Attachment C Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 551 of 573 ATTACHMENT 9.6 SEISMIC WALKDOWN CHECKLIST FORM Sheet 1 of 5 Status: YX N U Seismic Walkdown Checklist (SWC) \_\_\_\_\_ SWEL2-008 Equipment ID No. <u>19P-1A</u> Equip. Class 5. Horizontal pumps Equipment Description Fuel pool cooling recirc pump A Room, Area Col 3 line T Location: Bldg. RB Floor El. 326 Manufacturer, Model, Etc. (optional but recommended) Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. Anchorage 1. Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)? 2. Is the anchorage free of bent, broken, missing or loose hardware? Y⊠ N□ U□ N/A□ The anchorage is free of bent, broken, missing or loose hardware. 3. Is the anchorage free of corrosion that is more than mild surface oxidation?

Mild corrosion where paint is chipped

4. Is the anchorage free of visible cracks in the concrete near the anchors?

Single hairline cracks less then 1/16" in foundation near each bolt. These cracks are judged to have no adverse seismic impact on 19P-1A

Y□ N⊠ U□ N/A□

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 552 of 573

	SEISMIC WALKDOWN CHECKLIST FOR
Sheet 2 of 5	· · · ·
	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) <u>SWEL2-008</u>	
Equipment ID No. <u>19P-1A</u> Equip. Class <u>5. Horizontal presson and the second sec</u>	umps
Equipment Description Fuel pool cooling recirc pump A	
5. Is the anchorage configuration consistent with plant documentatio	on? Y⊠ N□ U□ N/A□
(Note: This question only applies if the item is one of the 50% for v	
an anchorage configuration verification is required.)	
6. Based on the above anchorage evaluations, is the anchorage free	e of Y⊠N⊡U⊡
potentially adverse seismic conditions?	· · · · · · · · · · · · · · · · · · ·
	·
Interaction Effects	· · · · · · · · · · · · · · · · · · ·
<ol> <li>Are soft targets free from impact by nearby equipment or structure Piping and conduit above oil reservoir are well supported.</li> </ol>	es? Y⊠ N□ U□ N/A□
Piping and conduit above on reservoir are wen supported.	
8. Are overhead equipment, distribution systems, ceiling tiles and lig	ahting, Y⊠ N⊡ U⊡ N/A⊡
and masonry block walls not likely to collapse onto the equipment	
	· · ·
9. Do attached lines have adequate flexibility to avoid damage?	
10. Based on the above seismic interaction evaluations, is equipment	it free Y⊠ N_ U_
10. Based on the above seismic interaction evaluations, is equipment of potentially adverse seismic interaction effects?	it free Y⊠ NL UL
	it free Y⊠ NL UL
	it free Y⊠ NL UL
	it free Y⊠ N∐ U∐
	it free Y⊠ NL UL
	it free Y⊠ N∐ U∐
	it free Y⊠ N∐ U∐
	it free Y⊠ N∐ U∐

;

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FORM
Sheet 3 of 5	
	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) <u>SWEL2-008</u>	
Equipment ID No. <u>19P-1A</u> Equip. Class <u>5. Horizontal pu</u>	Imps
Equipment Description Fuel pool cooling recirc pump A	· · · · · · · · · · · · · · · · · · ·
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that co adversely affect the safety functions of the equipment?	
· ·	
	· _
Comments (Additional pages may be added as necessary)	
No additional comments.	
	· · · ·
$\mathcal{D} \wedge \mathcal{D}$	· · · · ·
Kick Casella	Dete: 0.20.40
Evaluated by: <u>Rick Casella</u>	Date: <u>9-28-12</u>
NC, Danch	
Alan Porch	<u>9-28-12</u>
	· · · · ·
	$\left( \frac{1}{2} + \frac$
	· · · ·

Attachment C Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 554 of 573

#### ATTACHMENT 9.6

Sheet 4 of 5

#### SEISMIC WALKDOWN CHECKLIST FORM

Status: YX N U

Seismic Walkdown Checklist (SWC) \_ SWEL2-008

Equipment ID No. <u>19P-1A</u> Equip. Class <u>5. Horizontal pumps</u>

Equipment Description Fuel pool cooling recirc pump A

#### **Photographs**



Note: 19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)

Note: 19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)



#### ATTACHMENT 9.6

Sheet 5 of 5

#### SEISMIC WALKDOWN CHECKLIST FORM

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. 19P-1A

\_\_\_\_\_ Equip. Class <u>5. Horizontal pumps</u>

Equipment Description Fuel pool cooling recirc pump A



**Note:** 19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)

**Note:** 19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)

Engineering Report No. JAF-RPT-12-00015 Attachment C Rev. 0 Page 556 of 573 **ATTACHMENT 9.6** SEISMIC WALKDOWN CHECKLIST FORM Sheet 1 of 5 Status: YX N U Seismic Walkdown Checklist (SWC) \_\_SWEL 2-009 Equipment ID No. <u>19E-1A</u> Equip. Class 21. Tanks And Heat Exchangers Equipment Description Fuel pool cooling heat exchanger A Floor El. 326 Room, Area Col 4.5 line R Location: Bldg. <u>RB</u> Manufacturer, Model, Etc. (optional but recommended) Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. Anchorage 1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? 2. Is the anchorage free of bent, broken, missing or loose hardware? Anchorage is intact with all hardware present and in proper configuration. 3. Is the anchorage free of corrosion that is more than mild surface oxidation? Minor surface corrosion. No adverse seismic concern. 4. Is the anchorage free of visible cracks in the concrete near the anchors? No visible cracks in vicinity of anchorage.

Sheet 2 of 5	
Seismic Walkdown Checklist (SWC) <u>SWEL 2-009</u>	Status: YX N U
Equipment ID No. <u>19E-1A</u> Equip. Class <u>21. <i>Tanks And Heat E</i></u>	Exchangers
Equipment Description Fuel pool cooling heat exchanger A	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>4.17-4</li> </ul>	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y⊠ N□ U□
Very minor surface rust on plate.	
nteraction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	YX N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	YX N U N/A
9. Do attached lines have adequate flexibility to avoid damage?	Y N N U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	
	• • •

	ISMIC WAL	KDOWN CH	ECKLIST FORM
Sheet 3 of 5			
Seismic Walkdown Checklist (SWC) <u>SWEL 2-009</u>	Sta	atus: Y⊠	N[] U[]
Equipment ID No. <u>19E-1A</u> Equip. Class <u>21. Tanks And Hea</u>	t Exchang	ers	
Equipment Description Fuel pool cooling heat exchanger A			
Other Adverse Conditions			
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	, <b>Y</b>		
<u>Comments (</u> Additional pages may be added as necessary)			
No additional comments.		۰.	
			· .
Enduced by Dick Cocallo	-	۴.	
Evaluated by: <u>Rick Casella</u>	Date:	<u>9-28-12</u>	
A.C. Dande			•
Alan Porch		<u>9-28-12</u>	· · · · · · · · · · · · · · · · · · ·
			· · ·
	· ·		
~ . · · · . · · · · · · · · · · · · · ·			
		•	
			· .
	•		
		· •	4 

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 559 of 573

#### ATTACHMENT 9.6

Sheet 4 of 5

#### SEISMIC WALKDOWN CHECKLIST FORM

Status: YX N U

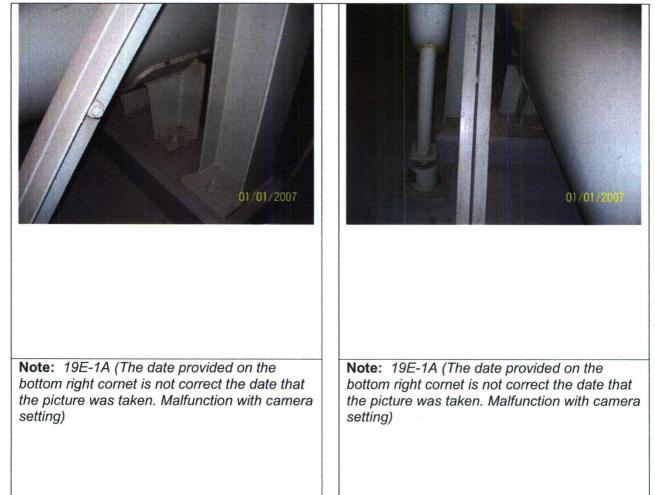
#### Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. 19E-1A

Equip. Class 21. Tanks And Heat Exchangers

Equipment Description Fuel pool cooling heat exchanger A

#### Photographs



Attachment C En

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 560 of 573

### ATTACHMENT 9.6

Sheet 5 of 5

#### SEISMIC WALKDOWN CHECKLIST FORM

Status: Y N U

#### Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. <u>19E-1A</u> Equip. Class<u>21. Tanks And Heat Exchangers</u>

Equipment Description Fuel pool cooling heat exchanger A





**Note:** 19E-1A with lead shielding around it. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting) **Note:** 19E-1A with shielding draped around it. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 561 of 573

ATTACHMENT 9.6 SEIS	MIC WALKDOWN CHECKLIST FOR
Sheet 1 of 5	
	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL 2-010</u>	,
Equipment ID No. <u>71MCC-131-OD1</u> Equip. Class1 <u>1 Motor Control Cen</u>	ter
Equipment Description <u>19P-1A(M) FUEL POOL COOLING RECIRC PUMP A</u>	MOTOR
Location: Bldg. <u>RB</u> Floor El. <u>326.9</u> Room, Area <u>Col 3 Line F</u>	>
Manufacturer, Model, Etc. (optional but recommended)	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown o SWEL. The space below each of the following questions may be used to record findings. Additional space is provided at the end of this checklist for documenting	the results of judgments and
Anchorage	
1. Is the anchorage configuration verification required (i.e., is the item one	Y NX
of the 50% of SWEL items requiring such verification)? The anchorage is not visible for anchorage.	
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y□ N□ U⊠ N/A□
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y□ N□ U⊠ N/A□
<ol><li>Is the anchorage free of visible cracks in the concrete near the anchors?</li></ol>	Y□ N□ U⊠ N/A□
	·
	· · ·

<sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	MIC WALKDOWN CHECKLIST FORM
heet 2 of 5	
	Status: Y N U⊠
eismic Walkdown Checklist (SWC) <u>SWEL 2-010</u>	
quipment ID No. <u>71MCC-131-OD1</u> Equip. Class <u>1 Motor Control Cente</u>	er
quipment Description 19P-1A(M) FUEL POOL COOLING RECIRC PUMP A	MOTOR
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	
	•
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	
	• •
nteraction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y⊠ N□ U□ N/A□
	• • •
9. Do attached lines have adequate flexibility to avoid damage?	Y⊠ N□ U□ N/A□
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	
· · · · · · · · · · · · · · · · · · ·	
	· · · ·

۰.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 563 of 573

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FORM
Sheet 3 of 5	
Seismic Walkdown Checklist (SWC) <u>SWEL 2-010</u>	Status: Y N U⊠
Equipment ID No. <u>71MCC-131-OD1</u> Equip. Class <u>1 Moto</u>	r Control Center
Equipment Description <u>19P-1A(M) FUEL POOL COOLING REC</u>	IRC PUMP A MOTOR
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions adversely affect the safety functions of the equipment?	s that could Y⊠ N⊡ U⊡
Comments (Additional pages may be added as necessary)	· · · · · · · · · · · · · · · · · · ·
<u>Jomments (Additional pages may be added as necessary)</u>	
	· · · · · · · · · · · · · · · · · · ·
AC, Danch	
Evaluated by: <u>A Porch</u>	Date: <u>11/01/12</u>
<u>C. Sawatzke C. Sawatte</u>	<u>11/01/12</u>
	• · · · · · · · · · · · · · · · · · · ·
	•
and the second	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 564 of 573

# ATTACHMENT 9.6

Sheet 4 of 5

#### SEISMIC WALKDOWN CHECKLIST FORM

Status: Y N U

#### Seismic Walkdown Checklist (SWC) SWEL 2-010

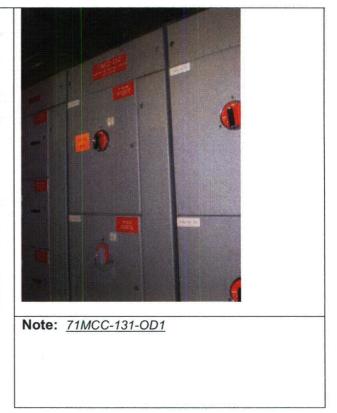
Equipment ID No. 71MCC-131-OD1 Equip. Class 1 Motor Control Center

Equipment Description <u>19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR</u>

#### Photographs



Note: 71MCC-131-0D1



Attachment C Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 565 of 573

# ATTACHMENT 9.6

Sheet 5 of 5

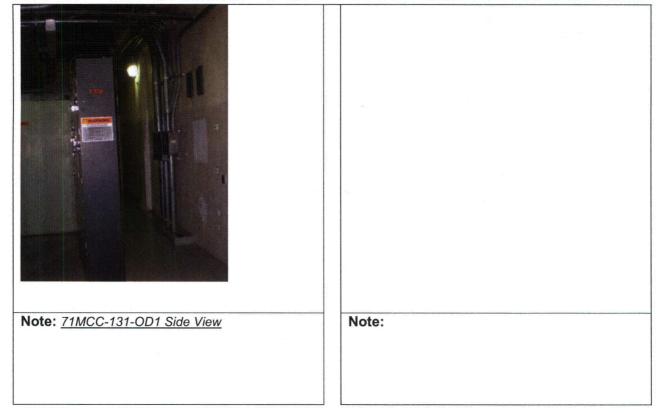
#### SEISMIC WALKDOWN CHECKLIST FORM

Status: Y N UX

#### Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. <u>71MCC-131-OD1</u> Equip. Class <u>1 Motor Control Center</u>

Equipment Description <u>19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR</u>



Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 566 of 573

ATTACHMENT 9.6 SEIS	MIC WALKDOWN CHECKLIST FOR
Sheet 1 of 4	
	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) <u>SWEL 2-012</u>	· · · · · · · · · · · · · · · · · · ·
Equipment ID No. <u>32DHR-18</u> Equip. Class <u>17-Pneumatic-Operat</u>	ed Valve
Equipment Description Decay Heat removal CLG Water Return ISOL Valve	
Location: Bldg. <u>RB</u> Floor El. <u>300</u> Room, Area <u>Col 1 Line Y</u>	1
Manufacturer, Model, Etc. (optional but recommended)	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown o SWEL. The space below each of the following questions may be used to record findings. Additional space is provided at the end of this checklist for documenting	the results of judgments and
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? The item is an inline valve.</li> </ol>	Y□ N⊠
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y N U N/A⊠
The item is an inline valve.	
	·
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y□ N□ U□ N/A⊠
No visible corrosion, Limited visibility.	
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Y□ N□ U□ N/A⊠
No visible cracks. Limited visibility.	
	,
	n at n

<sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FOR
heet 2 of 4	· · ·
	Status: YX N
eismic Walkdown Checklist (SWC) <u>SWEL 2-012</u>	
quipment ID No. <u>32DHR-18</u> Equip. Class <u>7-Pneumatic-Op</u>	perated Valve
equipment Description Decay Heat removal CLG Water Return ISOL Val	lve
<ol> <li>Is the anchorage configuration consistent with plant documentation (Note: This question only applies if the item is one of the 50% for w an anchorage configuration verification is required.)</li> </ol>	
<ol> <li>Based on the above anchorage evaluations, is the anchorage free potentially adverse seismic conditions?</li> <li>N/A</li> </ol>	of Y⊠ N⊟ U⊟
nteraction Effects	
<ol> <li>Are soft targets free from impact by nearby equipment or structures</li> <li>There are no soft targets.</li> </ol>	s? Y□ N□ U□ N/A⊠
8. Are overhead equipment, distribution systems, ceiling tiles and ligh and masonry block walls not likely to collapse onto the equipment?	
	· .
9. Do attached lines have adequate flexibility to avoid damage? No attached line.	Y□ N□ U□ N/A⊠
10. Based on the above seismic interaction evaluations, is equipment of potentially adverse seismic interaction effects?	free Y⊠ N□ U□

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 568 of 573

ATTACHMENT 9.6	· · · · ·		SEIS	MIC WALKDOWN CHECKL	IST FORM
Sheet 3 of 4				, 	
Solomia Walkdow	wn Chaoklint (SN/C)		040	Status: Y N	] U[]
	wn Checklist (SWC)				
Equipment ID No.			s <u>7-Pneumatic-Operat</u>	ed Valve	
Equipment Descript	tion <u>Decay Heat remo</u>	val CLG Wate	er Return ISOL Valve		
Other Adverse Con	nditions				
	oked for and found no			Y⊠ N□ U□	
, adversely af	fect the safety functior	ns of the equip	ment?		
к	,				
Comments (Additio	onal pages may be add	led as necess	arv)		
				i.	
	. –		· ·		
			·		
	Ň		· · · .	· · · · · · · · · · · · · · · · · · ·	
	AC, D.	mil	,		
Evaluated by: <u>A.Po</u>	rch			Date: <u>11/01/2012</u>	
	A	••••••••••••••••••••••••••••••••••••	· .		
<u>C.Sa</u>	watzke Qual	had -		<u>11/01/2012</u>	
		• .			
·	۰ ۲۰۰۰	·			
•					
· · ·					
	•	· · · · ·			
				· · · ·	·
•					
· .		· · ·			- -
	· · ·				
		· .			,
· ·	·	,	· ·	· · ·	

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 569 of 573

## ATTACHMENT 9.6

#### Sheet 4 of 4

#### SEISMIC WALKDOWN CHECKLIST FORM

Seismic Walkdown Checklist (SWC) SWEL 2-012

Status: Y N U

Equipment ID No. <u>32DHR-18</u> Equip. Class <u>7-Pneumatic-Operated Valve</u>

Equipment Description Decay Heat removal CLG Water Return ISOL Valve

#### Photographs



Note: 32DHR-18

п	
- 11. 	
в	
Note:	
Note:	
# 	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 570 of 573

ATTACHMENT 9.6	۲ ۲۰	SEISMIC WALKDOWN CHECKLIST FOR
Sheet 1 of 4		
		Status: Y N UX
Seismic Walkdown C	Checklist (SWC) <u>SWEL2-013</u>	
Equipment ID No. <u>71M</u>	ICC-120-OE1 Equip. Class <sup>1</sup> 1-Motor Contr	ol Centers
Equipment Description	<u>32P-1A(M) Decay Heat Removal SFP Water Pri</u>	mary Pump A Motor
Location: Bldg. <u>YD</u>	Floor El. <u>272</u> Room, Area <u><i>N/A</i></u>	
Manufacturer, Model, Et	c. (optional but recommended)	
Instructions for Compl	eting Checklist	
SWEL. The space belov	sed to document the results of the Seismic Walko v each of the following questions may be used to se is provided at the end of this checklist for docu	record the results of judgments and
Anchorage		
	configuration verification required (i.e., is the iter VEL items requiring such verification)?	m one Y⊡ N⊠
2. Is the anchorage	free of bent, broken, missing or loose hardware	? Y□ N□ U⊠ N/A□
3. Is the anchorage oxidation?	free of corrosion that is more than mild surface	
4. Is the anchorage anchors?	free of visible cracks in the concrete near the	Y□ N□ U⊠ N/A□
		· · · · · · · · · · · · · · · · · · ·

<sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 SEIS	SMIC WALKDOWN CHECKLIST FOR
Sheet 2 of 4	
Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>	Status: Y∏ N∏ U⊠
Equipment ID No. 71MCC-120-OE1 Equip. Class <sup>2</sup> _1-Motor Control Ce	nters
quipment Description <u>32P-1A(M) Decay Heat Removal SFP Water Primary</u>	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	
nteraction Effects	
7. Are soft targets free from impact by nearby equipment or structures? This component consists of four separate panels, each with a latch to open. There are no gauges, indicators, relays, etc. on the exterior of the panel. Therefore, no soft targets	Y□ N□ U□ N/A⊠
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? The item is located outside in the yard area. There are no overhead equipments.	, Y <u></u> N∏ U∏ N/A⊠
9. Do attached lines have adequate flexibility to avoid damage? The conduit and cable trays coming off the back of the unit have adequate flexibility.	Y⊠ N□ U□ N/A□
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y⊠ N∏ U∏

<sup>2</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FOR
Sheet 3 of 4	
	Status: Y N UX
Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>	
Equipment ID No. 71MCC-120-OE1 Equip. Class3_1-Motor C	Control Centers
Equipment Description <u>32P-1A(M) Decay Heat Removal SFP Wate</u>	er Primary Pump A Motor
Other Adverse Conditions	· · ·
11. Have you looked for and found no other seismic conditions the adversely affect the safety functions of the equipment?	nat could YX N U
Comments (Additional pages may be added as necessary)	
Some rust present along baseboard of MCC cabinet. Will not	t affect structural integrity of equipment
	,
	· · · · · · · · · · · · · · · · · · ·
Evaluated by: <u>A Porch</u>	Date: <u>11-14-12</u>
RCasella Rich Casella	11-14-12
	•
	-
<sup>3</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.	
	and the second

# ATTACHMENT 9.6

Sheet 4 of 4

SEISMIC WALKDOWN CHECKLIST FORM

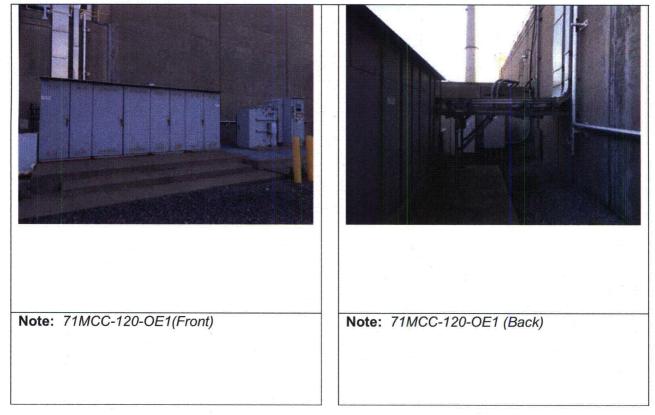
Seismic Walkdown Checklist (SWC) SWEL2-013

Status: Y N U

Equipment ID No. <u>71MCC-120-OE1</u> Equip. Class4 <u>1-Motor Control Centers</u>

Equipment Description <u>32P-1A(M) Decay Heat Removal SFP Water Primary Pump A Motor</u>

Photographs



<sup>4</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

# "Area Walk-By Checklists (AWCs)"

Attachment D Er

## Engineering Report No. JAF-RPT-12-00015

Rev. 0

Page 1 of 224

AWC #	SWEL #s	Page #
001	1- 426	4
002	1- 406	7
003	1- 578, 594, 625, 629, 643, 647, 663, 671, 675, and 683	10
004	1- 335, 347	15
005	1- 502	18
006	1- 519	21
007	1- 522	25
008	1- 333	28
009	1- 494	31
010	1- 475, 491	34
011	1- 498	37
012	1- 637, 434, 436, 437, 444, 493	42
013	1- 489, 495, 555, 636, 430, 433, 640	47
014	1-635, 660, and 687	52
015	1- 209, 210, 213, 219, 232, 234, 243	<b>57</b>
016	1-446	61
017	1- 119, 137, 360, 364, 366 and 367	64
018	1- 069, 079	68
019	1-319	73
020	1-470	77
021	1-032, 033, 043 and 044	80
022	1 -155, 157 and 161	84
023	1 - 165	87
024	1-371	91
025	1-169	95
026	1- 373, 696	98
027	1-124	101
028	1-217	104

Attachment D Engineering Report No. JAF-RPT-12-00015

Rev.	n
1161.	U.

49.2

Page 2 of 224

AWC #	SWEL #s	Page #
029	1-690	109
030	1-372	110
031	1-166	113
032	1- 123, 171	117
033	1- 053, 056, 445, 457	120
034	1-001	124
035	1- 335, 347	128
036	1-438, 462	131
037	1- 052	134
038	1- 448, 450	138
039	1-474	143
040	1-487	146
041	1-439	149
042	1-481	152
043	1- 336, 343	156
044	1-456	159
045	1-314	162
046	1-452	165
047	1-164	168
048	1- 516, 518, and 508	171
049	1- 581, 582, 624, 628, 642, 646, 662, 670, 674, 682, 577	175
050	1- 634, 658, 686	179
051	1-635	183
052	2-003 and 2-004	186
053	2-005, 2-006, 2-007, 2-008, 2-009	190
054	1-011	193
055	1-012	196
056	1-065	199

## Attachment D Engineering Report No. JAF-RPT-12-00015

### Rev. 0

Page 3 of 224

AWC #	SWEL #s	Page #
057	2-014	202
058	2-010	206
059	1-501	210
060	1-172	214
061	1-439, 462	217
062	2-013	220

ATTACHMENT 9.7		<u> </u>		-BY CHECKLI
Sheet 1 of 3	· · · · · · · · · · · · · · · · · · ·			
Area Walk-By Checklist (AWC) <u>AWC</u>	- 001	S	tatus: Y⊠	
·····			<u> </u>	
Location: Bldg. <u>AD</u> Floor El. <u>300</u>	Room, Area <sup>1</sup> <u>Col</u>	<u>10.5 Line S</u>		
SWEL Components: <u>SWEL1- 426</u>	······			
Instructions for Completing Checklist	,			
This checklist may be used to document the respace below each of the following questions r Additional space is provided at the end of this	nay be used to record the	results of judg	ments and	
<ol> <li>Does anchorage of equipment in the a potentially adverse seismic conditions opening cabinets)?</li> </ol>				N/A
The anchorage of equipment in the are potentially adverse seismic conditions.				
	•			· ·
	· · ·			
2. Does anchorage of equipment in the a significant degraded conditions?	rea appear to be free of	Υ⊠		N/A
The anchorage of equipment in the are significant degraded conditions.	ea appears to be free of			
	<i>,</i>			
3. Based on a visual inspection from the raceways and HVAC ducting appear to	o be free of potentially ad	verse		N/A
seismic conditions (e.g., condition of s conditions of cable trays appear to be				
The cable/conduit raceways and HVA		e of		
				,
		-		
	· .			
		ø.,	. •	

۰.

