
.7.	Verify Adequate Shut Margin:	down		
	a. Open sample isola valves as necessa			
	b. Direct Chemistry sample RCS for bo concentration.	to ron		
	ADEQUATE.		xenon concen initis	as necessary to a free, cold shutdown tration by ting 13009, CVCS R MAKEUP CONTROL
8. M	faintain Plant Condi STABLE:	tions -		
	RCS pressure.			

19. Ch Re	19101-C TIONS/EXPECTED RE eck ECCS Flow Not quired: RCS subcooling m	an deleter of the deleter of the second	8 <u>RE</u>	13 of 20
19. Ch Re	eck ECCS Flow Not quired:	an deleter of the deleter of the second	RE	SPONSE NOT OBTAINED
Re	quired:			
a,	RCS subcooling m			
	GREATER THAN 24° FOR ADVERSE CNMT	F [38°F	a.	Go to 19102-C, ECA-0.2 LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED
b.	PRZR level - GRE THAN 92 [362 FOR ADVERSE CNMT].	ATER	Ъ.	Control charging flow to maintain PRZR level.
	ADVERSE CARLY.			IF PRZR level can <u>NOT</u> be maintained, THEN go to 19102-C, ECA-0.2 LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED.
Por By Ap	y To Restore Offs wer To All AC Bus Initiating propriate Electri pocedures.	ses	st	intain plant conditions able using AC emergency wer.
Wai 13	art Essential Chi ter Pumps By Init 744, ESSENTIAL CH TER SYSTEM.	iating		

CGP       19101-C       8       14 o         ACTIONS/EXPECTED RESPONSE       RESPONSE NOT OBTAINED         CAUTION         • Two hot starts of an RCP are allowed if the pump coasts to a stop between starts. (Approximately 2 minutes.)         • Subsequent hot starts are allowed if the pump has been running for 20 minutes or idle for 45 minutes.         • Start only one RCP at a time.         • Determine If Natural Circulation Cooldown Not Required:         a. Start at least one RCP using Attachment D.         b. Consult TSC and go to appropriate procedure.	JRE NO.	REVISION	And the second se	PAGE NO.				
CAUTION • Two hot starts of an RCP are allowed if the pump coasts to a stop between starts. (Approximately 2 minutes.) • Subsequent hot starts are allowed if the pump has been running for 20 minutes or idle for 45 minutes. • Start only one RCP at a time. Determine If Natural Circulation Cooldown Not Required: a. Start at least one RCP using Attachment D. b. Consult TSC and go to	19101-C		8	14 0	£ 20			
<ul> <li>Two hot starts of an RCP are allowed if the pump coasts to a stop between starts. (Approximately 2 minutes.)</li> <li>Subsequent hot starts are allowed if the pump has been running for 20 minutes or idle for 45 minutes.</li> <li>Start only one RCP at a time.</li> <li>Determine If Natural Circulation Cooldown Not Required:         <ul> <li>a. Start at least one RCP using Attachment D.</li> <li>a. Go to 19002-C, ES-NATURAL CIRCULATIO COOLDOWN.</li> <li>b. Consult TSC and go to</li> </ul> </li> </ul>	ACTIONS/EXPECTED RESPONSE RESPONSE NOT OBTAINED							
<ul> <li>Coasts to a stop between starts. (Approximately 2 minutes.)</li> <li>Subsequent hot starts are allowed if the pump has been running for 20 minutes or idle for 45 minutes.</li> <li>Start only one RCP at a time.</li> <li>Determine If Natural Circulation Cooldown Not Required:         <ul> <li>a. Start at least one RCP using Attachment D.</li> <li>a. Go to 19002-C, ES-NATURAL CIRCULATIO COOLDOWN.</li> <li>b. Consult TSC and go to</li> </ul> </li> </ul>		CAUTION						
<ul> <li>Start only one RCP at a time.</li> <li>Determine If Natural Circulation Cooldown Not Required:         <ul> <li>a. Start at least one RCP using Attachment D.</li> <li>b. Consult TSC and go to</li> </ul> </li> </ul>	codata to a stop	f an RCP are a between start	llowed if s. (Appro	the pump primately 2				
Determine If Natural Circulation Cooldown Not Required: a. Start at least one RCP using Attachment D. b. Consult TSC and go to	<ul> <li>Subsequent hot starts are allowed if the pump has been running for 20 minutes or idle for 45 minutes.</li> </ul>							
Circulation Cooldown Not Required: a. Start at least one RCP using Attachment D. b. Consult TSC and go to	지수는 것 같은 것 같							
using Attachment D. NATURAL CIRCULATIO COOLDOWN.	Circulation Cooldown Required:	Not						
b. Consult TSC and go to appropriate procedure.	a. Start at least of using Attachment	D.	NATU	JRAL CIRCULATIO	0.2 N			
	appropriate proc	o to dure.						