1

spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	Status: Y⊠ ⊠ N□ ∪□	N/A
<ul> <li>Location: Bldg. <u>AD</u> Floor El. <u>300</u> Room, Area <u>Col. 10.5 Line S</u></li> <li>4. Does it appear that the area is free of potentially adverse seismic y spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</li> <li>5. Does it appear that the area is free of potentially adverse seismic riteractions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions</li> </ul>		
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? <i>It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</i></li> <li>5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? <i>It appears the area is free of potentially adverse seismic interactions</i></li> </ul>		
<ul> <li>spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</li> <li>5. Does it appear that the area is free of potentially adverse seismic riteractions that could cause flooding or spray in the area?</li> <li>It appears the area is free of potentially adverse seismic interactions</li> </ul>		
interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions	N N	N/A
interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions	N N	N/A
interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions	N N	N/A
6. Does it appear that the area is free of potentially adverse seismic Y interactions that could cause a fire in the area? It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	⊠ N□ U□	N/A
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead	⊠ N⊡ U⊡	N/A
shielding)? It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.		
· ·		
	-	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 6 of 224

ATTACHMENT		·	-	· · · · · · · · · · · · · · · · · · ·	<u> </u>	Ar	EA WALK-	BY CHEC
Sheet 3 of 3						Stat	us: Y🖂	N U
Area Walk-	By Chec	klist (AWC)	AWC-00'	<u> </u>				
Location: Bl	dg. <u>AD</u>	Floor El.	<u>300</u>	Room, Area	<u>Col. 10.5</u>	Line S		
advei No ot	rsely affect	t the safety funct	ions of the t could adv	eismic conditions equipment in the rersely affect the e found	e area?	YX N		
Turica								
Commente	(Additiona	I pages may be a						
<u>oonnnents</u>		n pages may be						./
				· · ·				
		ı						
-	Donald		Se that	n			9/24/12	
, <b>L</b>								•
. · ·					•			
			•			;		*
						;		
	• •						r	
					,			
				λ.				
				,				
			,					

	Atta	ch	m	en	It.	D
--	------	----	---	----	-----	---

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC- 002</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AD</u> Floor El. <u>322</u> Room, Area <sup>1</sup> <u>Col. 9.5 Lin</u>	e V
SWEL Components: <u>SWEL1- 406</u>	
Instructions for Completing Checklist	-
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
	· · · · · · · · · · · · · · · · · · ·
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area appears to be free of significant degraded conditions.	,
	• .
<ol> <li>Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ol>	
conditions of cable trays appear to be inside acceptable limits)?	
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
	•
	· ·

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC-002</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AD</u> Floor El. <u>322</u> Room, Area <u>Col. 9.5 Line</u>	V
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N∏ U∏ N/A∏
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N∏ U∏ N/A∏
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	1

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 9 of 224

ŧ

Status: Y⊠ N□ U         .ocation: Bldg. <u>AD</u> Floor El. <u>322</u> Room, Area <u>Col. 9.5 Line V</u> 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?         No other seismic conditions that could adversely affect the safety functions of the equipment in the area?         No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.         Comments (Additional pages may be added as necessary)         Evaluated by: <u>Pouria Pourghobadi</u> <i>Pouria Pourghobadi Pouria Pourghobadi Pourgi Pourghobadi</i>	Sheet 3 of 3							ALK-BY CHECK
Area Walk-By Checklist (AWC) _AWC-002					x		Status: \	/⊠ N□ U[
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y⊠ N□ U□         No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.       Y⊠ N□ U□         Comments (Additional pages may be added as necessary)       Comments (Additional pages may be added as necessary)         Evaluated by: Pouria Pourghobadi       P MMM         Donald Koberg       Date: 9/24/12	Area Walk-B	3y Checklist	(AWC)	AWC- 002	2			
adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. <u>Comments</u> (Additional pages may be added as necessary) <u>Evaluated by: Pouria Pourghobadi</u> <u>Date: 9/24/12</u> <u>Donald Koberg</u> <u>Janebb</u> <u>Markob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barkob</u> <u>Barko</u>	Location: Bld	g. <u>AD</u>	Floor El.	322	_ Room, Area	Col. 9.5 Line	V	
No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.							Y⊠ N⊟ U	
functions of the equipment in the area were found.			-					
Evaluated by: <u>Pouria Pourghobadi</u> <u>P</u> <u>M</u> <u>Donald Koberg</u> <u>Janel WM</u> <u>9/24/12</u>						<b>,</b>		
Evaluated by: <u>Pouria Pourghobadi</u> <u>P</u> <u>M</u> <u>Donald Koberg</u> <u>Janel WM</u> <u>9/24/12</u>								
Evaluated by: <u>Pouria Pourghobadi</u> <u>P</u> <u>M</u> <u>Donald Koberg</u> <u>Janel WM</u> <u>9/24/12</u>								
Evaluated by: <u>Pouria Pourghobadi</u> <u>P</u> <u>M</u> <u>Donald Koberg</u> <u>Janel WM</u> <u>9/24/12</u>								
	Comments (/	Additional pag	es may be a	idded as n	ecessary)			
			-					
				/				
								<del></del>
			72	n	1c.			
	Evaluated by	: <u>Pouria Pourg</u>	hobadi / -	<u> </u>			_ Date: <u>9/24/</u>	12
		`	N.	n re				
		Donald Kobe	rg I mal	of the	n		9/24/	12
		,			,			
		,			,			
		,			, - -			
		. (	·		,			
		. (			, , ,			
		, ,						
		, ,						
		, ,						
· · · ·		, ,						
		, ,						

	х • с	R Page 10
ATTACHMENT 9.7		AREA WALK-BY CHECKLIS
Sheet 1 of 5 Area Walk-By Checklist (AWC) <u>AW</u>	/C- 003	Status: Y⊠ N∏ U∏
Location: Bldg. <u>EG</u> Floor El. <u>27</u>	2′ Room, Area	EG Room B
SWEL Components: <u>SWEL 1-578, 59</u>	4, 625, 629, 643, 647,	663, 671, 675, and 683
Instructions for Completing Checklist This checklist may be used to document the space below each of the following question Additional space is provided at the end of the	s may be used to record	the results of judgments and findings.
<ol> <li>Does anchorage of equipment in the potentially adverse seismic conditio opening cabinets)?</li> <li>The clean/dirty rag bins and a hand that are not tightened/loose. Howev any vital equipment to cause adverse</li> </ol>	ns (if visible without nece held fire extinguisher ha ver, items are not close ei	essarily ve anchors nough to
2. Does anchorage of equipment in the significant degraded conditions? The anchorage of equipment in the appears to be free of significant deg	area, around the SWEL	
	، م	
3. Based on a visual inspection from the raceways and HVAC ducting appear seismic conditions (e.g., condition conditions of cable trays appear to	ar to be free of potentially of supports is adequate a be inside acceptable limi	adverse nd fill ts)?
The cable/conduit raceways and H potentially adverse seismic condition		Free of
	·	
· · · ·	۰. ۱	

-

v

ι,

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 11 of 224

	HMENT 9.7						AREA WALK-BY CHECKL
	2 of 5 Walk-By	Checklist	: (AWC)	AWC- 003	, , <u>}</u>		Status: Y⊠ N⊡ U⊡
ocatio	on: Bldg.	<u>EG</u>	Floor El.	272'	Room, Area	EG Room B	
4.		teractions v			ntially adverse s the area (e.g., c		
			rea is free o er equipmer		v adverse seism a.	ic spatial	
							. •
5.					ntially adverse s ray in the area?		Y⊠ N□ U□ N/A□
					ly adverse seisn ray in the area.	nic	• • • • •
			. <sup>.</sup>				2
6.			the area is fi Ild cause a f		ntially adverse s rea?	eismic	
			nrea is free o Ild cause a f		y adverse seism rea.	ic .	
						`	
7.	interaction	ons associa equipment	ted with hou	sekeeping	ntially adverse s practices, stora tions (e.g., scaf	ge of	
	interacti	ons associa		sekeeping	y adverse seism practices, stora tions.		
					1		
						·	1

,

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 12 of 224

ATTACHMENT 9.7	<u></u>					AREA	WALK-DI	CHECKLI
Sheet 3 of 5 Area Walk-By	Checklis	: (AWC)	AWC- 003	<u> </u>		Status	: Y⊠ N[	_ U_
Location: Bldg.	EG	_ Floor El.	<u>272'</u>	Room, Area	EG Room B			
adversely No other	<pre>/ affect the seismic col</pre>	safety functi	ons of the o	smic conditions equipment in the ersely affect the found.	e area?	YX N	] U[]	
		51 M						
Comments (Add	ditional pag	es may be a	idded as ne	ecessary)		1		
	onal comm	-						،ر
Evaluated by: <u>Ha</u>	aroreet Ch	uman 248 -	the	· · · · ·		Date: 00	0/21/2012	
·	aroslav Los	1	Liose		v		)/21/2012	
			<u>-</u>					
						,		
							· · ·	
		,			. ·	,		
	1							
					,			
		4 Z						
					i			
					i			

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 13 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Status: YX N U

### Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. EG Floor El. 272' Room, Area EG Room B

SWEL Components: SWEL 1-578, 594, 625, 629, 643, 647, 663, 671, 675, and 683

#### Photographs

Sheet 4 of 5



Note: Plcture of the clean/dirty rag bins.



Note: Plcture of the non-tightened/loose anchorage of the clean/dirty rag bins.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 14 of 224

### ATTACHMENT 9.7

Sheet 5 of 5

AREA WALK-BY CHECKLIST

Status: YX N U

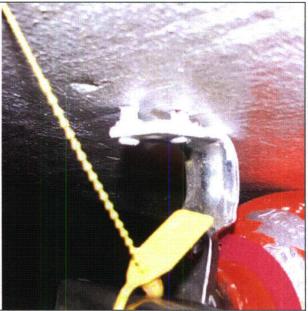
### Area Walk-By Checklist (AWC) <u>AWC-003</u>

Location: Bldg. EG Floor El. 272' Room, Area EG Room B

SWEL Components: SWEL 1-578, 594, 625, 629, 643, 647, 663, 671, 675, and 683



**Note:** *Plcture of the 76CX-609 hand held fire extinguisher.* 



**Note:** *Plcture of the non-tightened/loose* anchorage of the 76CX-609 hand held fire extinguisher.

ITTACHMENT 9.7		AREA WALK-BY CHECKLIST
heet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 004</u>	``````````````````````````````````````	Status: Y⊠ N⊡ U⊡
ocation: Bldg. <u>ST</u> Floor El. <u>252</u> '	Room, Area <sup>1</sup> <u>ST 25</u>	2'
WEL Components: <u>SWEL1- 335, 347</u>		
nstructions for Completing Checklist his checklist may be used to document the results o pace below each of the following questions may be additional space is provided at the end of this checkli	used to record the re	esults of judgments and findings.
<ol> <li>Does anchorage of equipment in the area app potentially adverse seismic conditions (if visibl opening cabinets)?</li> </ol>		YX NI UI N/AI y
The anchorage of equipment in the area appe potentially adverse seismic conditions.	ears to be free of	
2. Does anchorage of equipment in the area app significant degraded conditions?	bear to be free of	
The anchorage of equipment in the area, arou appears to be free of significant degraded con		s),
· · · ·	•	
<ol> <li>Based on a visual inspection from the floor, do raceways and HVAC ducting appear to be free seismic conditions (e.g., condition of supports conditions of cable trays appear to be inside a</li> </ol>	e of potentially adve is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ rse
The cable/conduit raceways and HVAC ductin potentially adverse seismic conditions.	ng appear to be free	of
· ·		
	ς	
If the room in which the SWEL item is located is very larg	e (e.g. Turhine Hall) 1	he area selected should be described. This

~

. .

,

TTACHMENT 9.7	AREA WALK-BY CHECKL
neet 2 of 3 rea Walk-By Checklist (AWC) <u>AWC- 004</u>	Status: Y⊠ N∏ U
ocation: Bldg. <u>ST</u> Floor El. <u>252'</u> Room, Area <u>ST 252'</u>	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	YX NI UI N/AI
It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□ U□ N/A□
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> </ol>	Y N N U N/A
It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 17 of 224

Sheet 3 of 3	9.7					AREA WALK-BY CHEC
						Status: Y⊠ N⊡ U
Area Walk	-By Checklist	(AWC)	WC- 004			
Location: Bl	dg. <u>ST</u>	_ Floor El.	<u>252'</u>	Room, Area	<u>ST 252'</u>	·
adve	you looked for rsely affect the	safety functio	ons of the e	quipment in the	e area?	
	ther seismic coi ions of the equi				safety	
	x					
					,	· .
						· · · · · · · · · · · · · · · · · · ·
-	(Additional pag	•	ided as neo	cessary)		
No a	dditional comm	ents.				
					· •	
		,				
			1	, ·		τ
						κ.
	·. ·····	110	QL.			
Evaluated by	y: <u>Harpreet Ghu</u>	iman (40	Zhr	·····	// 1= /// i= = // i	Date: <u>10/01/2012</u>
		1	Ann Tease			
	Yaroslav Los	ev	ase			10/01/2012
						······································
	·					
			· · ·			
			· · · · · ·			
			· • ·			
					,	
					,	
					,	
	• •				,	
	• • •	·			,	
			•		,	
	• • •		•		,	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 18 of 224 **ATTACHMENT 9.7 AREA WALK-BY CHECKLIST** Sheet 1 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_ AWC-005 Location: Bldg. BR Floor El. 272' Room, Area<sup>1</sup> BR 3 SWEL Components: SWEL1- 502 Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions. 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? The anchorage of equipment in the area, around the SWEL item(s). appears to be free of significant degraded conditions. 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 2 of 3	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC- 005</u>	
ocation: Bldg. <u>BR</u> Floor El. <u>272'</u> Room, Area <u>BR 3</u>	
`4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	₽÷.,
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
	¢.
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lea shielding)?	Y⊠ N∏ U∏ N/A∏ Id
It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	,
	Ň
	· · · ·

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 20 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_AWC- 005 Room, Area BR 3 Location: Bldg. BR Floor El. 272' 8. Have you looked for and found no other seismic conditions that could YX NU UU adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. Comments (Additional pages may be added as necessary) No additional comments. i. i. 748 Evaluated by: Harpreet Ghuman Date: 09/30/2012 Yaroslav Losev 09/30/2012

# JAF-RPT-12-00015 Rev. 0

## JAF SEISMIC WALKDOWN REPORT FOR RESOLUTION OF FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATION 2.3 SEISMIC

## **NOVEMBER 2012**

### **BOOK 3 OF 3**

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 21 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC- 006</u>	
ocation: Bldg. <u>BR</u> Floor El. <u>282'</u> Room, Area <sup>1</sup> <u>BR 4</u>	
SWEL Components: SWEL1- 519	
nstructions for Completing Checklist	1
his checklist may be used to document the results of the Area Walk-By near o pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other of	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
North West anchor on the skid of equipment 72FN-46D is loose. Also there is a loose anchor on the UNISTRUT post base of equipment 72MOD-101B.	
The resolution to this deficiency is tracked through CR-JAF-2012-06539 and CR-JAF-2012-06537.	)
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.	• .
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
	,

selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 2 of 4 Area Walk-By Checklist (AWC) <u>AWC- 006</u>	Status: Y N U
.ocation: Bldg. <u>BR</u> Floor El. <u>282'</u> Room, Area <u>BR 4</u>	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y N N U N/A
It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	·
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ol>	Y 🛛 N 🗌 U 🗌 N/A 🗍
shielding)? It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	ť
х, · ·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 23 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC- 006</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>BR</u> Floor El. <u>282'</u> Room, Area <u>BR 4</u>	· · · · · · · · · · · · · · · · · · ·
8. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.	
Comments (Additional pages may be added as necessary)	
No additional comments.	
Evaluated by: <u>Harpreet Ghuman H8</u> 2000	Date: <u>09/30/2012</u>
Yaroslav Losev	09/30/2012
	· · · · · · · · · · · · · · · · · · ·
	• •
· · ·	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 24 of 224 ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC-006 Location: Bldg. BR Floor El. 282' Room, Area BR 4 SWEL Components: SWEL1-519 Photographs Note: Picture of a loose anchor for equipment Note: Picture of a loose anchor in the 72FN-46D is loose. UNISTRUT post base for equipment 72MOD-101B.

Attachment D	Engineering Report No. JAF-RPT-12-00015
	Rev. 0
	Page 25 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC- 007</u>	Status: Y⊠ N∏ U∏
Location: Bldg. BR Floor El. 272' Room, Area <sup>1</sup> BR 5	
SWEL Components: <u>SWEL1- 522</u>	
Instructions for Completing Checklist	· · · · · · · · · · · · · · · · · · ·
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	YX N U N/A
The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.	
	· ·
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N∏ U∏ N/A∏
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
4	
	-

the order of about 35 feet from the SWEL item.

j

	MENT 9.7	·	·····		AREA WA	LK-BY CHECKLI
Sheet 2 Area V		st (AWC) <u>AWC- (</u>	007		Status: Y	
ocatio	n: Bldg. <u>RB</u>	Floor El. <u>272'</u>	Room, Area	<u>BR 5</u>	· · · · · · · · · · · · · · · · · · ·	
:	spatial interactions and lighting)?	the area is free of po with other equipment area is free of potenti	t in the area (e.g., c	eiling tiles	Y⊠ N∏ U[	] N/A[]
		her equipment in the		io opuliur		
• • 2 • *	e en	e e eg e		,		
						•
		the area is free of pould cause flooding or			Ŷ⊠ N⊟ U[	_ N/A
		area is free of potenti uld cause flooding or		ic		
	. ! · · · ·					
					· .	
		the area is free of pound the area is free of pound the second states a fire in the second states a fire in the		eismic	Y⊠ N∏ U[	□ N/A□
		area is free of potenti uld cause a fire in the		ic		
			,			
	· .		:			
	interactions associ	t the area is free of po ated with housekeepi t, and temporary insta	ng practices, storag	ge of $\checkmark$	Y⊠ N∏ U[	_ N/A□
	interactions associ	area is free of potent ated with housekeepi t, and temporary inst	ing practices, stora	ic ge of	· .	۰
. ,	<b>*</b>					•.
	ι.					J.

5

Attachment D Engineering

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 27 of 224

ATTACHMENT	9.7	•			AREA WA	LK-BY CHECKL
Sheet 3 of 3				,	Statue: V	
Area Walk-I	By Checklist (	(AWC) <u>AWC-</u>	007	. (		
Location: Bld	lg. <u>RB</u>	_ Floor El. <u>272'</u>	Room, Area	<u>BR 5</u>		
			seismic conditions		Y⊠ N∏ U[	
	•	•	the equipment in th adversely affect the			•
		ment in the area w		Saloty		
				· · · · · · · · · · · · · · · · · · ·		
						· .
Comments (	Additional nage	s may be added a	s necessary)			
			s necessary)			
NO ad	ditional comme	nts.				
¢						
					·	
		212 91,	•			
Evaluated by	: <u>Harpreet Ghur</u>	nan INC AV	m_		_ Date: 09/30/	/2012
٠		man 140 2W	- all and a second			
1	Yaroslav Lose	V-			09/30	/2012
	····					
				•		×
1						
		•				
•		·				
•		•				
• •						
• •						
		,		·		<b>1</b> .
•				·		<b>1</b> .
•		,				<b>1</b> .
•		<b>.</b>				2
•		<b>.</b>				2
		<b>.</b>			· · · · ·	
		<b>.</b>				

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 28 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 008</u>	Status: Y⊠ N∏ U
Location: Bldg. <u>CB</u> Floor El. <u>271.8</u> Room, Area <sup>1</sup> <u>Col 0.5, L</u>	ing PD
SWEL Components: <u>SWEL1- 333</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result additional space is provided at the end of this checklist for documenting other	ts of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions	
	· •
	X

TTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 2 of 3	Status: YX N U
rea Walk-By Checklist (AWC) <u>AWC- 008</u>	
ocation: Bldg. <u>CB</u> Floor El. <u>271.8</u> Room, Area <u>Col 0.5, Line</u>	RP
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
· *	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·
	· · ·
,	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 30 of 224

• •

ATTACHMENT 9.7					A	REA WALK-	BA CH	ECK
Sheet 3 of 3				· · · ·	Sta	itus: Y🖂	NП	ιΓ
Area Walk-By Cheo	cklist (AWC) _	AWC-008	<u>}</u>	:	0.0		• •	J_
Location: Bldg. <u>CB</u>	Floor E	l. <u>271.8</u>	_ Room, Area	<u>Col 0.5, Line</u>	RP			
· · ·	ed for and found of the safety func nic conditions the	tions of the	equipment in th	e area?	Y⊠ I			
	equipment in th			Survey	1		<i>'</i> .	
•				,				
		. *						
· .								
Comments (Additiona	al pages may be	added as ne	ecessary)					
				~				
	•							
			. ·	`		ĩ		
	·						•	
· · ·				•			·	
	10	The second se						
Evaluated by: Yarosla	v Losev	Lase			Date:	9/26/12		
	01	10 24						
Donald	Kobern Jone	the the	n and a second s			9/26/12	·	
Donald			· · · · · · · · · · · · · · · · · · ·	······································	<del>-</del> .	<u>5/20/12</u>		
					(			
•								
			٦			-		
		· ·						
						3		
,	•							
				, ·				
Х			•		· ·	~		
			· · ·					
	•		,					
·								
, ,	•							
	•				•			

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 31 of 224 Attachment D

	ENT 9.7						. , .	AREA	VALK-BY CHECK
heet 1	of 3			,	. /			Status:	
rea Wa	alk-By C	hecklis	t (AWC) _	AWC-0	<u>09</u>			Claido.	
ocation:	: Bldg. <u>(</u>	<u>cs</u>	Floor E	I. <u>272</u>	Room,	Area¹ <u>Ca</u>	ble Spread	ling Room,	Col. 11, Line C
SWEL (	Compon	ents: <u>S</u>	WEL1- 49	4					
nstructi	ons for (	Completi	ng Checkl	ist		,	· · · · · · · · · · · · · · · · · · ·		
pace be	low each	of the fo	llowing que	estions may		record the	e results o	f judgments	WEL items. The and findings.
p		adverse			a appear to l visible witho		arily	Y⊠ N□	U N/A
			quipment i seismic co		appears to l	be free of		<b>`</b> .	
			с. Х			. N			
	• ,	•					~		1
			· .			~			
			equipment d condition		a appear to l	be free of	. '	Y⊠N□	U N/A
			quipment i d condition		appears to l	be free of			
				-	r F		د		
	۱.		• *				-		
ra S C	aceways eismic co onditions	and HVA onditions of cable	C ducting a (e.g., cond trays appe	appear to b ition of sup ar to be ins	or, do the ca e free of por ports is ade side accepta	entially ac quate and ble limits)	lverse fill ?	Y⊠ N⊟	U[] N/A[]
			aceways a seismic co		ducting appe	ar to be fr	ree of		
		1							
					. •				
				3			~~~		
			*						
				·	•				
					y large (e.g., 3 ne order of ab				uld be described. T

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 009</u>	Status: Y⊠ N⊡ U⊡
ocation: Bldg. <u>CS</u> Floor El. <u>272</u> Room, Area <u>Cable Sprea</u>	ding Room, Col. 11, Line C
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y N N U N/A
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□ U□ N/A□
CO₂ Sprinkler System is present in the area however it is properly supported and free from potentially adverse seismic interactions	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> </ol>	Y⊠ N□ U□ N/A□
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	<i>i</i> .
· .	
۰ . ۲	

Sheet 3 of 3         Area Walk-By Checklist (AWC)AWC-009         Location: Bldg. CSFloor El. 272         8. Have you looked for and found no other seis adversely affect the safety functions of the environment of th	_ Room, Area <u>Ca</u> smic conditions tha equipment in the ar prsely affect the safe	ble Spreading Ro t could Y⊠ N ea?	ntus: Y⊠ N⊡ U⊡ n <u>om, Col. 11, Line C</u> N⊡ U⊡
Location: Bldg. <u>CS</u> Floor EI. <u>272</u> 8. Have you looked for and found no other seis adversely affect the safety functions of the e No other seismic conditions that could adve	_ Room, Area <u>Ca</u> smic conditions tha equipment in the ar prsely affect the safe	ble Spreading Ro t could Y⊠ N ea?	om, Col. 11, Line C
8. Have you looked for and found no other seis adversely affect the safety functions of the e No other seismic conditions that could adve	smic conditions tha equipment in the ar ersely affect the safe	t could YX N ea?	
adversely affect the safety functions of the e No other seismic conditions that could adve	equipment in the ar	ea?	
No other seismic conditions that could adve	rsely affect the saf		
functions of the equipment in the area were	found.		
•			
	>		
	, ,		
Evaluated by: <u>Pouria Pourghobadi</u>	-fl ·	Date:	9/25/12
Evaluated by: <u>Pouria Pourghobadi</u> Donald Koberg <b>Simelal</b> Why			9/25/12
			· · · · ·

1. . .

Atta	achment D	Enginee	ring Report	No. JAF-RPT	Rev
				Pag	je 34 of
ATTACHMENT 9.7		<u></u>	AREA V	VALK-BY CHE	CKLIST
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 010</u>			Status:	Y⊠ N□ I	U
ocation: Bldg. <u>EB</u> Floor El. <u>272</u>	Room, Area <sup>1</sup> <u>Ele</u>	ectric Bay,	Col. 18, Lin	e B	
SWEL Components: <u>SWEL1- 475, 491</u>			· · · · · · · · · · · · · · · · · · ·		
nstructions for Completing Checklist					
This checklist may be used to document the results of pace below each of the following questions may be additional space is provided at the end of this checkl 1. Does anchorage of equipment in the area app	used to record th ist for documentir	e results of ng other co	judgments mments.		
potentially adverse seismic conditions (if visib opening cabinets)?					
The anchorage of equipment in the area appe potentially adverse seismic conditions.	ears to be free of				۰.
<b>,</b>					
<ol><li>Does anchorage of equipment in the area app significant degraded conditions?</li></ol>	pear to be free of		Y⊠ N□	U[] N/A[]	
The anchorage of equipment in the area appe significant degraded conditions.	ears to be free of	•			
	۰.				,
<ol> <li>Based on a visual inspection from the floor, d raceways and HVAC ducting appear to be fre seismic conditions (e.g., condition of supports conditions of cable trays appear to be inside a</li> </ol>	e of potentially ac s is adequate and	dverse I fill	Y⊠ N□	U[] N/A[]	
The cable/conduit raceways and HVAC duction potentially adverse seismic conditions.	ng appear to be fi	ree of			
· .					

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

~

.

Аттасни												4	REA	NALK-	BY CHEC	CKLI
Sheet 2 Area W		Check	list (A	WC)	AWC	:- 01(	)					St	atus:	Y⊠	N∏ (	ר
Location				Floor E				om, Ar	ea E	lectric	Rav (	Col 1	8 Lin	e R		
4. C s	Does it a patial in	ppear th teractior		area is	free of	poter	ntially	advers	e seis	mic					N/A	
	t appear nteractio							seismia	: spati	al		·				
	Does it a nteractic									mic		Y⊠	N	U U	N/A	
	t appear hat coul							seismie	: intera	actions					· .	
	-													,		
	Does it a nteractic							advers	e seis	mic	1	Y⊠	N	υ	N/A	
	t appear hat coul					lly adv	verse	seismie	intera	actions	•					
	,							-				:				
i	Does it a nteractic portable shielding	ons asso equipme	ciated	with ho	ouseke	eping	pract	ices, st	orage	of	ad	Y⊠	<b>N</b> □	υ	N/A	
ć	t appeai associate and temp	əd with l	nousel	eeping												
			•										. <i>'</i>			

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 36 of 224 **ATTACHMENT 9.7 AREA WALK-BY CHECKLIST** Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_ AWC-010 Location: Bldg. EB Floor El. 272 Room, Area Electric Bay, Col. 18, Line B 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. Comments (Additional pages may be added as necessary) Evaluated by: Pouria Pourghobadi Date: 9/25/12 Yourded What Donald Koberg 9/25/12

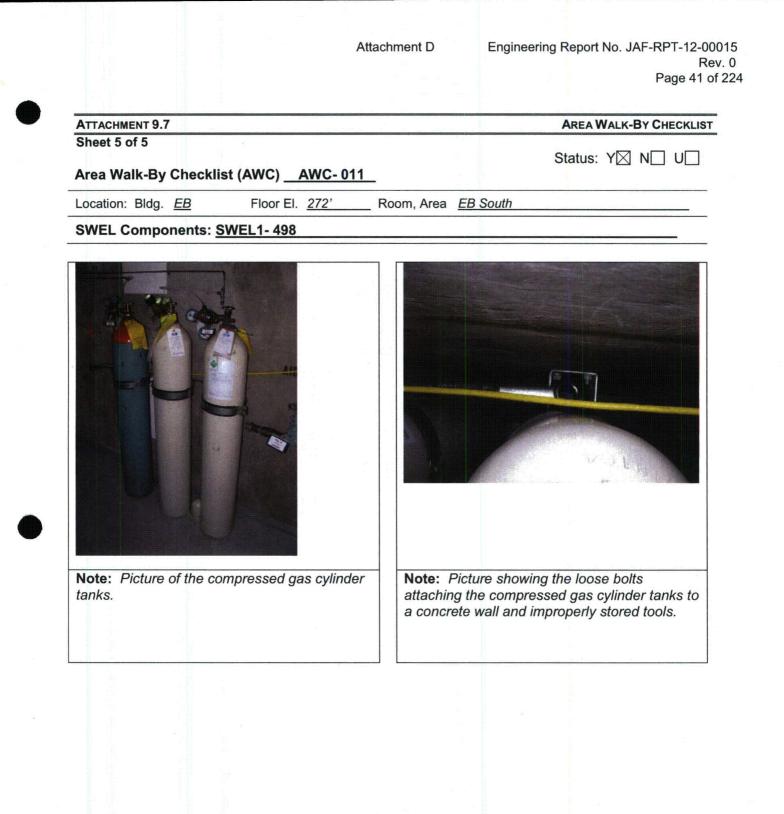
	A
ATTACHMENT 9.7 Sheet 1 of 5	AREA WALK-BY CHECKLIST
Area Walk-By Checklist (AWC) <u>AWC- 011</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>EB</u> Floor El. <u>272'</u> Room, Area <sup>1</sup>	EB South
SWEL Components: SWEL1- 498	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Wa space below each of the following questions may be used to record Additional space is provided at the end of this checklist for docume	the results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free potentially adverse seismic conditions (if visible without neo opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free potentially adverse seismic conditions.	of
>	
	, ,
2. Does anchorage of equipment in the area appear to be free significant degraded conditions?	of YXNUNA
The anchorage of equipment in the area, around the SWEL appears to be free of significantly degraded conditions.	.item(s),
·	
<ol> <li>Based on a visual inspection from the floor, do the cable/co raceways and HVAC ducting appear to be free of potentiall seismic conditions (e.g., condition of supports is adequate conditions of cable trays appear to be inside acceptable lim</li> </ol>	y adverse and fill
The cable/conduit raceways and HVAC ducting appear to b potentially adverse seismic conditions.	be free of
	,
<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine selected area should be based on judgment, e.g., on the order of about 35	Hall), the area selected should be described. This eet from the SWEL item.
	· · ·

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 2 of 5 Area Walk-By Checklist (AWC) <u>AWC- 011</u>	Status: Y⊠ N⊟ U⊟
ocation: Bldg. <u>EB</u> Floor EI. <u>272'</u> Room, Area <u>EB South</u>	
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</li> </ul>	Y⊠ N□ U□ N/A□
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	Y⊠ N□ U□ N/A□
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	Y⊠ N∏ U∏ N/A∏
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
Compressed gas cylinder tanks have loose anchorage. One bolt out of two should be tightened on each support of gas tanks. There are also tools (i.e. wrenches) in the back of the gas cylinder tanks with no work order posted in the area. It is determined that these items will not adversely affect the equipment in the area.	
	· · · · · · ·
х	

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 3 of 5	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC- 011</u>	
_ocation: Bldg. <u>EB</u> Floor EI. <u>272'</u> Room, Area <u>EB South</u>	n
8. Have you looked for and found no other seismic conditions that could	
adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety	
functions of the equipment in the area were found.	
·	
Comments (Additional pages may be added as necessary)	
No additional comments.	
	· · ·
<i>A10</i> o1.	
Evaluated by: <u>Harpreet Ghuman 48</u> -24	Date: <u>09/28/2012</u>
Change	
Yaroslav Losev	09/28/2012
`	
	1
	,

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 40 of 224

## ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 4 of 5 Status: YX N U Area Walk-By Checklist (AWC) AWC-011 Location: Bldg. EB Floor El. 272' Room, Area EB South SWEL Components: SWEL1- 498 Photographs **Note:** Picture showing the span of the 4.5" Note: Picture showing the span of other conduit lines including the JB-FPS20 junction conduits on the West Side of the block wall. box on the East Side of the block wall.



TTACHMENT 9.7	AREA WALK-BY CHECKI
heet 1 of 5	Status: Y🛛 N🗌 U
area Walk-By Checklist (AWC) <u>AWC- 012</u>	
ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <sup>1</sup> <u>EG B &amp; D Pa</u>	anel Room
WEL Components: <u>SWEL1-637, 434, 436, 437, 444, 493</u>	
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By near or pace below each of the following questions may be used to record the results of additional space is provided at the end of this checklist for documenting other co	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	· · · · ·
	· · ·
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	YX N U N/A
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
There is a roll of excess cable hanging over the edge of the cable tray 1TC456B. Not a credible adverse seismic condition. Site personnel were notified.	
n	
If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area elected area should be based on judgment, e.g., on the order of about 35 feet from the SV	i selected should be described. T WEL item.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 43 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
sheet 2 of 5	Status: YX N U
Area Walk-By Checklist (AWC) <u>AWC- 012</u>	
.ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <u>EG B &amp; D P</u>	anel Room
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
Two lights next to Motor Control Centers (MCCs) do not have latches present on the hooks. In a seismic event one end may become unhooked and swing. For the fixture to hit the MCC, and out-of-plane motion is required which is very unlikely. Not a credible seismic event.	. ·
The site personnel were notified immediately.	•
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
	۱,
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y N N U N/A
Unanchored cabinets are present which may tip and slide into other equipment.	
Fire Extinguisher Portable Tank on a hand truck. The wheels do not have wheel stops preventing the cart from becoming mobile. This is not an adverse seismic condition but the site personnel were notified.	
	· •
	· ·

HMENT 9.7 3 of 5 Walk-By Checklist (AWC) <u>AWC-</u> ion: Bldg. <u>EG</u> Floor El. <u>272</u> Have you looked for and found no other adversely affect the safety functions of	Room, Area <u>E0</u>	Statu: <u>6 B &amp; D Panel Room</u>		
<b>3 of 5 Walk-By Checklist (AWC) <u>AWC-</u> on: Bldg. <u>EG</u> Floor El. <u>272</u> Have you looked for and found no other</b>	Room, Area <u>E0</u>	Statu: <u>6 B &amp; D Panel Room</u>		LIST
<b>3 of 5 Walk-By Checklist (AWC) <u>AWC-</u> on: Bldg. <u>EG</u> Floor El. <u>272</u> Have you looked for and found no other</b>	Room, Area <u>E0</u>	Statu <u>6 B &amp; D Panel Room</u>	s: YX N U	
Walk-By Checklist (AWC) <u>AWC-</u> on: Bldg. <u>EG</u> Floor El. <u>272</u> Have you looked for and found no other	Room, Area <u>E0</u>	B & D Panel Room	· · · · · · · · · · · · · · · · · · ·	]
on: Bldg. <u>EG</u> Floor El. <u>272</u> Have you looked for and found no other	Room, Area <u>E0</u>	B & D Panel Room	· · · · · · · · · · · · · · · · · · ·	
Have you looked for and found no other				
	r seismic conditions that			
adversely affect the safety functions of			] U[]	
	the equipment in the ar	ea? ,	,	
•				
	•.	÷		
nents (Additional pages may be added a	as necessary)			
Some cables are overhanging the cable interaction.	e tray above the MCCs.	This is not a credible	seismic	
plant personnel were notified. This is	's not a credible seismic	interaction.		
ated by: <u>Pouria Pourghobadi</u>	The	Date: <u>9</u> /	191/19	
aled by rouna rounghobadi		Date. <u>w</u>	21/12	
Donald Koberg HS 2MM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	9/	/21/12	
		-		
		•		
·				
			~	
			~	
Ŧ				

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 45 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 5 Status: Y N U Area Walk-By Checklist (AWC) AWC-012 Location: Bldg. EG Floor El. 272 Room, Area EG B & D Panel Room SWEL Components: SWEL1-637, 434, 436, 437, 444, 493 **Photographs** Note: Unanchored Cabinets Note: Improper light hooks.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 46 of 224

ATTACHMENT 9.7		a an a Maisa an Anna Anna Anna	T. T	<b>A</b> REA V	VALK-BY CHECKL
Sheet 5 of 5 Area Walk-By Checklist (	AWC) _ AWC- 012			Status:	Y⊠ N□ U□
Location: Bldg. <u>EG</u>			EG B & D Pane	el Room	<ul> <li>Stational party data att att att and party and party att att att att att att att att att a</li></ul>
SWEL Components: SWI	EL- SWEL1-637, 434	, 436, 437, 4	44, 493		
Note: Overhanging cables	5.	Note:	ŭ		
. dikulu					

· · · · · · · · · · · · · · · · · · ·		Rev Page 47 of
ATTACHMENT 9.7		AREA WALK-BY CHECKLIST
Sheet 1 of 5 Area Walk-By Checklist (AWC) <u>AWC-</u>	<u>013</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>EG</u> Floor El. <u>272</u>	Room, Area <u>A/C ED</u>	G Switchgear
SWEL Components: SWEL1- 489, 495,	555, 636, 430, 433, 640	
Instructions for Completing Checklist This checklist may be used to document the re space below each of the following questions n Additional space is provided at the end of this	nay be used to record the res	sults of judgments and findings.
<ol> <li>Does anchorage of equipment in the a potentially adverse seismic conditions opening cabinets)?</li> </ol>		
· · ·		
2. Does anchorage of equipment in the a significant degraded conditions?	ea appear to be free of	
	· · · ·	
	1	
<ol> <li>Based on a visual inspection from the raceways and HVAC ducting appear to seismic conditions (e.g., condition of s conditions of cable trays appear to be</li> </ol>	be free of potentially advers upports is adequate and fill	Y⊠ N∏ U∏ N/A∏ se
		,

)

	MENT 9.7					<u></u>				NALK-	BY CHE	CKLIS
Sheet 2 Area V		Checklist	(AWC) _	AWC- 01	<u>13</u>			S	tatus:	Y⊠	N	υ
ocatio	n: Bldg.	EG	_ Floor E	I. <u>272</u>	Ro	om, Area	A/C EDG	Switchg	ear			
:	spatial in and lighti 33" clear 10512,10 hanging l	ng)? ance (east- )514,10502 by a single	vith other e west) betw ,10504 . If chain, out-	equipment i veen light fi light fixture of-plane pe	in the a <i>ixture a</i> e failed endulur	rea (e.g., <i>nd 71-</i> in a seisr n motion	ceiling tiles	а	N	U	N/A	
		ppear that t						Υ⊠	N 🗌	υ□	N/A	
		•									Ś	
		ppear that t ons that cou				adverse	seismic	Y	I N□	υ	N/A	
·												
	interactic portable shielding CO <sub>2</sub> fire o	)? extinguishe	ted with ho and temp r 76CX-60	ousekeepin orary instal 6 has whee	g pract llations el choc	ices, stor (e.g., sca ked on op		d .	] N []	υ	N/A	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 49 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 3 of 5	Status: Y⊠ N□ U□
Area Walk-By Checklist (AWC) <u>AWC- 013</u>	
ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <u>A</u>	VC EDG Switchgear
<ol> <li>Have you looked for and found no other seismic conditions th adversely affect the safety functions of the equipment in the a</li> </ol>	
· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	
Comments (Additional pages may be added as necessary)	
$ \rightarrow $	· · · · · · · · · · · · · · · · · · ·
Evaluated by: <u>R Casella Kick Casella</u>	Date: <u>10-29-12</u>
Evaluated by: <u>R Casella</u> A Porch A. C., Danch	
A Porch A Ci, Dand	<u>10-29-12</u>
	· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·	۲ .
۰. ۱	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 50 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 013 \_\_\_\_ Location: Bldg. EG Floor El. 272 \_\_\_\_ Room, Area A/C EDG Switchgear SWEL Components: SWEL1- 489, 495, 555, 636, 430, 433, 640 Photographs **Note:** CO<sub>2</sub> fire extinguisher 76CX-606 Note: CO<sub>2</sub> fire extinguisher 76CX-606

Attachment D Engineering Report No. JAF-RPT-12-00015

Rev. 0 Page 51 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 5 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_AWC- 013 Location: Bldg. EG Floor El. 272 Room, Area A/C EDG Switchgear SWEL Components: SWEL1- 489, 495, 555, 636, 430, 433, 640 1 Note: Light Fixture and MCC's Note:

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 52 of 224

ATTACHMENT 9.7	AREA V	VALK-BY CHECKLIST
Sheet 1 of 5	<u> </u>	
Area Walk-By Checklist (AWC) <u>AWC- 014</u>	Status:	
Location: Bldg. EG Floor El. 272' Room, Area <sup>1</sup> EG Room D		
SWEL Components: SWEL 1-635, 660, and 687		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Area Walk-By near one space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other con	judgments	
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	Y⊠ N□	
The clean/dirty rag bins and hand held fire extinguisher have anchors that are not tightened. Also one anchor is missing on the work bench. However, items are not close enough to any vital equipment to cause adverse affect onto a SWEL item during a seismic event.		
<ol> <li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.</li> </ol>	Y⊠ N□	U N/A
· · · · · · · · · · · · · · · · · · ·		
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□	U N/A
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.		
·		

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

.)

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 2 of 5 Area Walk-By Checklist (AWC) <u>AWC- 014</u>	Status: Y⊠ N∏ U[
ocation: Bldg. <u>EG</u> Floor El. <u>272'</u> Room, Area <u>EG Room D</u>	
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</li> </ul>	Y⊠ N∏ U∏ N/A∏
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	Y⊠ N⊡ U⊡ N/A⊡
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> <li>It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.</li> </ol>	Y⊠ N□ U□ N/A□

		•		•		AREA	VALK-BY CH	IECKLIST
			• •			Status:	Y⊠ N⊟	υ
Checklist	(AWC)	<u>AWC- 01</u>	4			· ,		
EG	_ Floor El.	<u>272'</u>	Room	, Area	EG Room D	, 		
y affect the s seismic con	afety funct	ions of the t could adv	e equipme versely aff	nt in the	e area?	Y⊠N⊡	U	,
	× 1		·					
ditional page	es may be a	added as r	necessary	)				
	-		•					
				•				
larproot Chu	- 218 -	2hrs	~~ <u>~</u>			Data: 00/	21/2012	
<u>arpreet Griu</u>	illall · ·				·	Date. <u>09/</u>	21/2012	
aroslav Lose	9VV	Case	Streen .			09/	21/2012	
· · ·						-1		
· .								
		•					,	ŕ.
				· · .				
							·	
		•					•	
		•						
	<u>EG</u> u looked for a y affect the s seismic con ditional page ional comme	<u>EG</u> Floor EI. a looked for and found if y affect the safety funct seismic conditions that s of the equipment in the ditional pages may be a ional comments.	EG Floor El. 272'	u looked for and found no other seismic cor y affect the safety functions of the equipment seismic conditions that could adversely affect the equipment in the area were found. ditional pages may be added as necessary ional comments.	EG       Floor El. 272'       Room, Area         J looked for and found no other seismic conditions of the equipment in the seismic conditions that could adversely affect the sof the equipment in the area were found.         ditional pages may be added as necessary)         ional comments.         darpreet Ghuman M& MMM_         'aroslav Losev	EG       Floor El. 272       Room, Area       EG Room D         u looked for and found no other seismic conditions that could y affect the safety functions of the equipment in the area?       seismic conditions that could adversely affect the safety of the equipment in the area were found.         ditional pages may be added as necessary)       ional comments.         ditional pages may be added as necessary)       ional comments.         arpreet Ghuman AB       JMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Checklist (AWC) _ AWC- 014	Checklist (AWC)AWC- 014

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 55 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_AWC- 014 Location: Bldg. EG Floor El. 272' \_\_\_\_ Room, Area EG Room D SWEL Components: SWEL 1-635, 660, and 687 Photographs Note: Picture of the clean/dirty rags. Note: Picture of the non-tightened anchorage of the clean/dirty rags.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 56 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 5 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 014\_\_\_ Location: Bldg. EG Floor El. 272' Room, Area EG Room D SWEL Components: SWEL 1-635, 660, and 687 Note: Picture of the work bench. Note: Picture of the missing anchorage of the work bench.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 57 of 224

ATTACHMENT 9.7				-BY CHECKLIS
Sheet 1 of 4 Area Walk-By Checkl	iet (AWC) AWC- A	15	Status: Y	3 N□ U□
Location: Bldg. RB	Floor El. 227	Room, Area <sup>1</sup> <u>Crescent E</u>	ast HPCI	
SWEL Components:	SWEL1- 209, 210, 21	13, 219, 232, 234, 243		
Instructions for Comple	ting Checklist	<b>`</b>		
space below each of the	following questions ma	ults of the Area Walk-By near of y be used to record the results necklist for documenting other of the second seco	of judgments and	
potentially advers opening cabinets) Two P1001 condu parallel to each o Box. No visible su are supporting co	? uits run the width of the ther, supporting conduit upports provided throug	visible without necessarily room (approximately 21ft) ts, smoke detector and a Pull h the entire run. Unistrut lines adequate supports. The	Y N U	N/A
2. Does anchorage significant degrad	of equipment in the are ed conditions?	a appear to be free of	Y⊠ N∏ U∏	] N/A
The anchorage of significant degrad	<sup>f</sup> equipment in the area led conditions.	appears to be free of	, . ,	
		· ·		;
raceways and HV seismic condition conditions of cabl <i>The cable/condui</i>	AC ducting appear to b s (e.g., condition of sup e trays appear to be in	oor, do the cable/conduit be free of potentially adverse ports is adequate and fill side acceptable limits)? ducting appear to be free of		] N/A
	· · ·			

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Attachment D Engineering Repor

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 58 of 224

	HMENT 9.7				·····	AREA WALK-BY CHE	CKLI
	2 of 4 Walk-By	Checklis	t (AWC) _	AWC- 0	<u>15</u>	Status: Y⊠ N⊟ t	٦Ü
ocatio	on: Bldg.	RB	Floor E	il. <u>227</u>	Room, Area <u>Crescen</u>	t East, HPCI	
4.	spatial in and light	teractions ing)?	with other e	equipment i	entially adverse seismic n the area (e.g., ceiling tile	Y⊠ N□ U□ N/A□ s	•
			is free of po ner equipmo		dverse seismic spatial rea.		
5.					entially adverse seismic spray in the area?	Y⊠ N∏ U∏ N/A∏	
			is free of p oding or sp		dverse seismic interactions area.	, ,	
					,		
6.			the area is uld cause a		entially adverse seismic area?	Y⊠ N∏ U∏ N/A∏	
			is free of p Fire in the a		dverse seismic interactions		
<b>7.</b>	interactio	ons associa equipment	ated with ho	busekeepin	entially adverse seismic g practices, storage of lations (e.g., scaffolding, le	Y⊠ N□ U□ N/A□ ad	
	associat		ısekeeping		dverse seismic interactions storage of portable equipm		
						ý	

	`**	Page 59 of 2
ATTACHMENT 9.7	AREA WALK-B	Y CHECKLIST
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC- 015</u>	Status: Y🛛 I	
Location: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area <u>Crescent E</u>	ast, HPCI	
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?	YX N U	
No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.		
Comments (Additional pages may be added as necessary)	· · · · ·	
·		
Rp.j.M.		2
Evaluated by: <u>Pouria Pourghobadi</u> Donald Koberg Smalle Why	Datè: <u>9/21/12</u>	
Amale Vilin	9/21/12	

· · · ·

.

•

.

١

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 60 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECK
Sheet 4 of 4	Status: Y⊠ N⊡ U[
Area Walk-By Checklist (AWC) <u>AWC- 015</u>	
Location: Bldg. <u>RB</u> Floor El. <u>227</u> Roor	om, Area <u>HPCI</u>
SWEL Components: SWEL-SWEL1-209, 210, 213	3, 219, 232, 234, 243
Photographs	
<b>Note:</b> Unistruts providing supporting the conduits and Junction box.	Note:

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 61 of 224

CHECKL
] U[
is. The igs.
•
,

· ,

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 62 of 224

	IMENT 9.7	,					AREA V	VALK-BY CHECKL
Sheet 2 Area V		Checklist	: (AWC)	AWC- 010	6	. *	Status:	Y⊠ N□ U□
Locatio	n: Bldg.	RB	_ Floor El.	<u>344.6'</u>	Room, Area	LPCI Batter	y Room	
		teractions v			ntially adverse so the area (e.g., c		YX N	U N/A
			rea is free o er equipmen		y adverse seism ea.	ic spatial		
						. '		
	interactio	ons that cou	ld cause floo	oding or sp	ntially adverse s pray in the area?		Y⊠ N□	U N/A
					y adverse seism pray in the area.	ic		
					. *	•		e sa
							`	
6.			the area is fr Ild cause a fi		ntially adverse s rea?	eismic	Y⊠ N□	U N/A
			irea is free o Ild cause a fi		ly adverse seism rea.	ic		
	•						· .	
	-							
7.	interaction	ons associa equipment	ted with hou	sekeeping	ntially adverse s practices, stora ations (e.g., scaft	ge of	Y⊠ N□	U N/A
	interaction	ons associa		sekeeping	ly adverse seism practices, stora ations.			
			,			ł		
							·	
					1			

ATTACHMENT 9.7		AREA WALK-BY C	HECKLIST
Sheet 3 of 3			
Area Walk-By Checklist (AWC)	AWC- 016	Status: Y⊠ N	_ U[]
_ocation: Bldg. <u>RB</u> Floor E	El. <u>344.6'</u> Room, Area <u>LPC</u>	I Battery Room	'
•	ctions of the equipment in the are at could adversely affect the safe	a?	
		-	
Comments (Additional pages may be	e added as necessary)	,	
No additional comments.		· · ·	
	•	· · · ·	
Evaluated by: <u>Harpreet Ghuman</u>	H8. 2hm	Date: 0 <u>9/30/2012</u>	
Evaluated by: <u>Harpreet Ghuman</u>	H8 ghm	Date: <u>09/30/2012</u>	
Evaluated by: <u>Harpreet Ghuman</u>	H& ghn	Date: <u>09/30/2012</u> 09/30/2012	
Evaluated by: <u>Harpreet Ghuman</u>	H8 ghn		
Taiosiav 2036v 2	·····	09/30/2012	
Taloslav Losev >	. <u>.</u>	09/30/2012	
Taloslav Losev >	. <u>.</u>	09/30/2012	
		09/30/2012	
		09/30/2012	
		09/30/2012	
Taloslav Losev >		09/30/2012	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 64 of 224