END OF PROCEDURE TEXT

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		ATTACHMENT A	Sheet 1 of 2				
	ESTABLISHING	G CHARGING WITHOUT INS	TRUMENT AIR				
Α.	Establish Charging With Train A Emergency Bus Energized:						
	1. Verify Train A	CCP - RUNNING.					
	2. Verify Train A	charging isolation va	lves - CPEN:				
	<ul> <li>HV-8116</li> <li>HV-0190A</li> <li>HV-8105 (100)</li> </ul>	cally verify if Train 1	B De-energized)				
131		wing charging isolation					
	<ul> <li>HV-8485A</li> <li>HV-8106</li> </ul>						
4	4. Maintain desire	ed charging flow using	HV-0190A.				
		to seal injection manua					
	UNIT 1	UNIT 2					
	1-1208-U6-152	2-1208-0	6-152				
. (	6. Return to Step	5 of this procedure.					
		NOTE					
	accac	the following section of the following section of the seal control seal real cooling is estable	injection				
7	. Maintain 8 to 1	13 gpm seal injection	flow by throttling:				
	UNIT 1	UNIT 2					
	1-1208-U6-152	2-1208-U	6-152				
8	. Maintain desire	ed charging flow using	HV-0190A.				
8	. Maintain desire	ed charging flow using	HV-0190A.				

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B. Establish C	harging With Tr	ain B Emergen	cy Bus Energize	ed :
l. Verify T	rain B CCP - RU	NNING.		
2. Verify T	rain B charging	isolation va	lve HV-0190B -	OPEN.
3. Verify T	rain B BIT out !-	et isolation	valve HV-8801B	- OPEN.
4. Shut the	following char;	ging isolatio	n valves:	
<ul> <li>HV-84</li> <li>HV-84</li> </ul>				
5. Maintain	desired chargin	ng flow using	HV-0190B.	
6. Open cha:	rging to seal in	njection manu	al isolation:	
UNIT 1		UNIT 2		
1-1208-1	16-151	2-1208-U	6-151	
7. Return to	Step 5 of this	s procedure.		
		NOTE		
	Use the follow attachment to after seal coo	control seal	injection	
8. Maintain	8 to 13 gpm sea	al injection	flow by thrott!	ling:
UNIT 1		UNIT 2		-
1-1208-1	6-151	2-1208-U	6-151	
9. Maintein	desired chargin	ng flow using	HV-0190B.	
	END OF A	ATTACHMENT A		