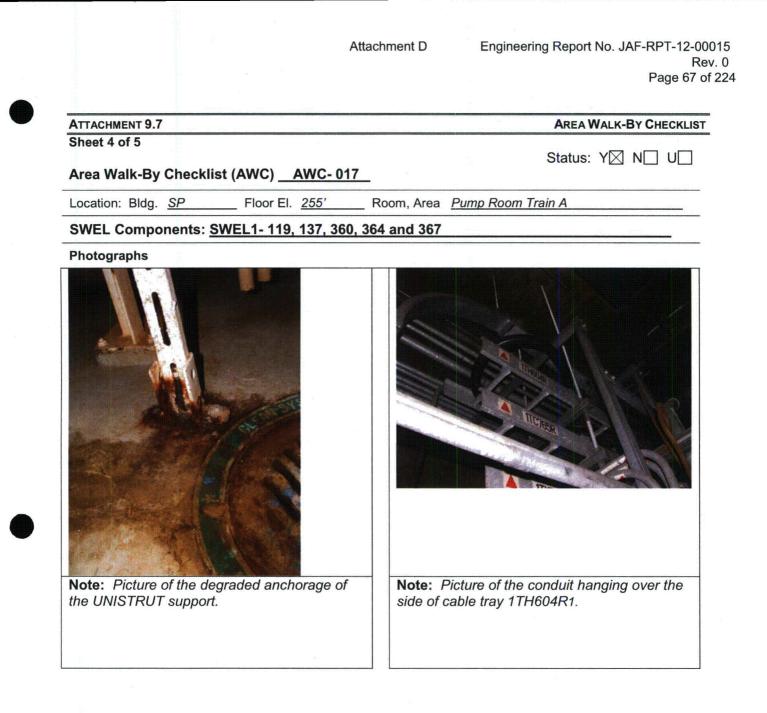
		<u>.</u>				<del></del>			ARE	AWALK	-BY CH	IECKL
Sheet 1 of							·		Statu	s: Y⊠	I N□	٧Ľ
Area Wal	k-By Cheo	cklist (A	WC)	AWC-	017	•						
_ocation:	Bldg. <u>SP</u>		Floor El.	<u>255'</u>		Room, A	rea¹ <u>Pum</u>	p Room T	Train A			
SWEL Co	omponents	s: <u>SWE</u>	<u>L1- 119</u>	<u>, 137, 3</u>	<u>860, 3</u>	<u>64, 366</u>	and 367					_
nstructio	ns for Com	pleting	Checklis	st								
pace belo	list may be w each of th space is pro	he follow	ing ques	stions m	ay be	used to r	ecord the	results of	judgmer			
pot	es anchorag entially advo ening cabine	erse seis						ily	Y⊠ N[	<u> </u>	N/A	]
	e anchorage entially adv				a, app	ear to be	free of	1				
•											*	•
	es anchoraç nificant degi				ea apj	pear to b	e free of		Y⊠ N[	_ U_	N/A	]
ins dee it w the Als floo	chorage for trumentation amed adver- vill not affect area, other so, the failur oding hazard 185.	n piping, se. If the t the func r than the e of the s	is signifi support tionality pressu support a	icantly d was to of the s re gage and pipir	legrad fail an traine conne ng will	ed. Howe d damag r or other ected to th not resu	ever, this is e the I&C µ component ne I&C pipi It in a fire c	piping, nts in ng. nr		``		
rac sei	sed on a vis ways and smic conditi nditions of c	HVAC d ions (e.g	ucting ap ., conditi	opear to on of su	be fre	e of pote s is adeq	ntially adv uate and fil	erse	Y⊠ N[	] U[]	N/A	]-
is t fou Po a r coi equ	ere is a 6" c unrestrained und to be im rtion of the o od hanger w nduits are n uipment is c solution to th	d. Anothe properly conduit is which pro ot deems construct	er 6" diar secured s secure vides su ed as ad ed of ste	neter co in Servi d by a s ipport fo verse se el and h	nduit : ice Wa ingle µ r the 1 eismic nave n	supporte ater Pum plastic ziµ 1TH604R condition o soft tar	d by the tra p Room A. p tie on the Tray. The ns since the gets. The	ny is side of se e below	·			
	n in which th ea should be l									nould be	describ	oed. T

Attachment D Rev. 0 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 2 of 5 Status: YX N U Area Walk-By Checklist (AWC) AWC- 017 Location: Bldg. SP Floor El. 255' Room, Area Pump Room Train A 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area. 5. Does it appear that the area is free of potentially adverse seismic YX N UNA interactions that could cause flooding or spray in the area? It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area. 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area. 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

Engineering Report No. JAF-RPT-12-00015

Page 65 of 224

		· •		Page 6	6 of 2
ATTACHMENT 9.7			AREA V	ALK-BY CHECK	IST
Sheet 3 of 5 Area Walk-By Checklist (AWC	) <u>AWC- 017</u>	· · ·	Status:	YX N U	]
Location: Bldg. <u>SP</u> Floo	or El. <u>255'</u>	Room, Area <u>Pump I</u>	Room Train A		—
8. Have you looked for and fou adversely affect the safety f No other seismic conditions functions of the equipment i	unctions of the e that could adve	equipment in the area? ersely affect the safety	ıld Y⊠ N⊡		
			•		
Comments (Additional pages may	be added as ne	ecessary)			
found near the location sug		area is being serviced.			
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	·
The site personnel are notif	ied.		Date: <u>09/2</u>		
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	
The site personnel are notif Evaluated by: <u>Harpreet Ghuman</u>	ied.		Date: <u>09/2</u>	21/2012	



Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 68 of 224

## ATTACHMENT 9.7

Sheet 5 of 5

AREA WALK-BY CHECKLIST

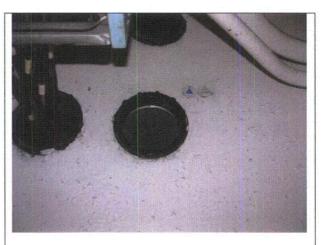
Area Walk-By Checklist (AWC) \_\_\_\_\_ AWC- 017\_\_\_\_ Status: Y // N // U //

Location: Bldg. SP Floor El. 255" Room, Area Pump Room Train A

SWEL Components: SWEL1- 119, 137, 360, 364 and 367



**Note:** Picture of the conduit tied to a rod hanger support the on cable tray 1TH604R1.



**Note:** *Picture of uncovered penetration in Pump Rom B, West wall.* 



**Note:** *Picture of a step ladder not in designated location in Pump Rom B.* 

Matai		
Note:		

ATTACHMENT 9.7			AREA WALK	-BY CHECKLIST
		S	tatus: Y🖂	N U
Area Walk-By Checklist (AWC) <u>AWC- (</u>	<u>018</u>			
ocation: Bldg. <u>RB</u> Floor El. <u>272'</u>	Room, Area <sup>1</sup> <u>RB</u>	RHR Heat Exc	hange Rm	
SWEL Components: <u>SWEL1- 069, 079</u>				
nstructions for Completing Checklist				,
his checklist may be used to document the respace below each of the following questions manditional space is provided at the end of this c	ay be used to record the	e results of judg	ments and	
<ol> <li>Does anchorage of equipment in the are potentially adverse seismic conditions (in opening cabinets)?</li> </ol>			N U U	N/A
The anchorage of equipment in the area adverse seismic conditions.	appear to be free of po	otentially		
	· .			
<ol><li>Does anchorage of equipment in the are significant degraded conditions?</li></ol>	a appear to be free of	YX	N□ U□	N/A
The anchorage of equipment in the area appears to be free of significantly degra		m(s),		·
		. •		
			-	
<ol> <li>Based on a visual inspection from the flor raceways and HVAC ducting appear to seismic conditions (e.g., condition of sup conditions of each to the inspect to be in</li> </ol>	be free of potentially ad oports is adequate and	lverse fill	N U	N/A
conditions of cable trays appear to be in Instrumentation pipe, along the West W Room, is poorly supported. The pipe ha	all of the RHR Heat Exc s an un-braced length c	changer of		·
approximately 10'. Pipe bears on a strut a significant amount; however, the pipe surrounding equipment. Failure of this lo will not affect nearby equipment except which this line is attached to.	is not detrimental to an &C pipe during a seism	y ic event		
Site personnel notified. The resolution to CR-JAF-2012-07912.	o this deficiency is track	ked thru		

ATTACHMENT 9.7	- 			AREA	WALK-BY CHECKL
heet 2 of 4 Area Walk-By Checkl	ist (AWC) <u>A</u>	WC- 01	<u>8</u>	Status	: YX N U
ocation: Bldg. <u>RB</u>	Floor El.	272'	Room, Area <u>RB RHR H</u>	leat Exchange	<u>ə Rm</u>
			ntially adverse seismic n the area (e.g., ceiling tiles	Y⊠ N□	
It appears that the interactions with c			ly adverse seismic spatial ea.		
5. Does it appear the interactions that c			entially adverse seismic pray in the area?	Y⊠ N□	
It appears that the interactions that c			ly adverse seismic oray in the area.		·
interactions that o	ould cause a fir area is free of	e in the a <i>potential</i> i	ly adverse seismic	Y⊠ N⊟	U N/A
	ouid cause a III	e in the a	nea.		4 
interactions asso	ciated with hous	ekeeping	entially adverse seismic practices, storage of ations (e.g., scaffolding, lead		U N/A
this room. It appe	ars that the area ciated with hous	a is free c ekeeping	with current work order insid of potentially adverse seismic g practices, storage of ations.		
· ·	· · · · · · · · · · · · · · · · · · ·	. '			

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 71 of 224 ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 3 of 4 Status: YX N U Area Walk-By Checklist (AWC) <u>AWC-018</u> Room, Area RB RHR Heat Exchange Rm Location: Bldg. RB Floor El. 272' YX NU UU 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. Comments (Additional pages may be added as necessary) No additional comments. Evaluated by: <u>Harpreet Ghuman H8</u> Date: 09/26/2012 Trace Yaroslav Losev 09/26/2012

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 72 of 224 Attachment D

ATTACHMENT 9.7 Sheet 4 of 4	AREA WALK-BY CHECKI
Sneet 4 of 4	Status: Y N U
Area Walk-By Checklist (AWC) <u>AWC- 018</u>	-
Location: Bldg. <u>RB</u> Floor El. <u>272'</u>	Room, Area RB RHR Heat Exchange Rm
SWEL Components: <u>SWEL1-069,079</u>	
Photographs	
<b>Note:</b> <i>Picture showing the deflected shape of the instrumentation line resting on a strut support and the un-braced length.</i>	Note:

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 73 of 224

TTACHMENT 9.7	AREA WALK-BY CHECKL
heet 1 of 4	Status: Y⊠ N⊡ U⊡
rea Walk-By Checklist (AWC) <u>AWC- 019</u>	
ocation: Bldg. <u>RB</u> Floor El. <u>296'</u> Room, Area <sup>1</sup> <u>RB 296'</u>	
WEL Components: <u>SWEL1- 319</u>	
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By near of pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other of	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions.	/
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	Y⊠ N∏ U∏ N/A∏
The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y N N U 'N/A
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	r r

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 2 of 4	
Area Walk-By Checklist (AWC) <u>AWC- 019</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>296'</u> Room, Area <u>RB 296'</u>	
<ol> <li>Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> </ol>	
It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	YX N U N/A
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	· · ·
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic	
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
Temporary scaffold in the area has been there since 06-21-2012. The elapsed time since installation is greater than 90 days. Scaffold must be seismically evaluated or removed. Scaffold Log # R20-046. Site personnel are notified and the scaffolding is to be evaluated for long erection period.	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 75 of 224 AREA WALK-BY CHECKLIST ATTACHMENT 9.7 Sheet 3 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC-019 Floor El. 296' Room, Area RB 296' Location: Bldg. RB Y⊠ N□ U□ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: <u>Harpreet Ghuman</u> Date: 09/26/2012 Yaroslav Losev -09/26/2012

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 76 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 019 \_ Floor El. 296' Location: Bldg. RB Room, Area RB 296' SWEL Components: SWEL1- 319 Photographs Note: Picture showing the out of date scaffold Note: tag.

		Page 77
ATTACHMENT 9.7	-	AREA WALK-BY CHECKLIS
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 0</u> 2	20	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>344.6'</u>	Room, Area <sup>1</sup> <u>RB :</u>	344.6'
SWEL Components: <u>SWEL1- 470</u>		
Instructions for Completing Checklist		
This checklist may be used to document the resu space below each of the following questions may Additional space is provided at the end of this che	be used to record the	results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area potentially adverse seismic conditions (if opening cabinets)?</li> </ol>	visible without necessa	Y⊠ N∏ U∏ N/A∏ rily
The anchorage of equipment in the area a potentially adverse seismic conditions.	appears to be free of	
<ol><li>Does anchorage of equipment in the area significant degraded conditions?</li></ol>	appear to be free of	Y 🛛 N 🗌 U 🗌 N/A 🗌
The anchorage of equipment in the area, appears to be free of significantly degrade		(s),
<ol> <li>Based on a visual inspection from the floor raceways and HVAC ducting appear to be seismic conditions (e.g., condition of supp conditions of cable trays appear to be ins</li> </ol>	e free of potentially adv ports is adequate and fi ide acceptable limits)?	erse
The cable/conduit raceways and HVAC d potentially adverse seismic conditions.	ucting appear to be fre	e of
	~	·

.

/

ATTACHMENT 9.7	AREA WALK-BY CHECKL
heet 2 of 3 rea Walk-By Checklist (AWC) <u>AWC- 020</u>	Status: Y⊠ N⊡ U⊡
ocation: Bldg. <u>RB</u> Floor El. <u>344.6'</u> Room, Area <u>RB 344.6'</u>	· · · · · · · · · · · · · · · · · · ·
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
	χ
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	· · · · · · · · · · · · · · · · · · ·
7. Does it appear that the area is free of potentially adverse seismic	
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 79 of 224

TTACHMENT 9.7			AREA	WALK-BY CHECKLIS
Sheet 3 of 3			Status	: Y⊠ N□ U□
Area Walk-By Checkli	ist (AWC) <u>AWC</u>	- 020		
ocation: Bldg. <u>RB</u>	Floor El. <u>344</u> .	<u>6'</u> Room, Area <u>RB 3</u>	44.6'	·····
		er seismic conditions that c		U
•	=	f the equipment in the area <sup>.</sup> I adversely affect the safety		
	quipment in the area			
	1			
			······	
Comments (Additional pa	ages may be added	as necessary)		
No additional com	nments.	- ,		
			•	
		, , ,		·
				·
			,	
	1			
	212 911			
Evaluated by: <u>Harpreet G</u>	ihuman H8 24	····-	Date: <u>09</u>	/30/2012
	10 cu	see		
Evaluated by: <u>Harpreet G</u> Yaroslav L	10 cu	see		/30/2012 /30/2012
	10 cu	see		
	10 cu	~~		
	10 cu	· .		
	10 cu	· · ·		
Yaroslav L	10 cu	· ·		
Yaroslav L	osev	· · ·	09	/30/2012
Yaroslav L	10 cu			/30/2012 ſ
Yaroslav L	osev		09	<b>/30/2012</b>
Yaroslav L	osev	• • • • • • • • • • • • • • • • • • •	09	<b>/30/2012</b>
Yaroslav L	osev	• • • • • • • • • • • • • • • • • • •	09	<b>/30/2012</b>
Yaroslav L	osev	· · · · · · · · · · · · · · · · · · ·	09	<b>/30/2012</b>
Yaroslav L	osev	· · · · · · · · · · · · · · · · · · ·	09	<b>/30/2012</b>
Yaroslav L	osev The	· · · · · · · · · · · · · · · · · · ·	09	/30/2012

Attachment D Engineering Report No. JAF-RPT-12-00015 Page 80 of 224

Rev. 0

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 1 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC- 021 Location: Bldg. RB Floor El. 272' Room, Area<sup>1</sup> RB East SWEL Components: SWEL1-032, 033, 043 and 044 Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions. 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions. 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions. <sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Area Walk-By Checklist (AWC)AWC- 021         Location: Bldg. <u>RB</u> Floor El. <u>272'</u> Room, Area <u>RB East</u> 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?         All equipment on skids are set up the same and spaced an equal distance apart. The gap between each skid is small, but during a seismic event the skids will act in unison; therefore will have no interaction with one another.	Status: Y⊠ N∏ U[
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>All equipment on skids are set up the same and spaced an equal distance apart. The gap between each skid is small, but during a seismic event the skids will act in unison; therefore will have no</li> </ul>	Y N N U N/A
spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? All equipment on skids are set up the same and spaced an equal distance apart. The gap between each skid is small, but during a seismic event the skids will act in unison; therefore will have no	Y⊠ N∏ U∏ N/A∏
seismic event the skids will act in unison; therefore will have no	
	ſ
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N∏ U∏ N/A∏
There was a tool located on the ground in the area without any work orders in vicinity; however, this is not considered a significant source to damage any equipment during a seismic event due to the size of the tool and location.	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 82 of 224 ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 3 of 4 Status: YX N U Area Walk-By Checklist (AWC) \_\_AWC- 021 Location: Bldg. RB Floor El. 272' Room, Area RB East YX NI UI 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.  $^{\prime}$ Comments (Additional pages may be added as necessary) No additional comments. Evaluated by: <u>Harpreet Ghuman H8</u> Date: 09/23/2012 Yaroslav Losev -09/23/2012

	Attachment D	Engineering Report No. JAF-RPT-12-00 Rev Page 83 of
ATTACHMENT 9.7		AREA WALK-BY CHECKLIST
Sheet 4 of 4 Area Walk-By Checklist (AWC) <u>AWC</u>	- 021	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>272</u> '	Room, Area <u>I</u>	RB East
SWEL Components: SWEL1-032, 033,	043 and 044	
Photographs		an a
<b>Note:</b> Picture showing the location of the improperly stored tool.	Note:	4. 

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 84 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 1 of 3	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC- 022</u>	
_ocation: Bldg. <u>RB</u> Floor El. <u>326'</u> Room, Area <sup>1</sup> <u>RB NW 326</u>	, -
SWEL Components: SWEL1 -155, 157 and 161	······································
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other c	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	YX N U N/A
The anchorage of equipment in the area, appear to be free of potentially adverse seismic conditions.	· · · · · · · · · · · · · · · · · · ·
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	• • •
	· ·

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 85 of 224

	HMENT 9.7				· . · · · · · · · · · · · · · · · · · ·	,		AREA	WALK-BY CH	ECKLIS
heet	2 of 3							Statura		
Area V	Walk-Bv	Checklis	t (AWC)	AWC-0	22	,		Status	Y⊠ N□	
•				El. <u>326'</u> `			RB NW 326'	,		
	on: Bldg.					· · · · · · · · · · · · · · · · · · ·		•		
4.		teractions		s free of pol equipment					U[] N/A[]	
•				of potentia nent in the a		se seismic	spatial			
						-		,		
		·								
5.				s free of poi flooding or a			smic	Y⊠ N□		]
				e of potentia flooding or						
					Υ.					
6.				s free of po a fire in the		adverse sei	smic	Y⊠ N□	ù <u>□</u> N/A□	]
				e of potentia		rse seismic				•
	Interactio	ns that co	ula cause	a fire in the	area.				1	
								$\infty$ .		t, xt
7.	interactio	ns associa equipment	ated with h	s free of po ousekeepir oorary insta	ng practic	es, storage	of	Y⊠ N□	U[] N/A[	]. ·
	It appear interactio	s that the a	ated with h	e of potentia ousekeepir oorary insta	ng practic					
	•			,			1			
•			· · ·					•		_
	,									
· .						-				
	•				,					
			• .							
			•					,		
								•	<b>~</b> .	

	Attachment D	Engineering Report N	Rev. Page 86 of 2
ATTACHMENT 9.7		AREA WA	LK-BY CHECKLIST
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC-</u>	022	Status: Y	N U
Location: Bldg. <u>RB</u> Floor El. <u>326'</u>	Room, Area <u><i>Rt</i></u>	3 NW 326'	· · · · · · · · · · · · · · · · · · ·
<ol> <li>Have you looked for and found no othe adversely affect the safety functions of</li> </ol>			
No other seismic conditions that could functions of the equipment in the area		əty	
			·
Comments (Additional pages may be added a	as necessary)		
No additional comments.			
Evaluated by: <u>Harpreet Ghuman H8</u> 24M	····-	Date: <u>09/25</u>	/2012
Evaluated by: <u>Harpreet Ghuman 148</u> Yaroslav Losev	~~	Date: <u>09/25</u> 09/25	
Evaluated by: <u>Harpreet Ghuman 148</u> . Yaroslav Losev			
Evaluated by: <u>Harpreet Ghuman N8 24M</u> Yaroslav Losev		09/25	
	<b>,</b> ,	09/25	/2012
	۰. ۱	09/25	/2012
	۰. ۱	09/25	/2012
	ι	09/25	/2012
	۰. ۱	09/25	/2012

· .

.

.

	ула <del>ни</del> -	
ATTACHMENT 9.7		AREA WALK-BY CHECKLIST
Sheet 1 of 4 Area Walk-By Checklist (AWC) <u>AW(</u>	<u>C- 023</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>272</u>	? Room, Area <sup>1</sup> <u>RB Sou</u>	th, Col. 3, Line R
SWEL Components: SWEL1 - 165		-4 f.
Instructions for Completing Checklist		
This checklist may be used to document the space below each of the following questions Additional space is provided at the end of thi	may be used to record the resu	ults of judgments and findings.
<ol> <li>Does anchorage of equipment in the potentially adverse seismic condition opening cabinets)?</li> </ol>		
The anchorage of equipment in the a adverse seismic conditions.	rea appear to be free of potent	ially
2		
<ol><li>Does anchorage of equipment in the significant degraded conditions?</li></ol>		
The anchorage of equipment in the a appears to be free of significantly de		
		· · · ·
3. Based on a visual inspection from the raceways and HVAC ducting appear seismic conditions (e.g., condition of conditions of cable trays appear to be <i>The cable/conduit raceways and HV</i> , potentially adverse seismic condition	to be free of potentially adverse supports is adequate and fill e inside acceptable limits)? AC ducting appear to be free of	
		-
		· .
· `		
<sup>1</sup> If the room in which the SWEL item is located is selected area should be based on judgment, e.g.,	s very large (e.g., Turbine Hall), the on the order of about 35 feet from t	e area selected should be described. This he SWEL item.
	1	

•

ATTACH	MENT 9.7											AREA	NALK	-BY CHECKLI
Sheet 2	of 4										S	tatus:	٧X	
Area W	/alk-By	Checkli	st (Al	NC)	AWC-	023	<b>_</b> ,				0			
ocation	n: Bldg.	<u>RB</u>	F	loor El.	<u>272'</u>		Roon	n, Area	<u>RB S</u>	outh, C	Col. 3, I	ine R		· · ·
5		ppear tha teractions ng)?									Υ⊠	N	υ	N/A
		s that the ons with o						e seisr	nic spai	tial			•	
		ppear tha								;	Y⊠	N	υD	N/A
		s that the ons that co												
												•	`,	
		ppear tha						lverse s	seismic	;	Υ⊠	N	Ú[]	N/A
l l	lt appear	ons that co is that the ons that co	area	is free d	of potent	ially	advers	e seisn	nic					
							Ņ		,					
i	nteractic	ppear tha ons assoc equipmer )?	iated v	vith hou	isekeepi	ing p	ractice	s, stora	age of		۲⊠	N	υ□	N/A
1	interactio	rs that the ons assoc equipmer	iated v	vith hou	usekeepi	ing p	ractice						. (	
							,							
														-
	. `													
			•							د				

· · · · · · · · · · · · · · · · · · ·	Attachment D	Engineering Report No	o. JAF-RPT-12-00 Re Page 89 of
ATTACHMENT 9.7		Area Wa	LK-BY CHECKLIST
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC</u>	<u>- 023</u>	Status: Y	N U
Location: Bldg. <u>RB</u> Floor El. <u>272'</u>	Room, Area	RB South, Col. 3, Line R	
8. Have you looked for and found no othe adversely affect the safety functions of No other seismic conditions that could functions of the equipment in the area	f the equipment in the adversely affect the s	area?	
<u>Comments (</u> Additional pages may be added No additional comments.	as necessary)		
	<i>r</i>		
Evaluated by: <u>Harpreet Ghuman 148</u> . Here	<u></u>	Date: <u>09/26/</u>	2012
Yaroslav Losev	- all'	09/26/	2012
· · · · · ·	. •		
· · ·			
. *			
			· .
			· .

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 90 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC-023 Location: Bldg. RB Room, Area RB South, Col. 3, Line R Floor El. 272' SWEL Components: SWEL1 - 165 Photographs Note: Picture showing the deflected shape of Note: the instrumentation line and the unbraced length.

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 1 of 4	Status: Y🛛 N🔲 U
Area Walk-By Checklist (AWC) <u>AWC- 024</u>	
_ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <sup>1</sup> <u>Col. 3</u>	
SWEL Components: <u>SWEL1- 371</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N⊡ U⊡ N/A⊡
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
	ς.
	·

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 2 of 4 Area Walk-By Checklist (AWC) <u>AWC- 024</u>	Status: Y⊠ N⊟ U⊟
ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <u>Col. 3</u>	······································
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? It appears the area is free of potentially adverse seismic spatial	YX N UNA
interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
	• • • • • • •
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N∏ U∏ N/A∏
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N□ U□ N/A□
One gallon of water stored in inacceptable manner. No straps, loose hose. Not an adverse seismic condition.	
	· .

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 93 of 224

ATTACHMENT 9.7				AREA WALK-BY C	HECKL
Sheet 3 of 4 Area Walk-By Check	list (AWC) <u>AWC- 02</u>	24		Status: YX N	] U[
Location: Bldg. <u>RB</u>	Floor El. <u>242</u>	Room, Area	<u>Col. 3</u>		
adversely affect to No other seismic	I for and found no other s the safety functions of the conditions that could ad equipment in the area we	e equipment in the versely affect the	e area?	YM NO UO	
<u>Comments (</u> Additional	pages may be added as i	necessary)			
				· ·	
Evolution but Dourio Dr	Rp-J	MC.		Data: 0/24/12	
Evaluated by: Pouria Po	Surgnobadi · · ·			_ Date: <u>9/24/12</u>	
Evaluated by: <u>Founa Fo</u> Donald K	oberg Fondel Los	ly		9/24/12	
Evaluated by: <u>Pouna Po</u> Donald K	oberg Small Ly	hy			
Evaluated by: <u>Pouna Pc</u> Donald K	oberg Finall L	ly			
Donald K	oberg Finald Lin				

.

ATTACHMENT 9.7	ing in the second secon	-1	AREA V	VALK-BY CHECKLIS
Sheet 4 of 4 Area Walk-By Checklist (AWC) <u>AWC- 024</u>	a a construction of a a construction of a const			
Location: Bldg. <u>RB</u> Floor El. <u>242</u>	Room, Area	<u>Col. 3</u>		
SWEL Components: <u>SWEL1- 371</u>		199 199 - 1995 - 199		
Photographs	1.11			

	Attachment D	Engineering Report No. JAF-RPT-12-00 Re Page 95 c
ATTACHMENT 9.7		AREA WALK-BY CHECKLIST
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 0</u>	25	Status: Y⊠ N∏ U∏
ocation: Bldg. <u>RB</u> Floor El. <u>300</u>	Room, Area <sup>1</sup> <u>Ce</u>	ol. R, Line 4.5
WEL Components: <u>SWEL1- 169</u>		
nstructions for Completing Checklist		
This checklist may be used to document the result pace below each of the following questions may additional space is provided at the end of this ch	y be used to record th	ne results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area potentially adverse seismic conditions (if opening cabinets)?</li> </ol>		
The anchorage of equipment in the area potentially adverse seismic conditions.	appears to be free of	, , , , , , , , , , , , , , , , ,
·		· · · · · ·
<ol> <li>Does anchorage of equipment in the area significant degraded conditions?</li> </ol>	a appear to be free of	
The anchorage of equipment in the area significant degraded conditions.	appears to be free of	
3. Based on a visual inspection from the flo raceways and HVAC ducting appear to b	be free of potentially a	dverse <u> </u>
seismic conditions (e.g., condition of sup conditions of cable trays appear to be ins		
The cable/conduit raceways and HVAC of potentially adverse seismic conditions.	ducting appear to be t	ree of
	1	
	·	
		,

TTACHME		· · · · · · · · · · · · · · · · · · ·				AREA	WALK-BY CH	ECKLIS
iheet 2 of	3					Status	: Y⊠ N□	
rea Wal	k-By Check	list (AWC) _	AWC- 02	.5				<u>∽∟</u>
ocation:	Bldg. <u>RB</u>	Floor E	il. <u>300</u>	Room, Are	a <u>Col. R, Line</u>	4.5		<i>,</i>
spa				entially adverse n the area (e.g.		YX N	U[] N/A[]	
		ea is free of p other equipm		lverse seismic : ea.	spatial			
							÷	
				entially adverse pray in the area		Y⊠ N⊏	U N/A	
		rea is free of p flooding or sp		lverse seismic rea.	interactions			
		·						
		hat the area is could cause a		entially adverse area?	seismic	Y⊠ N□		
lt a	ppears the ar		otentially ac	lverse seismic	interactions			
	1				<i>,</i>			
				•				
			-					
inte . por	eractions asso table equipm	ociated with ho	busekeeping	entially adverse g practices, stor ations (e.g., sca	rage of	Y⊠ N_	U N/A	]
	elding)? ppears the ai	rea is free of p	otentially ad	dverse seismic	interactions	v		
	sociated with d temporary ii		practices, s	storage of porta	ble equipment,		<b>、</b>	
um	a tomporary n	iotanationo.						
		<u></u>						
				i				~
	i	i						
	1			i.				
1	1				•			
							• •	
	х							
						<b>*</b> .	`	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 97 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC-025 Floor El. 300 Room, Area Col. R, Line 4.5 Location: Bldg. RB Y⊠ N□ U□ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. • ) Comments (Additional pages may be added as necessary) Donald Koberg Finald Lolay Evaluated by: Pouria Pourghobadi Date: 9/25/12 9/25/12

Attachment [	D Engineering Report No. JAF-RPT-12-0001 Rev. ( Page 98 of 2
ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 026</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>242</u> Room, A	rea <sup>1</sup> Col. 4, Line D, Crescent East 242
SWEL Components: <u>SWEL1- 373, 696</u>	
Instructions for Completing Checklist	· · · · · · · · · · · · · · · · · · ·
This checklist may be used to document the results of the Area space below each of the following questions may be used to re Additional space is provided at the end of this checklist for doc	ecord the results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be potentially adverse seismic conditions (if visible without opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be potentially adverse seismic conditions.	free of
	-
<ol><li>Does anchorage of equipment in the area appear to be significant degraded conditions?</li></ol>	free of YX N UNA
The anchorage of equipment in the area appears to be significant degraded conditions.	free of
3. Based on a visual inspection from the floor, do the cab	
raceways and HVAC ducting appear to be free of poten seismic conditions (e.g., condition of supports is adequ conditions of cable trays appear to be inside acceptabl <i>The cable/conduit raceways and HVAC ducting appear</i> <i>potentially adverse seismic conditions.</i>	ate and fill e limits)?
· ·	

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 99 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 026</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <u>Col. 4, Line I</u>	D, Crescent East 242
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□ U□ N/A□
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	· · ·
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	YX N UN N/A
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	:
·	

		Ū	ng Report No. JAF-RPT-12-00 Re
· · · ·			Page 100
		<u></u>	
ATTACHMENT 9.7	·		AREA WALK-BY CHECKLIS
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC</u>	<u>C- 026</u>		Status: Y⊠ N⊟ U⊟
Location: Bldg. <u>RB</u> Floor El. <u>242</u>	Room, Area <u>C</u>	ol. 4, Line D	, Crescent East 242
8. Have you looked for and found no oth adversely affect the safety functions of No other seismic conditions that coul functions of the equipment in the area	of the equipment in the a d adversely affect the sa	rea?	
· · ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
Comments (Additional pages may be added	l as necessary),		
	• • •		、
Evaluated by: <u>Pouria Pourghobadi</u>	pigte.		Date: <u>9/23/12</u>
Evaluated by: <u>Pouria Pourghobadi</u>	pople. Holy		Date: <u>9/23/12</u> 9/23/12
Evaluated by: <u>Pouria Pourghobadi</u>	pople. Voly		
Evaluated by: <u>Pouria Pourghobadi</u>	χ.		9/23/12
	x		9/23/12
	χ.		9/23/12
	× .		9/23/12
	``````````````````````````````````````		9/23/12
	, ,	•	9/23/12
· · · · · · · · · · · · · · · · · · ·	``````````````````````````````````````	•	9/23/12

ATTACHMENT 9.7		AREA WALK-BY CHE	CKLIST
Sheet 1 of 3		Status: YX N	
Area Walk-By Checklist (AWC) <u>AWC- (</u>	<u></u>		
ocation: Bldg. <u>RB</u> Floor El. <u>227</u>	Room, Area <sup>1</sup> Crescent E	ast RHR Pump	
SWEL Components: <u>SWEL1- 124</u>			
nstructions for Completing Checklist This checklist may be used to document the res space below each of the following questions ma Additional space is provided at the end of this c	ay be used to record the results	of judgments and findings.	he
<ol> <li>Does anchorage of equipment in the are potentially adverse seismic conditions (i opening cabinets)?</li> </ol>			
The anchorage of equipment in the area potentially adverse seismic conditions.	a appears to be free of		
<ol> <li>Does anchorage of equipment in the area significant degraded conditions?</li> <li>The anchorage of equipment in the area significant degraded conditions.</li> </ol>		Y⊠ N⊡ U⊡ N/A⊡	
<ol> <li>Based on a visual inspection from the flaraceways and HVAC ducting appear to seismic conditions (e.g., condition of sup conditions of cable trays appear to be in <i>The cable/conduit raceways and HVAC</i> <i>potentially adverse seismic conditions.</i></li> </ol>	be free of potentially adverse pports is adequate and fill iside acceptable limits)?	Y⊠ N∏ U∏ N/A∏	
<u>;</u>			
,			
		·	
1			
<sup>1</sup> If the room in which the SWEL item is located is ve selected area should be based on judgment, e.g., on t	ry large (e.g., Turbine Hall), the ar	ea selected should be described	l. This

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 102 of 224 AREA WALK-BY CHECKLIST ATTACHMENT 9.7 Sheet 2 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC-027 Location: Bldg. RB Floor El. 227 Room, Area Crescent East RHR Pump 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area. 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area. 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area. 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 103 of 224 ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_AWC- 027 Room, Area Crescent East RHR Pump Location: Bldg. RB Floor El. 227 YX NO UO 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. Comments (Additional pages may be added as necessary) Jadi My Jonald Liky Evaluated by: Pouria Pourghobadi Date: 9/23/12 9/23/12

Engineering Report No. JAF-RPT-1	2-00015
	Rev. 0
Page	104 of 224

ITTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 1 of 3	Status: Y🛛 N 🗌 U
area Walk-By Checklist (AWC) <u>AWC- 028</u>	1
ocation: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area <sup>1</sup> <u>West Cresc</u>	cent
WEL Components: <u>SWEL1-217, 171</u>	
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By near of pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
	• .
	· · · · · · · · · · · · · · · · · · ·
	· ·
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	Y⊠ N∏ U∏ N/A∏
conditions of cable trays appear to be inside acceptable limits)? The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
	. ,

.

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 105 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 028</u>	Status: Y⊠ N⊡ U⊡
ocation: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area	West Crescent
4. Does it appear that the area is free of potentially adverse se spatial interactions with other equipment in the area (e.g., c and lighting)? It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	eiling tiles
5. Does it appear that the area is free of potentially adverse se interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic inte that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse se	eismic Y⊠ N⊡ U⊡ N/A⊡
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area?	۰. ۲
7. Does it appear that the area is free of potentially adverse se interactions associated with housekeeping practices, storag portable equipment, and temporary installations (e.g., scaff shielding)?	ge of
It appears the area is free of potentially adverse seismic int associated with housekeeping practices, storage of portable	teractions le equipment,

ATTACHMENT 9.7	· ·	AREA WALK-BY CHECH	KLIST
Sheet 3 of 3		Status: Y⊠ N⊡ U	 
Area Walk-By Checklist (AWC) <u>AWC- 028</u>			
_ocation: Bldg. <u>RB</u> Floor El. <u>227</u> Room	n, Area <u>West Cresc</u>	cent	
<ol> <li>Have you looked for and found no other seismic cor adversely affect the safety functions of the equipme No other seismic conditions that could adversely aff functions of the equipment in the area were found.</li> </ol>	nt in the area?	YX N U	
	Ĺ		
	· · · · · · · · · · · · · · · · · · ·		·
<u>Comments</u> (Additional pages may be added as necessary	)		
	<b>v</b>		
Evaluated by: <u>Pouria Pourghobadi</u> Rym	• •	Date: <u>9/21/12</u>	
Evaluated by: <u>Pouria Pourghobadi</u>		9/21/12	
	ι.		
		. v	
· · · ·			
		· · ·	
			· ·
	,		

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 107 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
heet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 029</u>	Status: Y⊠_N∏_U[
ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <sup>1</sup> <u>Crescent V</u>	Vest: Col. 4. Line A
WEL Components: <u>SWEL1- 690</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other	s of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	YX N U N/A
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	YX N UN/A
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	Ļ
· · ·	

v

	MENT 9.7						AREA WALK	-BY CHECKLI
Sheet 2 Area V		Checklis	t (AWC)	AWC- 0	29	S	Status: Y区	N U
	n: Bldg.			EI. <u>242</u>	Room, Area <u>Crese</u>	cent West: C	ol. 4, Line A	
		teractions			tentially adverse seismic in the area (e.g., ceiling		N U	N/A
				ootentially a nent in the a	adverse seismic spatial area.			
				!		•		
					tentially adverse seismic spray in the area?	Υ⊠		N/A
				potentially a pray in the	adverse seismic interactio area.	ons		
		P					•	
							,	
				s free of po a fire in the	tentially adverse seismic area?	Y		N/A
		s the area d cause a i			adverse seismic interacti	ons		
			0					
					,			_
7.	interactio	ns associa equipment	ated with h	ousekeepir	tentially adverse seismic ng practices, storage of Illations (e.g., scaffolding	•	] N [] U []	N/AL_I
	associate	s the area ed with hou oorary insta	ısekeepin	potentially a g practices,	adverse seismic interacti , storage of portable equi	ons ipment,		
			·				```````````````````````````````````````	·
		``	·		•			
					· .			• •
		•	,				ı	

ATTACHMENT 9.7	· · ·	AREA WAL	K-BY CHECKL
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC- 029</u>		Status: Y	
Location: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Are	ea <u>Crescent We</u>	est: Col. 4, Line	A
8. Have you looked for and found no other seismic conditio adversely affect the safety functions of the equipment in No other seismic conditions that could adversely affect th functions of the equipment in the area were found.	the area?	Y⊠ N∏ U[	]
Comments (Additional pages may be added as necessary)			
Comments (Auditional pages may be added as necessary)		/	
Donald Koberg		9/25/12	2
· · · · · · · · · · · · · · · · · ·			
		• • •	
		. · ·	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 110 of 224

NTTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 1 OI S	Status: YX N U
Area Walk-By Checklist (AWC) <u>AWC- 030</u>	
ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <sup>1</sup> <u>Col. 1, Line</u>	R
SWEL Components: <u>SWEL1- 372</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	
The anchorage of equipment in the area appears to be free of significant degraded conditions.	. •
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N∏ U∏ N/A∏
The cable/conduit raceways and HVAC ducting appear to be free of	
potentially adverse seismic conditions.	·
	,
	· · · · · · · · · · · · · · · · · · ·

ينونون مسري

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 111 of 224

heet 2 of 3		
rea Walk-By Checklist (AWC) <u>AWC- 030</u>	Status:	Y⊠ N□ U□
ocation: Bldg. <u>RB</u> Floor El. <u>272</u> Room, Area <u>Col. 1, Line</u>	R	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y⊠ N□	U N/A
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.		
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□	U[] N/A[]
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.		
		N N
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠N□	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.		
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> </ol>	Y⊠ N∏	U[] N/A[]
Temporary scaffolding is( log # R20-014) erected in the area. It is near the 90 allowance. Evaluations are to be performed for long-period erection of the scaffolding per EN-MA-133.		、

.

· ·			•		Rev. Page 112 of	
ATTACHMENT 9.7		, ,, , ., ., ., ., ., ., ., ., ., ., ., .,		AREA WALK-	BY CHECKLIST	
Sheet 3 of 3				Status: Y🖂		
Area Walk-By Checkl	list (AWC) <u>AWC</u>	<u>- 030</u>				
ocation: Bldg. <u>RB</u>	Floor El. <u>242</u>	Room, Are	a <u>Col. 1, Line R</u>	)	,	
No other seismic	for and found no oth he safety functions of conditions that could quipment in the area	of the equipment in t d adversely affect th	he area?	Y⊠ N□ U□		
Comments (Additional p	ages may be added	as necessarv)				
	· · · · · · · · · · · · · · · · · · ·	,				
	. ``					
· · · ·			·			
	6					
۱	6					
Evaluated by: <u>Pouria Po</u>	Pp	-jll.		Date: <u>9/25/12</u>		
Evaluated by: <u>Pouria Po</u> Donald Ko	Pp	JU.		Date: <u>9/25/12</u> 9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg <b>Sonald</b> I					
Donald Ko	urghobadi <sup>P</sup> P oberg <b>Ponal</b> el I			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg <b>Ponal</b> el I			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg <b>Yonald</b> I			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg Yonald R			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg Yonald R			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg Yonald R			9/25/12		
Donald Ko	urghobadi <sup>P</sup> P oberg <b>Yonald</b> I			9/25/12		
Donald Ko	urghobadi oberg Yonald I			9/25/12		
Donald Ko	urghobadi oberg Yonald I			9/25/12		
Donald Ko	urghobadi <u>P</u> pberg Yonald <i>I</i>			9/25/12		
Donald Ko	urghobadi <u>P</u> pberg Yonald <i>I</i>			9/25/12		
Donald Ko	urghobadi <u>P</u> pberg Yonald <i>I</i>			9/25/12		

A

.

ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 1 of 4	Status: Y⊠ N∏ U∏
Area Walk-By Checklist (AWC) <u>AWC- 031</u>	
Location: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area <sup>1</sup> <u>Col. 3, Lin</u>	e P. RCIC Pump Room
SWEL Components: <u>SWEL1- 166</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result Additional space is provided at the end of this checklist for documenting other	s of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
	. 1
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□.
See comments.	

•

•

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 114 of 224

	MENT 9.7			··· ,	· · · · · · · · · · · · · · · · · · ·		AREA W	ALK-BY CHECKL
Sheet 2		<b>.</b>			. 1		Status:	
Area M	/alk-By	Checklis	t (AWC)	AWC- 0	<u>31_</u>	1		
ocatio	n: Bldg.	<u>RB</u>	Floor El	227	Room, Area	Col. 3, Line F	P, RCIC Pum	Room
:		teractions ng)?			entially adverse se in the area (e.g., c		Y⊠N∏ U	
					,			
					entially adverse sepray in the area?	eismic	Y⊠ N∏ (	
	Sprinkler	system in	the area is a	adequatel	y supported.			
•								
					•			
	interactic	ons that co	uld cause a	fire in the			Y⊠ N⊟ l	J] N/A[_]
			is free of po fire in the ar		dverse seismic inte	eractions		
								· 2
	interactio	ons associ equipmen	ated with hou	usekeepin	entially adverse se g practices, storag lations (e.g., scaff	je of	Y⊠ N∏ I	J N/A
	-	ary scaffold	ling is prese	nt and we	ll secured. Tempo	erary tools		
	-	1						
						•		
				• •				
		,						
					•			

ATTACHMENT 9.7			4	AR	EA WALK-E	Y CHECKLIS
Sheet 3 of 4 Area Walk-By Checklist	(AWC) AWC	- 031		Stat	us: Y🛛	
Location: Bldg. <u>RB</u>	Floor El. 227		<u>Col. 3, Line</u>	P. RCIC	Pump Roo	 m
8. Have you looked for adversely affect the s	and found no oth	er seismic condition	s that could			
No other seismic con functions of the equi	ditions that could	d adversely affect the				(
· ·						
Comments (Additional page	es may be added	as necessary)			:	
• •		pported approximate ding from elevations				
support on the ve interaction. The turbine exhaust have been in con on the pipe insula	rtical span exten pipe is supported tact with conduit titon. The indent mic interaction. T c movement of ti	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line.	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the	verse seisi or and app ch has crea conduit is	nic ears to ated a dent
support on the ve interaction. The turbine exhaust have been in con on the pipe insula and adverse seis expansion/seismi The site personnel w	rtical span exten pipe is supported tact with conduit tion. The indent mic interaction. T c movement of th rere notified of th <i>P M</i>	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line.	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the ch limits i	verse seisi or and app ch has crea conduit is hermal	nic ears to ated a dent
support on the ve interaction. The turbine exhaust have been in con on the pipe insula and adverse seis expansion/seismi The site personnel w	rtical span exten pipe is supported tact with conduit tition. The indent mic interaction. T c movement of ti rere notified of th hobadi	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line. e conditions immedia	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the ch limits i	verse seisi or and app ch has crea conduit is hermal <u>9/24/12</u>	nic ears to ated a dent
support on the ve interaction. The turbine exhaust have been in con on the pipe insula and adverse seis expansion/seismi The site personnel w	rtical span exten pipe is supported tact with conduit tion. The indent mic interaction. T c movement of th rere notified of th <i>P M</i>	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line. e conditions immedia	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the ch limits i	verse seisi or and app ch has crea conduit is hermal	nic ears to ated a dent
support on the ve interaction. The turbine exhaust have been in con on the pipe insula and adverse seis expansion/seismi The site personnel w	rtical span exten pipe is supported tact with conduit tition. The indent mic interaction. T c movement of ti rere notified of th hobadi	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line. e conditions immedia	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the ch limits i	verse seisi or and app ch has crea conduit is hermal <u>9/24/12</u>	nic ears to ated a dent
support on the ve interaction. The turbine exhaust have been in con on the pipe insula and adverse seis expansion/seismi The site personnel w	rtical span exten pipe is supported tact with conduit tition. The indent mic interaction. T c movement of ti rere notified of th hobadi	ding from elevations d at approximately 40 1CC594RU3, 9 feet ation on the pipe ins The pipe support is P he RCIC line. e conditions immedia	227' to 242'. N ) inches above above the sup ulation is mino FSK-1963 whi	lot an ad room flo port, whic r and the ch limits i	verse seisi or and app ch has crea conduit is hermal <u>9/24/12</u>	nic ears to ated a dent

`

· · •

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 116 of 224

## ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST** Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC-031 Location: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area Col. 3, Line P, RCIC Pump Room SWEL Components: SWEL1- 166 Photographs Note: Unsupported vertical pipes and Note: pipe/conduit interaction point.

TTACHMENT 9.7		Δpc	A WALK-BY CHECK	119
heet 1 of 3				
		Statu	s: Y⊠ N∏ U[	
rea Walk-By Checklist (AWC) <u>AWC-</u>	<u>U32</u>			
ocation: Bldg. <u>RB</u> Floor El. <u>227</u>	Room, Area¹ <u>Col</u>	. 3, Line A, RHR Pı	IMP	•
WEL Components: <u>SWEL1- 123, 171</u>		· · · · · · · · · · · · · · · · · · ·		
structions for Completing Checklist				
his checklist may be used to document the response below each of the following questions madditional space is provided at the end of this c	ay be used to record the	results of judgmen		;
<ol> <li>Does anchorage of equipment in the are potentially adverse seismic conditions (i opening cabinets)?</li> </ol>			U N/A	
The anchorage of equipment in the area potentially adverse seismic conditions.	a appears to be free of			)
· · · · · · · · · · · · · · · · · · ·				
<ol><li>Does anchorage of equipment in the are significant degraded conditions?</li></ol>	ea appear to be free of	YX N		
The anchorage of equipment in the area significant degraded conditions.	a appears to be free of			
			`	
<ol> <li>Based on a visual inspection from the flaraceways and HVAC ducting appear to seismic conditions (e.g., condition of su conditions of cable trays appear to be in</li> </ol>	be free of potentially ad pports is adequate and side acceptable limits)?	verse fill	] U[] N/A[]	
The cable/conduit raceways and HVAC potentially adverse seismic conditions.	ducting appear to be fro	ee of		
	,			

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

•

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 118 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 2 of 3	Status: YX N
Area Walk-By Checklist (AWC) <u>AWC- 032</u>	
_ocation: Bldg. <u>RB</u> Floor El. <u>227</u> Room, Area <u>Col. 3, Lin</u>	ne A, RHR Pump
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
and the second	
· · ·	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
	· · ·
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N∏ U∏ N/A∏ t
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipmen and temporary installations.	nt,

			Pa	Re age 119
ATTACHMENT 9.7		AR	EA WALK-BY C	HECKLIS
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC-</u>	032	Sta	tus: Y⊠ N	) U
Location: Bldg. <u>RB</u> Floor El. <u>227</u>	Room, Area <u>Col.</u>	3, Line A, RHR I	Pump	
8. Have you looked for and found no othe adversely affect the safety functions of No other seismic conditions that could functions of the equipment in the area	the equipment in the area adversely affect the safet	a?		
	· . · · ·			
Comments (Additional pages may be added a	as necessary)			
Evaluated by: <u>Pouria Pourghobadi</u>	-phi	Date:	9/24/12	
Evaluated by: <u>Pouria Pourghobadi</u>	hty		9/24/12	
· · · · · · · · · · · · · · · · · · ·		· .		
· · · · · · · · · · · · · · · · · · ·				

.

. .

ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 1 of 4 Area Walk-By Checklist (AWC) <u>AWC- 033</u>	Status: YX N U
ocation: Bldg. <u>RR</u> Floor El. <u>284'8"</u> Room, Area <sup>1</sup> <u>Relay F</u>	Room Col. 9-11, Line F-G
SWEL Components: <u>SWEL1- 053, 056, 445, 457</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By ne space below each of the following questions may be used to record the result of the space is provided at the end of this checklist for documenting ot	sults of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
	``````````````````````````````````````
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
The anchorage of equipment in the area appears to be free of significant degraded conditions.	
· .	
·	· · ·
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially advers seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N⊡ U⊡ N/A⊡ se
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	f

·.

, <sup>\</sup>

.

· · ·

; .

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 121 of 224

TTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 2 of 4	Status: Y⊠ N∏ U∏
rea Walk-By Checklist (AWC) <u>AWC- 033</u>	
ocation: Bldg. <u>RR</u> Floor El. <u>284'8"</u> Room, Area <u>Relay Room</u>	Col. 9-11, Line F-G
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
	· ·
<ol><li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of</li></ol>	
portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	·
	. <u> </u>
	· · · · ·

	Re Page 122 d
ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC- 033</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RR</u> Floor El. <u>284'8</u> Room, Area <u>Relay Roo</u>	m Col. 9-11, Line F-G
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.	
	:
	-
Comments (Additional pages may be added as necessary)	
	· · · · · · · · · · · · · · · · · · ·
Evaluated by: <u>Pouria Pourghobadi</u>	Date: <u>9/24/12</u>
Donald Koberg Finald Thy	9/24/12

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 123 of 224

ATTACHMENT 9.7						AREA V	VALK-BY	CHECKL
Sheet 4 of 4				ndan oʻshindina noʻsyni oʻni sashar L		Status		
Area Walk-By	Checklist	(AWC)	AWC- 033	22		otatus.		
Location: Bldg.	RR	_ Floor El.	<u>242'8"</u>	_ Room, Area	Control Roon	n Ventilation	Exhaust	Fan A
SWEL Compo	onents: <u>SW</u>	EL1- 053,	056, 445,	457				
Photographs		si s	:					
Note: $CO_2$ Spr	inkler Syste	em.		Note:				

	Attachment D	Engineering Report No. J	AF-RPT-12-000 Rev Page 124 o
			. ugo .2. o
ATTACHMENT 9.7	······································	AREA WALK	-BY CHECKLIST
Sheet 1 of 4 Area Walk-By Checklist (AWC) <u>AWC- (</u>	034	Status: Y⊠	] N□ U□
Location: Bldg. <u>SG</u> Floor El. <u>272</u>	Room, Area¹ <u>St</u>	andby Gas, Col. 1, Line Y	
SWEL Components: <u>SWEL1- 001</u>		······································	
Instructions for Completing Checklist This checklist may be used to document the res space below each of the following questions ma Additional space is provided at the end of this c	ay be used to record th	e results of judgments and	
<ol> <li>Does anchorage of equipment in the are potentially adverse seismic conditions (if opening cabinets)?</li> </ol>			N/A
The anchorage of equipment in the area potentially adverse seismic conditions.	a appears to be free of		
<ol> <li>Does anchorage of equipment in the are significant degraded conditions?</li> <li>The anchorage of equipment in the area</li> </ol>			N/A
significant degraded conditions.			
•			
<ol> <li>Based on a visual inspection from the flor raceways and HVAC ducting appear to seismic conditions (e.g., condition of sup conditions of cable trays appear to be in</li> </ol>	be free of potentially a pports is adequate and	dverse I fill	N/A
Three pipes (two of which are copper pi above the valve. The unsupported leng present a significant support issue. In a likely to fail, based on engineering judgr connections are soldered. The collapse	th does appear long e seismic event, the pip ment and the fact that	nough to es are the	
(made of steel) will not result in damage industrial safety issue and not an advers personnel were notified immediately			
<sup>1</sup> If the room in which the SWEL item is located is ve selected area should be based on judgment, e.g., on t	ery large (e.g., Turbine Ha the order of about 35 feet	all), the area selected should be from the SWEL item.	described. This
selected area should be based on judgment, e.g., on t	the order of about 35 feet	from the SWEL item.	