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			ATTACH	IENT B	Sheet 1 of 1
		RECOVI	ERY OF RCP	SEAL INJEC	CTION
	Check RCP	No. 1 sea	al temperat	ure.	
	IF less the THEN open ACCW supply procedure.	CVCS SEAL	LS RCP SEAL	. INJ SUPPL CP. Retur	LY CMMT ISO valve and Th to Step 10 of this
	IF greater THEN proces	than 220 ed to Ste	)°F, p 2 of thi	s Attachme	mt.
•	Verify seal Verify ACC	l injecti V supply	on supply temperatur	temperatur e - LEIS T	* - LESS THAN 135°F. The H 105°F.
•		perator t	o shut CVC		P SEAL INJ NEEDLE VLVS
	<ul> <li>1208-U4</li> <li>1208-U4</li> <li>1208-U4</li> <li>1208-U4</li> </ul>	415(RCP 416(RCP	2)		
	Verify CVCS Attachment	SEALS The second	C. SLAI IN	J NEEDLE V	LVS of Step 3 of this
	Open CVCS S RCP.	EALS RCP	SEAL INJ	SUPPLY CNM	TT ISO valve for affected
	Slowly open establish a	CVCS SE 1°F per	ALS RCP SE minute co	AL INJ NEE oldown rat	DLE VLVS TO #1 SEAL to
		. 1 seal	temperatu	re is less	then 220°F
	IF normal c	harging   1 charging	has been e	stablished	n using FV 0121 and
	Verify RCP	seal par	ameters:		
	<ul> <li>Seal inj</li> <li>RCP No.</li> <li>ACCW sup</li> </ul>	I Seal to	emperature	- LESS TH	LESS THAN 135°F. AN 220°F. 105°F.
	IF RCP seal THEN secure	paramete the affe	ers can NO' ected RCP.	I be verif	ied,
. 1	Return to S	tep 11 of	f this pro	cedure.	

END OF ATTACHMENT B

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	ATTACHMENT C	Sheet 1 of 1
- <u>ESTABL</u>	ISH SAFETY GRADE LETD	DOWN
	CAUTION	
The PRT may rupture letdown.	e while performing sa	afety grade
Open Reactor Vessel	Head Vent isolation	valves:
<ul> <li>HV-8095A</li> <li>HV-8096A</li> <li>HV-8095B</li> <li>HV-8096B</li> </ul>		
Open Reactor Vessel desired letdown flow	Head Vent flow contr w:	ol valves to obtain

END OF ATTACHMENT C

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		ATTACHMENT D	
	- <u>STARTI</u>	NG A REACTOR COOLANT PUMP	
1.	Establish Initial Co	nditions:	
	a. 13.8KV power avai	lable to RCP.	
	b. Steam bubble in P	RZR.	
	c. #1 Seal dP greate	r than or equal to 200 ps	id.
	d. Seal injection flo	ow 8 to 13 gpm.	
	e. Seal leakoff flow	greater than or equal to	0.2 gpm.
2.	Check the following a clear those alarms for	alarms clear or establish or the RCP to be started:	conditions to
	a. RCP LOWER OIL RSVI	R HI/LO LEVEL.	
	b. RCP UPPER RSVR HI	/LO LEVEL.	
	C. VOLUME CONTROL TAN	WE OUTLET TEMP HI.	
	d. VCT HI/LO PRESS.		
	e. RCP STNDPIPE LO LE	EVEL.	
	f. RCP STNDPIPE HI LE	EVEL.	
	g. RCP MTR OVERLOAD.		
	h. RCP NO 2 SEAL LKOP	FF HI FLOW.	
	i. ACCW RCP CLR OUTLE	T HI TEMP.	
	j. ACCW RCP CLR LO FI	.OW .	
	k. ACCW RCP THERM BAR	RRIER HX HI FLOW.	
	1. ACCW RCP THERM BAR	RRIER HI PRESS.	
•	Verify all RCP ACCW t	hermal barrier isolation	valves open.
	Start the associated		
	After two minutes of	lift pump operation, sta	rt the RCP.

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		TTACHMENT D (Cont'd.)				

- 6. After proximately one minute check the following alarms clear:
  - a. RCP LOW FLOW.
  - b. RCP SHAFT VIBRATION.
  - C. RCP FRAME VIBRATION.
  - d. Those alarms in Step 2.

7. After one minute of RCP operation, stop the oil lift pump.

## END OF ATTACHMENT D