•

## Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 125 of 224

ATTACHMENT 9.7	AREA W	ALK-BY CH	ECKLI
Sheet 2 of 4 Area Walk-By Checklist (AWC) <u>AWC- 034</u>	Status:	Y⊠ N□	υ
_ocation: Bldg. <u>SG</u> Floor El. <u>272</u> Room, Area <u>Standby Gas,</u>	Col. 1, Line	9 Y	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y⊠ N□	U[] N/A[]	
It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.			
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? It appears the area is free of potentially adverse seismic interactions	YX N	U[] N/A[]	·
that could cause flooding or spray in the area.			,
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears the area is free of potentially adverse seismic interactions that each a fire in the area	Y⊠ N∏	U N/A	
that could cause a fire in the area.	:	÷ .	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N⊡	U[] N/A[]	
It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.		•	
			-

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 126 of 224

				· · · · · · · · · · · · · · · · · · ·			A WALK-		
Sheet 3 of 4 Area Walk-By (	Checklist (A	WC)	AWC-	034		Stat	us:Y🛛	N	υĽ
Location: Bldg.		Floor El.			<u>Standby Ga</u>	as, Col. 1,	Line Y	<u> </u>	
				seismic condition		YX N			
•		•		he equipment in the dversely affect the					
	of the equipm				salely	,			
		, ,							
<u>Comments (</u> Addi	tional pages	may be a	added a	s necessary)	. •				
					·				
·						Y	-	:	
,		·							
	•	1. Jl	m	yv _	· .		0/05/40		
Evaluated by: <u>Por</u>	uria Pourgho		<i>.</i> <i>.</i> <i>.</i> <i>.</i> <i>.</i>			Date:	9/25/12		
Evaluated by: <u>Por</u> Do	u <u>ria Pourgho</u> nald Koberg`	J.met	le za	In	.,		<u>9/25/12</u> 9/25/12		
Evaluated by: <u>Por</u>	u <u>ria Pourgho</u> nald Koberg`	9 met	102 Z	In	· · ·				
Evaluated by: <u>Por</u>	u <u>ria Pourgho</u> nald Koberg`	9 met	IS 24	Im	.,				
Evaluated by: <u>Por</u>	u <u>ria Pourgho</u> nald Koberg`	9 met	12 24	/ Ang	.,				
Do	nald Koberg`	Sonal				4	9/25/12		
Do	nald Koberg`	Sonal				4	9/25/12		
Do	nald Koberg`	Gonal	:		·, }	4 4 2	9/25/12		
Do	nald Koberg`	9 met					<b>9/25/12</b>		
Do	nald Koberg`	9 met					<b>9/25/12</b>		
Do	nald Koberg`	9 met					<b>9/25/12</b>		
Do	nald Koberg`	9 met				40	9/25/12		
Do	nald Koberg`	Jonal					9/25/12		
Do	nald Koberg`	Jonal	· ·	Γ.		44 - 19 44 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	9/25/12		
· · · · · · · · · · · · · · · · · · ·	nald Koberg`	Jonal	· ·			44 - 19 44 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	9/25/12		

 Attachment D
 Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 127 of 224

 ATTACHMENT 9.7
 AREA WALK-BY CHECKLIST

 Sheet 4 of 4
 Status: YM NU

 Area Walk-By Checklist (AWC) \_ AWC- 034
 Status: YM NU

 Location: Bldg. SG
 Floor El. 272
 Room, Area <u>Standby Gas, Col. 1, Line Y</u>

 SWEL Components: <u>SWEL1- 001</u>
 Photographs

Note: Unsupported Pipe Spans

Note:

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 128 of 224 Attachment D

ATTACHMENT 9.7	AREA WALK-BY CHECKL
iheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC- 035</u>	Status: Y⊠ N∏ U⊡
ocation: Bldg. <u>S7</u> Floor El. <u>252'</u> Room, Area¹ <u>S7 252'</u>	
SWEL Components: <u>SWEL1- 335, 347</u>	······································
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or pace below each of the following questions may be used to record the results of additional space is provided at the end of this checklist for documenting other co	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.	
	,
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	Y⊠ N□ U□ N/A□
The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.	
	(
	5 S

## Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 129 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECK
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 035</u>	Status: Y⊠ N⊡ U
Location: Bldg. <u>ST</u> Floor El. <u>252'</u> Room, Area <u>ST 252'</u>	
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.</li> </ul>	YX NI UI N/AI
х	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.	Y⊠ N□ U□ N/A□
6. Does it appear that the area is free of potentially adverse seismic	
It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area? It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.	
	· ·
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.	
	:

				AREA WALK-BY CH	IECKLIST
Sheet 3 of 3				Status: Y🛛 N	٤I
Area Walk-By Checklist	(AWC) <u>AWC- (</u>	035			
Location: Bldg. <u>ST</u>	_ Floor El. <u>252'</u>	Room, Area	ST 252'		
8. Have you looked for a adversely affect the s No other seismic con	afety functions of t ditions that could a	he equipment in the dversely affect the s	area?	YM NO UO	
functions of the equip	ment in the area w	vere touna.			
Comments (Additional page	s may be added as	s necessary)			
No additional comme		,			
	١	,			
		×			
	219 01			· · ·	
Evaluated by: <u>Harpreet Ghui</u>	man AO-ZA	~~ <u>~</u>		Date: <u>10/01/2012</u>	
	man 148 Al	sec-			
Yaroslav Lose	IV	· · · · · · · · · · · · · · · · · · ·		10/01/2012	
		č			
				· .	
				,	
				,	
				,	
				,	
· · ·		,		,	
· · · ·				,	
• • • • •				,	

•

	Attachment D	Engineering Report No. JAF-RPT-12- F Page 13
ATTACHMENT 9.7	an a	AREA WALK-BY CHECKL
Sheet 1 of 4		
Area Walk-By Checklist (AWC) <u>AWC-03</u>	6	Status: Y⊠ N⊟ U⊑
Location: Bldg. <u>RB</u> Floor El. <u>300</u>	Room, Area <u>Co</u>	I. 2 Line R
SWEL Components: SWEL1-438, 462		
Instructions for Completing Checklist		· · · · · · · · · · · · · · · · · · ·
This checklist may be used to document the resu space below each of the following questions may Additional space is provided at the end of this ch	y be used to record the	e results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area potentially adverse seismic conditions (if opening cabinets)?</li> </ol>		Y⊠ N⊡ U⊡ N/A⊡ arily
anna a stàite ann an t-ann an		
	•	
2. Does anchorage of equipment in the area significant degraded conditions?	appear to be free of	Y⊠ N□ U□ N/A□
<ol> <li>Based on a visual inspection from the floor raceways and HVAC ducting appear to be seismic conditions (e.g., condition of supp conditions of cable trays appear to be inspectively.</li> </ol>	e free of potentially ac ports is adequate and	lverse fill
1		
	· ·	
		•
		ι,

X

1

,

· · ·

•

Attachment D Engine

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 132 of 224

Sheet 2 of 4       Status: Y⊠ N□ U□         Area Walk-By Checklist (AWC) _AWC-036	ATTACHMENT 9	7				AREAV	VALK-BY CH	ECKLIS
.ocation: Bldg. <u>RB</u> Floor El. <u>300</u> Room, Area <u>Col. 2 Line R</u> 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?       Y⊠ N□ U□ N/A□         5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?       Y⊠ N□ U□ N/A□         6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?       Y⊠ N□ U□ N/A□         7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead       Y⊠ N□ U□ N/A□	Sheet 2 of 4	Chacklist (AM)				Status:	Y⊠ N□	υ
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>		· · · · ·			Col. 2 Line R			
<ul> <li>interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>	4. Does it spatial	appear that the are nteractions with oth	a is free of poter	ntially adverse se	eismic	YX N		
<ul> <li>interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>	•	х		• •				Χ.
<ul> <li>interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>						. ,		
<ul> <li>interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>						Y⊠ .N□	U N/A	
<ul> <li>interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>						·		
<ul> <li>interactions that could cause a fire in the area?</li> <li>7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ul>								
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead					eismic	Y⊠N□	U[] N/A[]	
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead					•			
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead								
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead								
	interact	ions associated wit	h housekeeping	practices, storag	ge of	Y⊠N□	U N/A	
· · · · · · · · · · · · · · · · · · ·				110115 (ç.g., 50411	olding, icad			<b>、</b>
								-

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 133 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 3 of 4 Status: YX N U Area Walk-By Checklist (AWC) <u>AWC-036</u> Room, Area Col. 2 Line R Location: Bldg. RB Floor El. 300 YX N U 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? There is a 2" DIA. DWBA (DW Breaking Air) copper line that is being hung with other lines whose U-bolt is loose. The adjacent (upstream and downstream) supports are secured and there is no possibility of line becoming free or overstressed. Support is approximately 87' above 292' , 1'-6" north and 2' west of 66HV-3B. \* Ref. Col line W1). WR# 289378 is written to tighten nuts on 2" DIA. U-bolt. Comments (Additional pages may be added as necessary) There is a light fixture hung with 2 chains( one on each end) above 1/2" tubing from gas cylinder labeled flammable; both chains/hooks would need to fail to have fixture fall on tubing-not credible seismic condition. Evaluated by: AI G. Porch Date: 10/31/12 C. Sawatzke 10/31/12 14 (T

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 134 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC-036 Location: Bldg. RB Room, Area Col. 2 Line R Floor El. 300 SWEL Components: SWEL1-438, 462 Photographs 00 ... Note: Light fixture above 1/4" tubing from the Note: Light fixture above 1/4" tubing from the gas tanks gas tanks

	Page 135 c
ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC- 037</u>	Status: Y⊠ N⊟ U⊟
ocation: Bldg. <u>CR</u> Floor El. <u>300</u> Room, Area <u>10F</u>	· · · · · · · · · · · · · · · · · · ·
SWEL Components: <u>SWEL1- 052</u>	· · · · · · · · · · · · · · · · · · ·
nstructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result	
Additional space is provided at the end of this checklist for documenting other	
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	Y N N U N/A
	,
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
	<i>\</i>
	· ·
ì	

.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 136 of 224

	AREA WALK-BY CHECKL
sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 037</u>	Status: Y⊠ N∏ U匚
ocation: Bldg. <u>CR</u> Floor El. <u>300</u> Room, Area <u>10F</u>	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
· · · · · · · · · · · · · · · · · · ·	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
·	<i>r</i>
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N∏ U∏ N/A∏
<ol><li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of</li></ol>	
portable equipment, and temporary installations (e.g., scaffolding, lead	
shielding)?	
shielding)?	
shielding)?	· · · · · · · · · · · · · · · · · · ·
shielding)?	
shielding)?	
shielding)?	
shielding)?	· · · · · · · · · · · · · · · · · · ·
shielding)?	

ATTACHMENT 9.7       AREA WALK-BY CHECKLIST         Sheet 3 of 3       Status: Y⊠ N□ U□         Area Walk-By Checklist (AWC) _AWC- 037_			
Sheet 3 of 3       Status: Y N U         Area Walk-By Checklist (AWC) <u>AWC-037</u> Location: Bldg. <u>CR</u> Floor El. <u>300</u> Room, Area <u>10F</u> 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?         8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?         Comments (Additional pages may be added as necessary)         3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.         Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u> A. C. J. J. C. J. J. J. C. J.			
Area Walk-By Checklist (AWC) _AWC- 037			AREA WALK-BY CHECKLIST
Area Walk-By Checklist (AWC) <u>AWC- 037</u> Location: Bldg. <u>CR</u> Floor El. <u>300</u> Room, Area <u>10F</u> 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y N U         8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y N U         6. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y N U         6. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y N U         6. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y N U         6. Additional pages may be added as necessary)       3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.         Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u> A. C. J. C. J. L.	Sheet 3 of 3		Status: VM ND UD
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y⊠ N□ U□         Comments (Additional pages may be added as necessary)       3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.         Evaluated by: Rick Casella       Date: 9-28-12         Date: 9-28-12       Date: 9-28-12	Area Walk-By Checklist (AWC) <u>AWC</u>	<u>- 037</u>	
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?       Y⊠ N□ U□         Comments (Additional pages may be added as necessary)       3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.         Evaluated by: Rick Casella       Date: 9-28-12         Date: 9-28-12       Date: 9-28-12	Location: Bldg CR Eloor EL 300	Room Area 10F	
adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary)         3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.         Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u> A.C., Date: <u>9-28-12</u>			
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.			
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.			
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.			
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.			
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.		•	
3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.			
channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.	<u>Comments</u> (Additional pages may be added	as necessary)	· · ·
to this deficiency is tracked through CR-JAF-2012-06495. Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>			
LC, Date: 9-28-12			charge piping). The resolution
Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>			
Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>			í
Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>			
Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>			•
Evaluated by: <u>Rick Casella</u> Date: <u>9-28-12</u>	DAC	$\mathcal{D} = \mathcal{D} \mathcal{D}$	•
AC, Danch	Evaluated by: Rick Casella	, aserla	Date: <u>9-28-12</u>
Alan Porch 9-28-12	<b>.</b>	•	
Alan Porch		<b>∫</b> °:	
<u>Alan Porch</u> <u>9-28-12</u>		and	
	<u>Alan Porch</u>	· · ·	<u> </u>
		,	
		,	
		,	· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
		, , ,	
		, , ,	
		· · · · · ·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 138 of 224

	AREA WALK-BY CHECKLI
Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC- 038</u>	Status: Y🛛 N🗌 U
Location: Bldg. <u>BR-1</u> Floor El. <u>272</u> Room, Area	
SWEL Components: <u>SWEL1- 448, 450</u>	<u> </u>
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By nea space below each of the following questions may be used to record the resu Additional space is provided at the end of this checklist for documenting othe	Its of judgments and findings.
1. Does anchorage of equipment in the area appear to be free of	
potentially adverse seismic conditions (if visible without necessarily	
opening cabinets)?	
· · ·	
2. Does anchorage of equipment in the area appear to be free of	Ŷ⊠ N□ U□ N/A□
significant degraded conditions?	
,	
2. Read on a viewal increation from the floor, do the coble/conduit	
<ol> <li>Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse</li> </ol>	Y⊠ N□ U□ N/A□.
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	

.

TTACHMENT 9.7	AREA WALK-BY CHECKLIS
heet 2 of 5	Status: Y⊠ N⊡ U⊡
rea Walk-By Checklist (AWC) <u>AWC- 038</u>	
ocation: Bldg. <u>BR-1</u> Floor El. <u>272</u> Room, Area	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tile and lighting)?	Y⊠ N□ U□ N/A□ s
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y N N U N/A <sub>^</sub>
	,
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
x ·	
7. Does it appear that the area is free of potentially adverse seismic	
interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, le	ş
shielding)?	
·	
· ·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 140 of 224

		AREA WALK-BY CHECKL
Sheet 3 of 5		Status: YX N U
Area Walk-By Check	dist (AWC) <u>AWC- 038</u>	
ocation: Bldg. <u>BR-1</u>	Floor El. <u>272</u> Room, Area	· · · · · · · · · · · · · · · · · · ·
	for and found no other seismic conditions that cout the safety functions of the equipment in the area?	
	·	
Comments (Additional	pages may be added as necessary)	
	268N and 1TX256N appear to be close to capacity	All cables are within the tray I.E.
No over-hang	g and were well supported. No seismic concern.	
/		
· ·	· · · · · · · · · · · · · · · · · · ·	
Evaluated by: <u>R Casella</u>	Rich Caulla	Date: <u>10-30-12</u>
A Porch	AC, Danch	10.00.10
		10-30-12
	······································	<u>10-30-12</u>
		<u>10-30-12</u>
· · ·		<u>10-30-12</u>
		<u>10-30-12</u>
		<u>10-30-12</u>
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		· · ·
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 141 of 224

# ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 5 Status: YX N U Area Walk-By Checklist (AWC) AWC-038 Location: Bldg. BR-1 Floor El. 272 Room, Area SWEL Components: SWEL1- 448, 450 Photographs Note: Cable trays Note: Cable trays

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 142 of 224

# ATTACHMENT 9.7

Sheet 5 of 5

AREA WALK-BY CHECKLIST

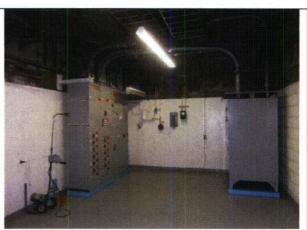
Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. <u>BR-1</u> Floor El. <u>272</u> Room, Area

SWEL Components: SWEL1- 448, 450



Note: Cable trays



Note:

-039	Area V	Page 143 o VALK-BY CHECKLIST
-030	AREAV	
-039		TALK-BI CHECKLIST
-000	Status:	Y⊠ N∏ U∏
Room, Area¹ <u>Co</u>	A1 Line 18.5	
	· · ·	· ·
may be used to record the	e results of judgments	
		U N/A
		· · · · · · · · · · · · · · · · · · ·
· ·		
area appear to be free of	Y⊠ N□	
	m(s),	· · ·
		N
to be free of potentially ac supports is adequate and inside acceptable limits) AC ducting appear to be fi	lverse fill ?	U N/A
	results of the Area Walk-E may be used to record the s checklist for documentin area appear to be free of (if visible without necess rea appears to be free of s. area appear to be free of rea, around the SWEL iter raded conditions.	results of the Area Walk-By near one or more S <sup>1</sup> may be used to record the results of judgments is checklist for documenting other comments. Area appear to be free of $Y \boxtimes N \square$ is (if visible without necessarily rea appears to be free of S <sup>1</sup> . Area appear to be free of $Y \boxtimes N \square$ rea, around the SWEL item(s), areaded conditions. In floor, do the cable/conduit to be free of potentially adverse supports is adequate and fill inside acceptable limits)? AC ducting appear to be free of

<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

1

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 144 of 224

				AREA WALK-BY CHE	CKLI
heet 2 of 3 Area Walk-By Che	ecklist (AWC) <u>AV</u>	<u>/C-039</u>		Status: Y⊠ N∏ I	υ
ocation: Bldg. <u>EB</u>	Floor El. 27	72' Room, Ar	ea <u>Col A1 Line 18</u> .	5	
spatial interact and lighting)?		ment in the area (e.c	I., ceiling tiles		
	it the area is free of po with other equipment in		smic spatial	(	
•					
interactions th	ar that the area is free nat could cause floodir	ng or spray in the are	a?		
	it the area is free of po nat could cause floodir			(	
interactions the It appears the	ar that the area is free hat could cause a fire i hat the area is free of po hat could cause a fire i	n the area? tentially adverse set		⊠ N∏ U∏ N/A∏	
interactions a	ar that the area is free ssociated with housek pment, and temporary	eeping practices, sto	orage of	∕⊠ N□ U□ N/A□	
	· .				
	• • • •		· ·		
				۰ ۰	
,			•		

Engineering Report No. JAF-RPT-12-00015 Attachment D Rev. 0 Page 145 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC-039 Location: Bldg. EB Floor El. 272' Room, Area Col A1 Line 18.5 YX NI UI 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found. Comments (Additional pages may be added as necessary) No additional comments. 748.2m Evaluated by: Harpreet Ghuman Date: 09/28/2012 09/28/2012 Yaroslav Losev

Attach	ment	D
--------	------	---

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 146 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECK
Sheet 1 of 3	
	Status: Y🛛 N🗌 U[
Area Walk-By Checklist (AWC) <u>AWC-040</u>	· · · · · · · · · · · · · · · · · · ·
Location: Bldg. <u>W. EB</u> Floor El. <u>272</u> Room, Area <u>Col. A1 Li</u>	ne 18
SWEL Components: SWEL1-487	
SWEE Components.	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result Additional space is provided at the end of this checklist for documenting other	s of judgments and findings.
1. Does anchorage of equipment in the area appear to be free of	
potentially adverse seismic conditions (if visible without necessarily	
opening cabinets)?	
٠.	
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	YX NQ UNAD
	- · · · · ·
3. Based on a visual inspection from the floor, do the cable/conduit	
raceways and HVAC ducting appear to be free of potentially adverse	
seismic conditions (e.g., condition of supports is adequate and fill	. ,
conditions of cable trays appear to be inside acceptable limits)?	
,	
·	J
	·
	,
	•

.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 147 of 224

Sheet 2	MENT 9.7		•	. · · · · ·				-BY CHECKLI
		Checklis	t (AWC)	AWC-04	<u>0</u>		Status: Y	] N UU
ocation	n: Bldg.	W. EB	Floor El.	272	Room, Are	a <u>Col. A1 Line</u>	18	
. s		teractions v			entially adverse n the area (e.g		Y⊠ N⊡ U⊡	N/A
						•		
					entially adverse pray in the are		YX N U	N/A
	•							
6. [ ii	Does it a nteractic	ppear that ns that cou	the area is f Ild cause a f	ree of pote fire in the a	entially adverse area?	e seismic	Y⊠ N⊡ U⊡	N/A
iı F	nteractic	ns associa equipment,	ted with hoι	isekeepin	entially adverse g practices, sto lations (e.g., sc	rage of	Y⊠ N⊟ U⊟	<b>N/A</b>
			,					
,								<u> </u>
						× .		

Attachment D	Engineering Report No. JAF-RPT-12-00015
	Rev. 0
	Page 148 of 224
,	

ATTACHMENT 9.7				ARE	A WALK-	BY CHEC	:KL
Sheet 3 of 3		· .		Statu	ıs: Y⊠	N	_ار
Area Walk-By Checklis	t (AWC) <u>AWC-04</u>	0					
Location: Bldg. <u>W. EB</u>	Floor El. <u>272</u>	Room, Area	Col. A1 Line	18	· · · · · ·		
8. Have you looked fo adversely affect the	r and found no other se safety functions of the			YX N			
					1		
Comments (Additional page	ges may be added as r	necessary)					
· · ·							
· · ·							
•							
			· .				
Evaluated by: <u>AI G. Porch.</u>	A.C. Danch	Ninessed.		Date	11/1/12		
Evaluated by: <u>Arc. Porch</u>	· · ·			_ Dute.	<u>, 17 17 1 C</u>		
<u>C. Sawatzke</u>	1. Sawatta						
	6	<u> </u>		_			
	·······				11/1/12		
	· .						
		·					
				\$			

Attachment D Eng

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 149 of 224

Sheet 1 of 3       Status: Y⊠ N□ L         Area Walk-By Checklist (AWC) _AWC-041	ATTACHMENT 9.7	AREA WALK-BY CHECKL
Area Walk-By Checklist (AWC)	Sheet 1 of 3	
SWEL Components: SWEL1- 439         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y⊠ N□ U□ N/A□ N/A□         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic condition of supports is adequate and fill       Y⊠ N□ U□ N/A□	Area Walk-By Checklist (AWC) <u>AWC-041</u>	Status: YX N U
Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y⊠ N□ U□ N/A□ V□ N/A□         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill.       Y⊠ N□ U□ N/A□	Location: Bldg. <u>RB</u> Floor El. <u>300</u> Room, Area <sup>1</sup> <u>Col. 6 line l</u>	२
<ul> <li>This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.</li> <li>1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic condition of supports is adequate and fill.</li> </ul>	SWEL Components: <u>SWEL1- 439</u>	
<ul> <li>space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.</li> <li>1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	Instructions for Completing Checklist	
potentially adverse seismic conditions (if visible without necessarily opening cabinets)?         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill       Y⊠ N□ U□ N/A□	space below each of the following questions may be used to record the results	of judgments and findings.
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	potentially adverse seismic conditions (if visible without necessarily	Y⊠ N□ U□ N/A□
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>		
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>		· · · · ·
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>		
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>		
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill		Y⊠ N∏ U∏ N/A∏
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill		
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill		
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill		
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill		
	raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
		ب
		•
	· · · · · · · · · · · · · · · · · · ·	
<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.	<sup>1</sup> If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the are selected area should be based on judgment, e.g., on the order of about 35 feet from the selected area should be based on judgment.	ea selected should be described. Th SWEL item.

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 150 of 224

	MENT 9.7						AREA V	VALK-BY CHECKL
Sheet 2		Cheelell-			4 · · ·		Status:	
			t (AWC) _			Col 6 Line R		
4.		ppear that teractions ng)?	the area is	free of pote	entially adverse n the area (e.g.,	seismic		UN/A
-		mento						
							•	
					entially adverse pray in the area		Y⊠ N□	U[] N/A[]
			۱. 					
	·							· · · ·
6.	Does it a interactio	ppear that ons that co	the area is uld cause a	free of pote	entially adverse area?	seismic	Y⊠N□	
	See com	ments			· ·			
	.:	· •						
_	_			· · ·		, 		
	interaction portable shielding	ons associa equipmen )?	ated with ho t, and temp	ousekeepin orary instal	entially adverse g practices, stor lations (e.g., sca	age of iffolding, lead		UN/A
						•		
	1				, .			
			<u>-</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-				
		,						
•	· ·				• .			

•

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 151 of 224

ATTACHMENT 9.7	•					AREA WALK-BY CHECKL
Sheet 3 of 3 Area Walk-By	Checklis	t (AWC)	<u>AWC-</u> 041			Status: Y⊠ N⊡ U⊡
_ocation: Bldg.		Floor El.		Room, Area	Col 6 line R	
				ismic conditions equipment in the		YX NI UI
	۰ ۰		,			5.
Comments (Add	ditional pag	es may be a	added as n	ecessary)	· · · ·	
flamm		chains would				to gas cylinders labeled nto the tubing. This is not a
				•		
		C. Da	-ch_			
Evaluated by: <u>A</u>	Porch	٦.		,		_ Date: <u>10-31-12</u>
<u>C</u>	Sawatzke	1. Sau	afre	Manifamorpu.		- 10-31-12
	,					
					, ,	

: · ·	Attachment D	Engineering Report No.	Pag
		ı	i ag
ATTACHMENT 9.7		AREA WA	LK-BY CHE
Sheet 1 of 4		Status: Y	
Area Walk-By Checklist (AWC) <u>AWC</u> -	042	Status. T	
Location: Bldg. <u>RB</u> Floor El. <u>272</u>	Room, Area <u>Co</u>	ol. 1.5 Line W	
SWEL Components: SWEL1-481			
Instructions for Completing Checklist		· ·	<u>.</u>
This checklist may be used to document the respace below each of the following questions manual space is provided at the end of this	nay be used to record th	ne results of judgments an	EL items. d findings
<ol> <li>Does anchorage of equipment in the an potentially adverse seismic conditions opening cabinets)?</li> </ol>			] N/A[]
٠ ١			
· · · · · · · · · · · · · · · · · · ·			
	•		
	,		
2. Does anchorage of equipment in the a significant degraded conditions?	rea appear to be free of	f Y⊠N⊟U[	N/A[
<ol> <li>Based on a visual inspection from the raceways and HVAC ducting appear to seismic conditions (e.g., condition of seconditions of cable trays appear to be</li> </ol>	o be free of potentially a upports is adequate and	adverse d fill	_ N/A
	· .		
	,		
	· ·		

•

TTACHMENT 9.7		· · · · · · · · · · · · · · · · · · ·	AREA WALK-BY CHECKLIST
heet 2 of 4 Area Walk-By C	hecklist (AWC) <u>AWC</u>	-042	Status: Y⊠ N□ U□
ocation: Bldg. <u>F</u>	RB Floor El. <u>272</u>	Room, Area <u>Col. 1.</u>	5 Line W
	ractions with other equipme	potentially adverse seismic ent in the area (e.g., ceiling til	Y⊠ N□ U□ N/A□ es
·.			,
	bear that the area is free of s that could cause flooding	potentially adverse seismic or spray in the area?	
			•
	pear that the area is free of s that could cause a fire in t	potentially adverse seismic the area?	Y⊠ N□ U□ N/A□
interaction	s associated with housekee quipment, and temporary in	potentially adverse seismic eping practices, storage of stallations (e.g., scaffolding, l	Y⊠ N⊡ U⊡ N/A⊡ ead
	·	· · · · · · · · · · · · · · · · · · ·	

ATTACHMENT 9.7 Sheet 3 of 4	<u>,</u>				,		,
Sheet 3 of 4				Are	A WALK-	Зү Снеск	LIST
Area Walk-By Checklist (	AWC) <u>AWC-04</u>	42		Stat	us: Y🛛		]
Location: Bldg. <u>RB</u>	Floor El. <u>272</u>	Room, Are	a <u>Col. 1.5 Line</u>	W		<u> </u>	—
8. Have you looked for a				YX N			
adversely affect the sa There is a 2" DIA. DW	•	• •		·			
hung with other lines of on the copper line is lo	on a common struc	tural angle men	nber, the U bolt				
supports are secured	and there is no pos	ssibility of line be	ecoming free or				
overstressed. Support 2' west of 66HV-3B. *	Ref. Col line W1).	WR# 289378 is	written to				
tighten nuts on 2" DIA any equipment in the a		le impact on safe	ety function of	۰.		,	
Comments (Additional pages		necessary)			•		
	•	••					
	•	`					
		• •	•				
					,		
					•	· · · · ·	
Evaluated by: <u>AI G. Porch</u>	AC, Da	-ch-		Date:	11/1/12		
C. Sawatzke	1. Sawatts				j		
······	8				11/1/12	· · · · · · · · · · · · · · · · · · ·	
		· ·					
	,						
.* /			· ·				
				r	•	×	
·			x				
. ,							

۱۰۰۰ ۱۰

.

Attachment D
Engineering Report No. JAF-RPT-12-00015<br/>Rev. 0<br/>Page 155 of 224

ATTACHMENT 9.7
AREA WALK-BY CHECKLIST

Sheet 4 of 4
Status: Y N U

Area Walk-By Checklist (AWC) \_ AWC-042

Location: Bldg. <u>RB</u>
Floor El. <u>272</u>

Room, Area <u>Col. 1.5 Line W</u>

SWEL Components: <u>SWEL1-481</u>

Photographs

Note: Loose nuts on the U-bolt connection.

Note:

Area Walk-By Checklist (AWC) <u>AWC- 043</u>			•	•	Page '
Sheet 1 of 3       Status: Y⊠ N□ U         Area Walk-By Checklist (AWC) _AWC-043_	ATTACHMENT 9.7	•	<u></u>	ARFA W	ALK-BY CHEC
Area Walk-By Checklist (AWC)AWC-043	Sheet 1 of 3	<u> </u>		· · · · · · · · · · · · · · · · · · ·	
SWELL Components:       SWEL1-336, 343         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. TI space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y⊠ N□ U□ N/A□         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions (e.g., condition of supports is adequate and fill conditions (e.g., condition of supports is adequate and fill conditions (e.g., condition of SWEL for 29AOV-80A (#343)	Area Walk-By Checklist (A	AWC) <u>AWC-043</u>		Status:	YX NL U
Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. It space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y N ∪ ∪ N/A ∪	Location: Bldg. PC	Floor El. 268 Room, Are	a <u>Near 29AOV</u>	-80A	
This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. Th space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y⊠ N□ U□ N/A□         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?       Y⊠ N□ U□ N/A□         See tubing interaction item addressed on SWEL for 29AOV-80A (#343)       See tubing interaction item addressed on SWEL for 29AOV-80A (#343)	SWEL Components: <u>SWE</u>	L1- 336, 343			<u> </u>
<ul> <li>space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.</li> <li>1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)</li> </ul>	Instructions for Completing	Checklist			
potentially adverse seismic conditions (if visible without necessarily opening cabinets)?         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y⊠ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?       Y⊠ N□ U□ N/A□         See tubing interaction item addressed on SWEL for 29AOV-80A (#343)       See tubing interaction item addressed on SWEL for 29AOV-80A (#343)	space below each of the follow	ving questions may be used to red	cord the results of	f judgments a	
<ul> <li>2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>Y N U N/A U N/A </li> <li>3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)</li> </ul>	potentially adverse seis			Y⊠ N⊟ U	J N/A
significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					ſ
significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)	· · ·		,	• •	
significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					
significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)			ree of	Y⊠ N⊟ I	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					ı
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)		<b>、</b>		,	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					
seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? See tubing interaction item addressed on SWEL for 29AOV-80A (#343)			/conduit		J N/A
See tubing interaction item addressed on SWEL for 29AOV-80A (#343)					
	raceways and HVAC d seismic conditions (e.g	lucting appear to be free of potent g., condition of supports is adequa	tially adverse		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		- -
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		· ·
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		· · ·
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		· · ·
	raceways and HVAC d seismic conditions (e.g conditions of cable tray	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray See tubing interaction	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		
	raceways and HVAC d seismic conditions (e.g conditions of cable tray See tubing interaction	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		· · · · · · · · · · · · · · · · · · ·
	raceways and HVAC d seismic conditions (e.g conditions of cable tray See tubing interaction	lucting appear to be free of potent g., condition of supports is adequa ys appear to be inside acceptable	tially adverse te and fill limits)?		

,

÷ .

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 157 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
heet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC- 043</u>	Status: Y⊠ N∏ U∏
ocation: Bldg. <u>PC</u> Floor El. <u>268</u> Room, Area <u>Near 294</u>	4 <i>0V-80A</i>
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y⊠ N□ U□ N/A□ s
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
	;
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, leas shielding)?	Y⊠ N□ U□ N/A□ ad
	·
· · · · · · · · · · · · · · · · · · ·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 158 of 224 Attachment D

	AREA WALK-BY CHECK
Sheet 3 of 3	Status: Y🛛 N🗌 U[
Area Walk-By Checklist (AWC) <u>AWC- 043</u>	
Location: Bldg. <u>PC</u> Floor El. <u>268</u> Room, Area <u>Near 29</u>	9AOV-80A
8. Have you looked for and found no other seismic conditions that coursely affect the safety functions of the equipment in the area?	
adversely affect the safety functions of the equipment in the area:	
<u>Comments</u> (Additional pages may be added as necessary)	
· · · · · · · · · · · · · · · · · · ·	
PAC.DD	
Evaluated by: Rick Casella_	Date: <u>9-28-12</u>
Alan Porch	9-28-12
۰. ۹. ۲. ۱	
· ·	
· ·	

		Page 1
A	· · · · · · · · · · · · · · · · · · ·	
ATTACHMENT 9.7 Sheet 1 of 3		AREA WALK-BY CHECK
Area Walk-By Checklis	t (AWC) <u>AWC-044</u>	Status: Y⊠ N⊟ U[
Location: Bldg. <u>RB</u>	Floor El. 272 Room, Area West of	f Airlock
SWEL Components: S	WEL1- 456	
Instructions for Completi	ing Checklist	······································
space below each of the fo	t to document the results of the Area Walk-By ne llowing questions may be used to record the res d at the end of this checklist for documenting ot	sults of judgments and findings.
	equipment in the area appear to be free of seismic conditions (if visible without necessarily	Y⊠ N□ U□ N/A□
		·
· ·		
2. Does anchorage of significant degrade	equipment in the area appear to be free of d conditions?	Y⊠ N□ U□ N/A□
raceways and HVA seismic conditions	nspection from the floor, do the cable/conduit C ducting appear to be free of potentially advers (e.g., condition of supports is adequate and fill trays appear to be inside acceptable limits)?	Y⊠ N⊡ U⊡ N/A⊡ ;e
		·
	<b>`</b>	
	· ·	·
		· •
~		
н н. -		

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 2 of 3	Status: Y🛛 N🗌 U
Area Walk-By Checklist (AWC) <u>AWC-044</u>	
Location: Bldg. <u>RB</u> Floor El. <u>272</u> Room, Area <u>West of Airl</u>	ock
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y N N U N/A
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
	۰.
	-
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N□ U□ N/A□
ч - с	

	Attachment D	Engineering Repo		Rev
			P	age 161 c
ATTACHMENT 9.7		Ar	EA WALK-BY C	HECKLIST
Sheet 3 of 3		Stat		
Area Walk-By Checklist (AWC) <u>AWC-0</u>	)44	Siai	us: Y⊠ N[	
Location: Bldg. <u>RB</u> Floor El. <u>272</u>	Room, Area <u>W</u>	est of Airlock		
<ol> <li>Have you looked for and found no other adversely affect the safety functions of t</li> </ol>				
			-	`
			• .	
Comments (Additional pages may be added as	s necessary)			
foundation for the RB				
· · · · · · · · · · · · · · · · · · ·				,
Evaluated by: <u>C. Sawatzke _ Sawat</u> fs		Date:	<u>9-28-12</u>	· 
Evaluated by: <u>C. Sawatzke _ Sawat</u> f		Date:	<u>9-28-12</u>	· 
AC, Dand				
Evaluated by: <u>C. Sawatzke Sawat</u> s <u>Alan Porch</u> A.C., Damel			<u>9-28-12</u> <u>9-28-12</u>	· 
				· · · · · · · · · · · · · · · · · · ·
			9-28-12	· 
			9-28-12	
Alan Porch			9-28-12	· 
<u>Alan Porch</u>			9-28-12	· · · · · · · · · · · · · · · · · · ·
<u>Alan Porch</u>			9-28-12	
<u>Alan Porch</u>			9-28-12	· · · · · · · · · · · · · · · · · · ·
<u>Alan Porch</u>			9-28-12	· · · · · · · · · · · · · · · · · · ·
<u>Alan Porch</u>			9-28-12	
<u>Alan Porch</u>			<u>9-28-12</u>	

•

i

۸. .

. .

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 162 of 224 AREA WALK-BY CHECKLIST **ATTACHMENT 9.7** Sheet 1 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_ AWC-045 Location: Bldg. SU Floor El. 260 Room, Area Col. 2 Line T SWEL Components: SWEL1-314 **Instructions for Completing Checklist** This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? This equipment is located in Torus. There are no equipments in this area with anchorage.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?

This equipment is located in Torus. There are no equipments in this area with anchorage.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?

This equipment is located in Torus. There are no cable trays.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 163 of 224

ATTACHMENT						AREA W	ALK-BY CHECKL
Sheet 2 of 3 Area Walk-	By Checklis	t (AWC)	AWC- 04	15		Status:	YX N U
Location: BI	dg. <u>SU</u>	Floor El.	260	Room, Area	<u>Col. 2 Line</u>	Т	· · · · · · · · · · · · · · · · · · ·
spatia	it appear that al interactions ghting)?	the area is fr with other eq	ee of pote uipment i	entially adverse n the area (e.g.,	seismic ceiling tiles	YX N	J N/A
	. •				·		
				· .	-		
				entially adverse pray in the area		Y⊠ N□	U[] N/A[]
		·					ſ
	۰.						
	it appear that actions that co			entially adverse area?	seismic	YX N	U N/A
						· ,	
				۰.			,
intera porta	actions associa ble equipment	ated with hou	isekeepin	entially adverse g practices, stor lations (e.g., sca	age of	Y⊠ N∏	U N/A
shiel	ding)?						
					;		
;					, ,		
	·				•		
						~	

ATTACHMENT 9.7					Ar	EA WALK-E	BY CHECKLIS
Sheet 3 of 3					Sta	tus V⊠	
Area Walk-By Checklist	(AWC) <u>AW(</u>	<u>C- 045</u>			Ola		
Location: Bldg. <u>SU</u>	_ Floor El. <u>260</u>	) Roo	om, Area	Col. 2 Line T			
8. Have you looked for a adversely affect the s					Y	i U	
			ν.	· .	•		
		•					
	<u></u>						
Comments (Additional page	s may be adde	d as necessa	ary)				
Approximately 12' of							
between 1CC584 through LB- 03 an					teractio	n is evalua	ted
-		-					
۰, 							
, ,	DIP	00					
Evaluated by: <u>Rick Casella</u>	Rich Cas	lla			Date:	<u>10-8-12</u>	
Evaluated by: <u><i>Rick Casella</i></u>	Rich Can	lla_			Date:	<u>10-8-12</u>	
Evaluated by: <u>Rick Casella</u> Alan Porch	Rich Can	lla_			, Date:	<u>10-8-12</u> 10-8-12	
	Rich Can	lla			, Date:		
	Rich Can					<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
<u>Alan Porch</u>						<u>10-8-12</u>	
Alan Porch						<u>10-8-12</u>	
<u>Alan Porch</u>						<u>10-8-12</u>	

1

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 165 of 224

NTTACHMENT 9.7	AREA WALK-BY CHECKLIS
heet 1 of 3	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC-046</u>	
ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <u>West C</u>	rescent
WEL Components: <u>SWEL1-452</u>	
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By ne pace below each of the following questions may be used to record the res additional space is provided at the end of this checklist for documenting oth	ults of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
71BMCC-3 is anchored similar to 71BMCC-1.	
Rack 25-50 cage bolted to floor and wall. Rack is adequately supported.	
66UC-22A adequately supported.	
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
Mild surface corrosion on 66UC-22A mounting bolts. Not an adverse seismic condition.	е
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially advers seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N⊡ U⊡ N/A⊡ se
·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 166 of 224 Attachment D

	AREA WALK-BY CHECKL
eet 2 of 3	Status: Y⊠ N∏ U
ea Walk-By Checklist (AWC) <u>AWC-046</u> cation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area <u>West Cres</u>	cent
<ol> <li>Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> </ol>	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□ U□ N/A□
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
Portable HEPA Unit adjacent to MCC is adequately secured to handra per Housekeeping Proc. AP-17.02. Verified non-credible seismic interactions.	il

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 167 of 224 Attachment D

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC-046</u>	Status: Y⊠ N∏ U∏
_ocation: Bldg. <u>RB</u> Floor El. <u>242</u> Room, Area	West Crescent
<ol> <li>Have you looked for and found no other seismic conditions to adversely affect the safety functions of the equipment in the</li> </ol>	
	<i>,</i>
Comments (Additional pages may be added as necessary)	
condition.	
	<u></u>
Rich Casella	
Evaluated by: <u>Rick Casella</u>	Date: <u>10/31/12</u>
Evaluated by: <u>Rick Casella</u>	Date: <u>10/31/12</u>
Evaluated by: <u>Rick Casella</u> Robert Kester	Date: <u>10/31/12</u>
100-	
Robert Kester	
Robert Kester	
Robert Kester	<u> </u>
Robert Kester	<u>10/31/12</u>
Robert Kester	<u>10/31/12</u>
Robert Kester Mart	<u>10/31/12</u>

		Attachment D	Engineering Rep	ort No. JAF-RPT-12-000 Rev.
				Page 168 o
ATTACHMENT 9.7		<u></u>	AR	EA WALK-BY CHECKLIST
Sheet 1 of 3			Stat	tus: Y N U
Area Walk-By Checklist	t (AWC) <u>AWC</u>	- 047		
Location: Bldg. <u>PC</u>	Floor El. <u>290</u>	Room, Area	Vicinity of 13MOV-15	5
SWEL Components: <u>SV</u>	VEL1- 164		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Instructions for Completin	ng Checklist			
This checklist may be used space below each of the fol Additional space is provided	lowing questions i	may be used to record	I the results of judgme	ents and findings.
opening cabinets)?	seismic conditions	(if visible without nec	essarily	
This equipment is in anchorage.	the Drywell. Ther	re is no equipment in t	he area with	
		ч.,		
2. Does anchorage of significant degraded		area appear to be free	eof Y□N	N□ U□ N/A⊠
This equipment is in anchorage.	the Drywell. Thei	re is no equipment in t	he area with	
seismic conditions (	C ducting appear t e.g., condition of s	floor, do the cable/co to be free of potentiall supports is adequate a inside acceptable lim	y adverse and fill	
		-	·	
Υ				
, ,				
				·
				•
	x			
· · ·				

t

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 169 of 224

TTACHMENT 9.7	AREA WALK-BY CHECKLIS
heet 2 of 3	Status: Y🛛 N🗌 U
rea Walk-By Checklist (AWC) <u>AWC- 047</u>	
ocation: Bldg. <u>PC</u> Floor El. <u>290</u> Room, Area <u>Vicinity of 1</u>	13MOV-15
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
	•
	, ,
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	YX N UNA
· · · · · · · · · · · · · · · · · · ·	
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
· ·	

.

· · ·		Attachment D	⊏nginee	ering Report No. J	Rev Rev Page 170 o
ATTACHMENT 9.7				AREA WALK	-BY CHECKLIST
Sheet 3 of 3 Area Walk-By Check	list (AWC) <u>AWC- (</u>	947		Status: Y	] N U U
Location: Bldg. <u>PC</u>	Floor El. <u>290</u>	Room, Area	Vicinity of 1	3MOV-15	
	for and found no other he safety functions of th			YX N U	
		)			`
<u>Comments (</u> Additional p	bages may be added as	necessary)			
)					
				N	
Evaluated by: <u><i>Rick Case</i></u>	Illa Rich Casell	2		Date: <u>9-28-12</u>	````
Alan Porc	A.C. Dand			<u>9-28-12</u>	
· · · · ·				· ·	
		<b>、</b>	ł		
				۰ ۲	
	· · · ·		)	· •	
			۰.	·.	
			·		

.

.

ATTACHMENT 9.7		AREA WALK-BY CHEC
Sheet 1 of 4		
Area Walk-By Checklist (AWC) <u>AWC-</u>	048	Status: Y🛛 N🗍 U
Location: Bldg. <u>BR</u> Floor El. <u>282</u>	Room, Area	
SWEL Components: <u>SWEL1- 516, 518, a</u>	and 508	
Instructions for Completing Checklist		· · · · · · · · · · · · · · · · · · ·
This checklist may be used to document the respace below each of the following questions m Additional space is provided at the end of this	nay be used to record the result	s of judgments and findings.
<ol> <li>Does anchorage of equipment in the ar potentially adverse seismic conditions opening cabinets)?</li> </ol>		Y⊠ N□ U□ N/A□
<ol><li>Does anchorage of equipment in the an significant degraded conditions?</li></ol>	rea appear to be free of	Y⊠ N□ U□ N/A□
		· .
<ol> <li>Based on a visual inspection from the f raceways and HVAC ducting appear to seismic conditions (e.g., condition of su conditions of cable trays appear to be i</li> </ol>	b be free of potentially adverse upports is adequate and fill	Y⊠ N□ U□ N/A□
· · ·		1
		· · · · ·
		-
		<u>^</u>

ITTACHMENT 9.7	AREA WALK-BY CHECKL
heet 2 of 4 srea Walk-By Checklist (AWC) <u>AWC- 048</u>	Status: Y⊠ N⊡ U⊡
ocation: Bldg. <u>BR</u> Floor El. <u>282</u> Room, Area	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
Approximately ¼" clearance between a 4" pipe running east-west and a junction box for conduit 1CC267RC1. Pipe penetration S-1653 through east wall is 42" from junction box. Not a seismic concern. 3 flexible conduit off the bottom of the box.	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
	1
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	
χ.	
	·

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 173 of 224

ATTACHMENT 9.7	······································			AREA WALK-	BY CHECKL
Sheet 3 of 4				Status: Y🛛	
Area Walk-By Ch	necklist (AWC	C) <u>AWC-04</u>	<u> </u>		
Location: Bldg. <u>Bl</u>	<u>R</u> Floo	or El. <u>282</u>	Room, Area		
			ismic conditions that could equipment in the area?	t Y⊠ N∏ U∏	
		,		٨	•
			·		
Comments (Additio	onal pages may	v de added as n	ecessary)		
				·	
A Po	rch	5, D-		10-30-12	
·····			· · · · · · · · · · · · · · · · · · ·		· · · · · · ·
	Ň				
v	,		· ·		
			$\sim$		
			х	•	
			·	•	
			<b>、</b>	•	
			<b>、</b>	• • •	
			<b>、</b>	, , , , , , , , , , , , , , , , , , ,	
	•		,	í	
	•		,	í	· · ·
	•		,	í	
	•	· · · · · · · · · · · · · · · · · · ·	<b>、</b>	í	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 174 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC- 048 Location: Bldg. BR \_ Floor El. 282 Room, Area SWEL Components: SWEL1- 516, 518, and 508 Photographs Note: Battery Room Elev. 282 Note: Battery Room Elev. 282

TTACHMENT 9.7	AREA WALK-BY CHECKLIS
heet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC- 049</u>	Status: YX N U
······································	·
ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <sup>1</sup> <u>EDG A Roc</u>	om
WEL Components: <u>SWEL1- 581, 582, 624, 628, 642, 646, 662, 670,</u>	674, 682, 577
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By near of pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other of the space is provided at the end of the checklist for documenting other	of judgments and findings.
1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?	Y⊠ N□ U□ N/A□
Anchorage at sliding foot of 93WE-1A is missing washer under bolt (2 locations). However, head of bolt is contacting frame. No seismic concern.	
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	YX N U N/A
Minor hairline cracks in pedestal at 93TK-7A. ( Note: previously addressed at 93TK-7B)	
3. Based on a visual inspection from the floor, do the cable/conduit	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	N
conditions of cable trays appear to be inside acceptable limits)?	

.

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 176 of 224

heet 2 of 4 Area Walk-By Checklist (AWC) <u>AWC- 049</u>	Statue	
	Status.	YX N U
ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <u>EDG A Roon</u>	ז	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	Y⊠ N□	U N/A
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y⊠ N□	
;		-
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠N□	U N/A
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> </ol>	Y⊠ N□	U N/A
Loose nut on 1of 2 bolts attaching "dirty rag" bin to south wall. No seismic concern. Bin has little mass and one bolt is tight.		

Attachment D	Engineering Report No. JAF-RPT-12-00015
	Rev. 0
	Page 177 of 22

	, 			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		EA WALK-	
Sheet 3 of 4 Area Walk-By	Checklis	t (AWC)	AWC- 049	<b>_</b>		Stat	us:Y🛛	N U
_ocation: Bldg.	EG	Floor El.	272	Room, Area	EDG A Room	1		
				mic conditions quipment in the		YX N		
	·						· ·	
Comments (Add		-						
conne to cei		onry wall w/	concrete wal	i at NW corner	dressed in CR- of room has c	rack tha	t extends	from floo
condi		on north side		eet of wall has	grout missing	(approx.	. ½″ WIŒ)	. Same
• •	tion exists	on north side	e of room.	,	grout missing		. ½" wide; 10-26-12	
Evaluated by: <u>R</u>	tion exists	on north side	e of room.	eet of wall has	grout missing	Date:		
Evaluated by: <u>R</u>	tion exists	on north side	e of room.	,	grout missing	Date:	<u>10-26-12</u>	
Evaluated by: <u>R</u>	tion exists	on north side	e of room.	,	grout missing	Date:	<u>10-26-12</u>	
Evaluated by: <u>R</u>	tion exists	on north side	e of room.	,	grout missing	Date:	<u>10-26-12</u>	

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 178 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: Y N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 049 Location: Bldg. EG \_ Floor El. 272 Room, Area EDG A Room SWEL Components: SWEL- 581, 582, 624, 628, 642, 646, 662, 670, 674, 682, 577 Photographs Note: Bolt missing washer on 93 WE-1A Note: Masonry wall joint with approx. 1/2" cracks.

			Page 1
ATTACHMENT 9.7		AREA WALK-	Вү Снеск
Sheet 1 of 4		Status: YX	
Area Walk-By Checklist (AWC) <u>AW</u>	<u>/C- 050</u>		
Location: Bldg. <u>EG</u> Floor El. <u>27</u>	72 Room, Area <sup>1</sup> <u>EDG</u>	C Room	
SWEL Components: <u>SWEL1- 634, 65</u>	i8, 686		
Instructions for Completing Checklist	, , , , , , , , , , , , , , , , , , ,		
This checklist may be used to document th space below each of the following question Additional space is provided at the end of t	is may be used to record the	results of judgments and fi	
<ol> <li>Does anchorage of equipment in the potentially adverse seismic condition opening cabinets)?</li> </ol>		Y⊠ N∏ U∏ rily	N/A
Four 3/8" bolts spaced 9.5" on cent (west side of the room) each have a thread engagement. Not considered to this deficiency is tracked through	approximately 1 thread below d a seismic concern. The reso	full	
<ol><li>Does anchorage of equipment in th significant degraded conditions?</li></ol>	e area appear to be free of		N/A[]
- · · ·		, <i>*</i>	
		J	
	· · · · · · · · · · · · · · · · · · ·		
· ^			
<ol> <li>Based on a visual inspection from t raceways and HVAC ducting appea</li> </ol>			N/A
seismic conditions (e.g., condition c conditions of cable trays appear to	of supports is adequate and fi		s
	be inside acceptable infits)?	• • •	
		н. Н	
	,	,	
		,	
		· .	
		х	$\sim$
	· · ·		

f the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. Th lected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

> ж. . Э

. (

**х** а

## Éngineering Report No. JAF-RPT-12-00015 Rev. 0 Page 180 of 224

	· · · · · · · · · · · · · · · · · · ·			A	AREA WALK-	
heet 2 of 4					Status: YX	
rea Walk-By	y Checklist	(AWC) <u>AW</u>	<u>C-050</u>			
ocation: Bldg	. <u>EG</u>	_ Floor El. 27	2 Ro	om, Area <u>EDG C Ra</u>	oom	
	nteractions w			adverse seismic rea (e.g., ceiling tiles	YX NI UI I	N/A
						~
		۲			•	
,						
		he area is free o d cause floodin		adverse seismic the area?		N/A
	•					
G. Daga it	abaaar that ti	ha araa ia fraa	of notontially	advaraa aaiamia		
interact	ions that coul	d cause a fire i	n the area?	adverse seismic	YX N U	
					,	
·	,					
						• .
interact	ions associate e equipment,	ed with housek	eeping practi	adverse seismic ices, storage of (e.g., scaffolding, lead	YX ND UD I	N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A
interact	ions associate e equipment,	ed with housek	eeping practi	ices, storage of		N/A

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 181 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC- 050</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>EG</u> Floor EI. <u>272</u> Room, Area <u>EDG C Roo</u>	om
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?	
1/2" Copper tubing from 93AC-C1 to 93EDG-23C is routed in tube track. At the last section of the track the anchor to masonry wall is missing. 8-3/4" section of tube track is resting on 1/4" tubing. Not a seismic	
concern, but should be repaired. The resolution to this deficiency is tracked through CR-JAF-2012-	
07963.	·
Comments (Additional pages may be added as necessary)	
3/8" Hose from 93PS-1C is pinched against housing for 93MP-1C, "C" s control (pinched at top west side of housing) Not a seismic concern	
Evaluated by: <u>R Casella</u> Rtch Casella	Date: 10-26-12
AC, Dand	
A Porch	10-26-12
,	
	ς.
	· · ·
	·

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 182 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) AWC- 050 Location: Bldg. EG Floor El. 272 Room, Area EDG C Room SWEL Components: SWEL1- 634, 658, 686 **Photographs** Note: 1/4" tubing along wall in tube track that is Note: 46FIS-102C anchorage. Less than full engagement by approx. 1 thread missing an anchor bolt

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 183 of 224

et;

TTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 1 of 3	Status: Y🛛 N🗌 U
rea Walk-By Checklist (AWC) <u>AWC- 051</u>	
ocation: Bldg. <u>EG</u> Floor El. <u>272</u> Room, Area <u>EDG-D roc</u>	om
WEL Components: <u>SWEL1- 635</u>	
nstructions for Completing Checklist	
his checklist may be used to document the results of the Area Walk-By near pace below each of the following questions may be used to record the results additional space is provided at the end of this checklist for documenting other	s of judgments and findings.
1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?	Y⊠ N∏ U∏ N/A∏
Minor hairline cracks at 2 of 4 bolts on each of 2 pedestals on 93TK-1	)
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	
significant degraded conditions :	
3. Based on a visual inspection from the floor, do the cable/conduit	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	
·	`
	· .
	1
· · · ·	

Sheet 2 of 3       Status: Y⊠ N□ U□         Area Walk-By Checklist (AWC) _AWC- 051	ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Area Walk-By Checklist (AWC)		······································
<ul> <li>4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic Y⊠ N□ U□ N/A□</li> </ul>	Area Walk-By Checklist (AWC) <u>AWC- 051</u>	Status: YX N U
<ul> <li>spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?</li> <li>5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic Y N U N/A U</li> </ul>	Location: Bldg. EG Floor El. 272 Room, Area EDG-D room	om
<ul> <li>interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic</li> </ul>	spatial interactions with other equipment in the area (e.g., ceiling tiles	Y N N U N/A
<ul> <li>interactions that could cause flooding or spray in the area?</li> <li>6. Does it appear that the area is free of potentially adverse seismic</li> </ul>	X	· . · · ·
6. Does it appear that the area is free of potentially adverse seismic $Y \boxtimes N \square U \square N/A \square$		YX N U N/A
6. Does it appear that the area is free of potentially adverse seismic Y⊠ N□ U□ N/A□ interactions that could cause a fire in the area?		
6. Does it appear that the area is free of potentially adverse seismic Y⊠ N□ U□ N/A□ interactions that could cause a fire in the area?		
	6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
7. Does it appear that the area is free of potentially adverse seismic YX NI UNAL interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead	

		, <b>,</b> , , , , , , , , , , , , , , , , ,			Page 185 of
ATTACHMENT 9.7			· · · · · · · · · · · · · · · · · · ·	AREA WALK-E	BY CHECKLIST
Sheet 3 of 3		LANGER CONTRACTOR	<u>, , , , , , , , , , , , , , , , , , , </u>	Status: YX	
Area Walk-By Checklis	st (AWC) <u>AWC- 0</u>	<u>151</u>			
Location: Bldg. EG	Floor El. <u>272</u>	Room, Area	EDG-D room		
8. Have you looked for adversely affect the	or and found no other a safety functions of the			YX N U	
•					
Comments (Additional pa					
Crack in concrete f	floor at column line A3 he EDG	-28, Runs north/ s	outh from nort	h wall to the joint w	with the
	,				
•			•		
		)			
Evaluated by: <u>Rick Casella</u>	Rick Casell	j •		Date: <u>9-28-12</u>	
Evaluated by: <u><i>Rick Casella</i></u>	Rich Casell	) a	· · · · · · · · · · · · · · · · · · ·	Date: <u>9-28-12</u>	
Evaluated by: <u>Rick Casella</u> <u>Alan Porch</u>	Rich Casell	) 		Date: <u>9-28-12</u> <u>9-28-12</u>	
	Rich Casell	) 	· · · · · · · · · · · · · · · · · · ·	- · -	
<u>Alan Porch</u>		) 	· · · · · · · · · · · · · · · · · · ·	<u>9-28-12</u>	
<u>Alan Porch</u>			· · · · · · · · · · · · · · · · · · ·	<u>9-28-12</u>	
<u>Alan Porch</u>			· · · · · · · · · · · · · · · · · · ·	<u>9-28-12</u>	
<u>Alan Porch</u>				<u>9-28-12</u>	
<u>Alan Porch</u>				<u>9-28-12</u>	
<u>Alan Porch</u>				<u>9-28-12</u>	
<u>Alan Porch</u>				<u>9-28-12</u>	·
<u>Alan Porch</u>				<u>9-28-12</u>	·
<u>Alan Porch</u>				<u>9-28-12</u>	·
<u>Alan Porch</u>				<u>9-28-12</u>	

Ņ

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 186 of 224

ATTACHMENT 9.7			AREA WALK-BY CHECKLIS
Sheet 1 of 4			Status: Y⊠ N⊡ U⊡
Area Walk-By Checklis	t (AWC) <u>AWC- (</u>	052	
Location: Bldg. <u>RB</u>	Floor El. <u>344</u>	Room, Area <u>"A" skimme</u>	r surge tank enclosure
SWEL Components: SV	NEL 2-003 and 2-0	004	
Instructions for Completing	•		
space below each of the fol	llowing questions ma	sults of the Area Walk-By near of a walk-By near of a second the results hecklist for documenting other of the second s	of judgments and findings.
1. Does anchorage of			
opening cabinets)?	seismic conditions (ii	f visible without necessarily	
		2	
•			
		x	
2. Does anchorage of significant degraded		ea appear to be free of	
• •		I to north wall of enclosure.	,
•		х	
•			
· · · ·			
raceways and HVA seismic conditions (	C ducting appear to (e.g., condition of su	oor, do the cable/conduit be free of potentially adverse pports is adequate and fill iside acceptable limits)?	
		re are no cable trays in the area	•
			,
		)	
	•		· · ·
		· · ·	
• •	· .	•	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 187 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
heet 2 of 4	Status: Y⊠ N⊡ U⊡
Area Walk-By Checklist (AWC) <u>AWC- 052</u>	
ocation: Bldg. <u>RB</u> Floor El. <u>344</u> Room, Area <u>"A" skin</u>	nmer surge tank enclosure
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tile and lighting)?	
Fluorescent light in the area is away from any SSCs, therefore there are no credible seismic interactions. The visible duct is supported by larger size duct above it.	
	· ·
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y□ N□ U□ N/A⊠
	× .
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y□ N□ U□ N/A⊠ ,
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, le shielding)?	
	······
	· · ·
	· · · · ·

	Attachment D	Enginee	ring Report No. J/	AF-RPT-12-000 Rev Page 188 c
ATTACHMENT 9.7	ана самара (1973) — Санта Салара (1974) — Салара 1970 — Самара (1975) — Салара (1974) — Салара (1974) — Салара		AREA WALK	-BY CHECKLIST
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC- 0</u>	<u>52</u>		Status: Y	N U
Location: Bldg. <u>RB</u> Floor El. <u>344</u>	Room, Area	<u>"A" skimmer</u>	surge tank enclo	sure
<ol> <li>Have you looked for and found no other s adversely affect the safety functions of th</li> </ol>				· · ·
· ·			`	
Comments (Additional pages may be added as	necessary)		1	
The post for containment boundary mark stability and the tube track is rigid, no Conduit on east wall is well supported.			rge base on the p	ost provides
	(			
Evaluated by: <u>Rick Casella</u>	sella		Date: 9-28-12	
AC, Da	~ch_			
Alan Porch	· · · · · · · · · · · · · · · · · · ·		<u> </u>	
			,	
	,			

•

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 189 of 224

## ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC- 052 AWC- 052 Location: Bldg. <u>RB</u> Floor El. <u>344</u> Room, Area <u>"A" skimmer surge tank enclosure</u> SWEL Components: <u>SWEL2-003 and 2-004</u> Photographs



Note: AWC-52

			8
Neter	mukanan mulamianay	มีกิรีก็เกมาะเสียงเหตุสุดเช	
Note:			

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 190 of 224 AREA WALK-BY CHECKLIST ATTACHMENT 9.7 Sheet 1 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC- 053 Location: Bldg. RB Floor El. 326 Room, Area Fuel pool heat exchanger room SWEL Components: SWEL 2-005, 2-006, 2-007, 2-008, 2-009 Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 191 of 224 AREA WALK-BY CHECKLIST ATTACHMENT 9.7 Sheet 2 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC- 053 Location: Bldg. RB Floor El. 326 Room, Area Fuel pool heat exchanger room 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? 2 fluorescent lights on north side would not damage items if they were to fall during a seismic event. Lights appear to be secure. 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

· .

YX N UNA

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 192 of 224 AREA WALK-BY CHECKLIST **ATTACHMENT 9.7** Sheet 3 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC-053 Floor El. 326 Location: Bldg. RB Room, Area Fuel pool heat exchanger room YX NI UI 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Flexible vertical conduit on the west side of pump A is well supported. 19FPS-318-tubing 3/8", will not be affected during a seismic event. Comments (Additional pages may be added as necessary) Evaluated by: <u>Rick Casella</u> Rick Casella Date: 9-28-12 Alan Porch 9-28-12

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 193 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 1 of 3 Status: YX N U Area Walk-By Checklist (AWC) AWC-054 Location: Bldg. PC Floor El. 292 Room, Area 02RV-71D cluster SWEL Components: SWEL1-011 Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? 2. Does anchorage of equipment in the area appear to be free of Y N N U N/A significant degraded conditions? 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?

	Attachment D	Engineering Report No. JAF-RPT-12-00015 Rev. 0
		Page 194 of 22
ATTACHMENT 9.7	and and the second s	AREA WALK-BY CHECKLIST
Sheet 2 of 3 Area Walk-By Checklist (AWC) <u>AWC</u>	- 054	Status: Y⊠ N⊡ U⊡
Location: Bldg. PC Floor El. 292	Room, Area <u>02</u>	2RV-71D cluster
4. Does it appear that the area is free of spatial interactions with other equipme and lighting)?		
<ol> <li>Does it appear that the area is free of interactions that could cause flooding</li> </ol>		mic , Y⊠ N⊡ U⊡ N/A⊡
<ol> <li>Does it appear that the area is free of interactions that could cause a fire in</li> </ol>		mic Y⊠ N⊡ U⊡ N/A⊡

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

YX N U N/A

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 195 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC- 054</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>PC</u> Floor El. <u>292</u> Room, Area <u>02RV-7</u>	71D cluster
8. Have you looked for and found no other seismic conditions that cound adversely affect the safety functions of the equipment in the area?	
<u>Comments (</u> Additional pages may be added as necessary) 3/16" tubing connected to electrical device on RPV side of 02RV-7 channel steel @ elev. 292 (at flange connecting SRV to SRV dis	
3/16" tubing connected to electrical device on RPV side of 02RV-7 channel steel @ elev. 292 (at flange connecting SRV to SRV dis this deficiency is tracked through CR-JAF-2012-06452. Rick Casella	scharge piping) The resolution to
3/16" tubing connected to electrical device on RPV side of 02RV-7 channel steel @ elev. 292 (at flange connecting SRV to SRV dis this deficiency is tracked through CR-JAF-2012-06452.	
3/16" tubing connected to electrical device on RPV side of 02RV-7 channel steel @ elev. 292 (at flange connecting SRV to SRV dis this deficiency is tracked through CR-JAF-2012-06452. Rick Casella	scharge piping) The resolution to

ATTACHMENT 9.7       AREAWALK-BY CHECKLIST         Sheet 1 of 3       Status: Y⊠ N□ U□         Area Walk-By Checklist (AWC) _AWC- 055	Sheet 1 of 3       Status: Y⊠ N[         Area Walk-By Checklist (AWC)AWC- 055	
Area Walk-By Checklist (AWC) _AWC- 055	Area Walk-By Checklist (AWC)AWC- 055	
SWEL Components:       SWEL1-012         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y	SWEL Components: SWEL1-012         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL item space below each of the following questions may be used to record the results of judgments and findin Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y□ N□ U□ N/A         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y□ N□ U□ N/A         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill       Y□ N□ U□ N/A	
SWEL Components:       SWEL1-012         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y	SWEL Components: SWEL1- 012         Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL item space below each of the following questions may be used to record the results of judgments and findin Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y□ N□ U□ N/A         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y□ N□ U□ N/A         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic condition of supports is adequate and fill       Y□ N□ U□ N/A	
Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y□ N□ U□ N/A⊠         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y□ N□ U□ N/A⊠         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic condition of supports is adequate and fill       Y⊠ N□ U□ N/A⊡	Instructions for Completing Checklist         This checklist may be used to document the results of the Area Walk-By near one or more SWEL item space below each of the following questions may be used to record the results of judgments and findin Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y□ N□ U□ N/A         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y□ N□ U□ N/A         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill       Y□ N□ U□ N/A	
This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.         1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?       Y□ N□ U□ N/A□         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?       Y□ N□ U□ N/A□         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill       Y□ N□ U□ N/A□	<ul> <li>This checklist may be used to document the results of the Area Walk-By near one or more SWEL item space below each of the following questions may be used to record the results of judgments and findin Additional space is provided at the end of this checklist for documenting other comments.</li> <li>1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li> <li>Y □ N □ U □ N/A significant degraded conditions?</li> <li>X □ N □ U □ N/A Significant degraded conditions?</li> <li>X □ N □ U □ N/A Significant degraded conditions?</li> <li>X □ N □ U □ N/A Significant degraded conditions?</li> </ul>	
potentially adverse seismic conditions (if visible without necessarily opening cabinets)?         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	potentially adverse seismic conditions (if visible without necessarily opening cabinets)?         2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?         3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	<u>,</u> X
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit</li> <li>Y⊠ N□ U□ N/A raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	
<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	<ul> <li>significant degraded conditions?</li> <li>3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ul>	
<ol> <li>Based on a visual inspection from the floor, do the cable/conduit</li> <li>Y⊠ N□ U□ N/A□ raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ol>	<ol> <li>Based on a visual inspection from the floor, do the cable/conduit</li> <li>Y⊠ N□ U□ N/A raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill</li> </ol>	X
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill	
		, ·

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 197 of 224 AREA WALK-BY CHECKLIST **ATTACHMENT 9.7** Sheet 2 of 3 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_ AWC- 055 Location: Bldg. PC Floor El. 292 Room, Area 02RV-71E cluster 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? YX N UNA 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

				· · · · · · · · · · · · · · · · · · ·	
ATTACHMENT 9.7		••••••••••••••••••••••••••••••••••••••	<u> </u>	REA WALK-BY CHE	CKLIST
heet 3 of 3 Area Walk-By Checklist	: (AWC) <u>AWC-</u>	055	Sta	atus: Y⊠ N⊡ I	U
ocation: Bldg. PC	Floor El. <u>292</u>	Room, Area	02RV-71E cluster		
8. Have you looked for adversely affect the					
. ·		,			
					<u></u>
omments (Additional pag	-		1 		
		l connected to SRV " tubing from thermo	discharge downstrea well.	m elbow is very lo	ose.
The resolution to thi	-	ked through CR-JAF			
The resolution to thi	-	-			
The resolution to thi	-	-			· ·
The resolution to thi	-	-			
	-	-	-2012-06495.	<u>9-28-12</u>	· · ·
	s deficiency is track	-	-2012-06495.	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u>	s deficiency is track	-	-2012-06495.		· · ·
Evaluated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L G, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L G, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495. Date:	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495. Date:	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	· · ·
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	
valuated by: <u>Rick Casella</u> <u>Alan Porch</u>	s deficiency is track Rich Casell L Ci, Dame	ked through CR-JAF	-2012-06495.	<u>9-28-12</u>	· · ·

,

~

, <b>A</b>	ttachment D	Engineeri	ng Report No. J/	AF-RPT-12-00015
				Rev. 0 Page 199 of 224
	,			Ū
ATTACHMENT 9.7			AREA WALK	-BY CHECKLIST
Sheet 1 of 3	a ann ann an Anna an Anna ann an Anna ann an Anna an A			
Area Walk-By Checklist (AWC) <u>AWC- 056</u>	<u> </u>		Status: YX	
Location: Bldg. <u>PC</u> Floor El. <u>279</u>	_ Room, Area	Near 10AOV-	68A	·
SWEL Components: SWEL1-065				
Instructions for Completing Checklist				
This checklist may be used to document the results space below each of the following questions may b Additional space is provided at the end of this chec	e used to record	the results of	judgments and	
<ol> <li>Does anchorage of equipment in the area a potentially adverse seismic conditions (if vis opening cabinets)?</li> </ol>			YX N U	N/A
• • • • • • • • • • • • • • • • • • •				
			·	
<ol><li>Does anchorage of equipment in the area a significant degraded conditions?</li></ol>	ppear to be free	e of	YX N U	N/A
		. ,	<i>.</i>	
				~
<ol> <li>Based on a visual inspection from the floor, raceways and HVAC ducting appear to be t seismic conditions (e.g., condition of support set of achieve condition of support</li> </ol>	free of potentially rts is adequate a	y adverse and fill	Y⊠ N∏ U∏	N/A
conditions of cable trays appear to be inside	e acceptable im	iitts)?		,
				ľ
	. <i>'</i>		,	. 1
,				
				2
·	Х	,		

.

j.

;

. \*

.. -

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 200 of 224

TTACHMENT 9.7	AREA WALK-BY CHECK
heet 2 of 3 rea Walk-By Checklist (AWC) <u>AWC- 056</u>	Status: Y⊠ N∏ U[
ocation: Bldg. <u>PC</u> Floor El. <u>279</u> Room, Area <u>Near 10AON</u>	/-68A
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
Υ	•
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	YX NI UNAI
	' c
	х -
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?</li> </ol>	Y⊠ N⊡ U⊡ N/A⊡
Various outage tools in the area. None of which would result in an adverse seismic interaction.	· · ·

Attachment D	Engineering Report No. JAF-RPT-12-00015
	Rev. 0
	Page 201 of 224

ATTACHMENT 9.7	•••	• • • • • • • • • • • • • • • • • • •		AREA	VALK-E	BY CHECKL
Sheet 3 of 3 Area Walk-By Checklist (	AWC) AWC- 050	6.		Status:	Y⊠	N U
Location: Bldg. <u>PC</u>	Floor El. <u>279</u>		Near 10AOV-6	8A		
8. Have you looked for a adversely affect the sa	nd found no other se	ismic conditions	that could	/⊠ N□	υ	
·					<u></u>	
Comments (Additional pages	s may be added as no	ecessary)				
× ×						
Evaluated by: <u>Rick Casella</u>	Rich Casella	<b>~</b> .		Date: <u>9-2</u>	<u>8-12</u>	
A	C. Danch			·		
Alan Porch				<u>9-2</u>	8-12	/
	~					
		Ň				
				_	,	
			,			
τ						

,	Attachment D En	gineering Report No. JAF-RPT-1
ATTACHMENT 9.7		AREA WALK-BY CHEC
Sheet 1 of 4 Area Walk-By Checklist (AWC) <u>Al</u>	WC-057	Status: Y⊠ N⊡ U
Location: Bldg. <u>RB</u> Floor El. <u>3</u>	300 Room, Area <u>S-E co</u>	rner near elevator
SWEL Components: SWEL2-014		
Instructions for Completing Checklist This checklist may be used to document to space below each of the following questio Additional space is provided at the end of	ons may be used to record the re-	sults of judgments and findings.
<ol> <li>Does anchorage of equipment in the potentially adverse seismic condition opening cabinets)?</li> </ol>		Y⊠ N⊡ U⊡ N/A⊡ ∕
		\ \
significant degraded conditions?		
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition conditions of cable trays appear to</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se
<ol> <li>Based on a visual inspection from raceways and HVAC ducting appe seismic conditions (e.g., condition</li> </ol>	ear to be free of potentially adver of supports is adequate and fill	Y⊠ N⊡ U⊡ N/A⊡ se

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 203 of 224

ATTACI								
iheet	2 of 4						Status	s: Y⊠ N⊡ U[
Area \	Walk-By	Checklis	t (AWC)	AWC-05	7			
Locatio	on: Bldg.	RB	Floor E	EI. <u>300</u>	Room, Are	ea <u>S-E corner</u>	near elevato	or
4.	spatial ir and light	nteractions ing)? iure in front	with other	equipment i levator), one	entially adverse n the area (e.g e chain broken	i., ceiling tiles / come loose	Y N	] U[] N/A[]
		orth of tubi		ng (see pho	10). Fixiure ~ 2	?' above tubing		
				N	•			·
5.					entially adverse pray in the are		Y⊠ N⊑	] U N/A
			•					
• •								
			1			·		
		1						
6.	Does it a interacti	appear that ons that co	the area is uld cause a	s free of pote a fire in the a	entially adverse area?	e seismic	Y⊠ N[	] U N/A
6.	Does it a interacti	appear that ons that co	the area is uld cause a	s free of pote a fire in the a	entially adverse area?	e seismic	YX N	] U[] N/A[]
6.	Does it a interacti	appear that ons that co	the area is uld cause a	s free of pote a fire in the a	entially adverse area?	e seismic	Y N	] U[] N/A[]
	interacti Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic		] U N/A ] U N/A
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		
	Does it a interacti	ons that co appear that ons associa equipmen	uld cause a the area is ated with h	a fire in the s s free of pote ousekeeping	area? entially adverse g practices, sto	e seismic prage of		

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 204 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 3 of 4 Area Walk-By Checklist (AWC) <u>AWC-057</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>300</u> Room, Area <u>S-E d</u>	corner near elevator
<ol> <li>Have you looked for and found no other seismic conditions that c adversely affect the safety functions of the equipment in the area</li> </ol>	
Comments (Additional pages may be added as necessary)	
Crack in concrete floor at column line A3-28, Runs north/ south f	rom north wall to the joint with the
foundation for the EDG	
Evaluated by: <u>Rick Casella</u>	
Evaluated by: <u>Rick Casella</u>	Date: <u>9-28-12</u>
Alan Porch A.C., Danch	9-28-12
	······································
	• • • •

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 205 of 224

ATTACHMENT 9.7			AREA W	ALK-BY	CHECKL
Sheet 4 of 4 Area Walk-By Checklist (AWC) <u>AWC-057</u>		2	Status:	Y⊠ N	
Location: Bldg. <u>RB</u> Floor El. <u>300</u>	Room, Area	<u>S-E corner near</u>	<sup>r</sup> elevator		
SWEL Components: <u>SWEL2-14</u>			· · · · ·		
Photographs					
<b>Note:</b> <i>light fixture and copper tubing.</i>	Note:				

Engineering Report No. JAF-RPT-12-00015 Attachment D Rev. 0 Page 206 of 224 AREA WALK-BY CHECKLIST **ATTACHMENT 9.7** Sheet 1 of 4 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_AWC-058 Room, Area Col Line 3P Location: Bldg. RB Floor El. 326 SWEL Components: SWEL2-010 Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments. 1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 2 of 4 Area Walk-By Checklist (AWC) <u>AWC-058</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>326</u> Room, Area <u>Col Line 3P</u>	· ····
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
· -:	· .
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y N N U N/A
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y⊠ N□ U□ N/A□
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?	Y⊠ N∏ U∏ N/A∏
	· ·
· · · · · · · · · · · · · · · · · · ·	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 208 of 224 Attachment D

	7							BY CHECKL
Sheet 3 of 4 Area Walk-By	· Checklist (	(AWC)	AWC-058	3		Stat	tus:Y🛛	N_] U_
Location: Bldg.	RB	_ Floor El.	326	Room, Area	Col Line 3P			
				eismic conditions equipment in the		YX N		
Comments (Ad	ditional page	s mav be a	added as n	ecessarv)				
				conduit approxima	ately 15" from	conduit	support-J	udged
	acceptable fo	or ½ 8' light	load. 1C		•	1		• •
	excess cable condition.	nanyiny f	0111 8108 0		Zor (See pro	л <b>о-</b> поса	a seisiiliC	auveise
				s) 1 south can rul very minimal-jud			1CX72Z. 2	?' east of
				vory minima jud		0.		
Evaluated by: <u>A</u>	I G. Porch	C, D	and			_ Date:	<u>11/1/12</u>	
		Sais	A	-				
<u>(</u>	<u> </u>	<i>c</i>	3				11/1/12	
			*			-	11/1/12	
						-	<u></u>	
						-	<u></u>	
		·				-		
					· · ··	- - -	<u>, , , , , , , , , , , , , , , , , , , </u>	
						- - - -		
				,		-		
						-		
						-		
						<u>-</u>		

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 209 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) <u>AWC-058</u> Location: Bldg. RB Floor El. 326 Room, Area Col Line 3P SWEL Components: SWEL2-010 **Photographs** Note: :Light fixture chain supported from Note: South spring cans pipe support. conduit.

ATTACHMENT 9.7	AREA WALK-BY CHECKLI
Sheet 1 of 4 Area Walk-By Checklist (AWC) <u>AWC- 059</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>BR-1</u> Floor El. <u>272</u> Room, Area	
SWEL Components: <u>SWEL1- 501</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By space below each of the following questions may be used to record the Additional space is provided at the end of this checklist for documenting	results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessa opening cabinets)?</li> </ol>	Y⊠ N□ U□ N/A□ rily
<ol><li>Does anchorage of equipment in the area appear to be free of significant degraded conditions?</li></ol>	
	ť
· · · · · · · · · · · · · · · · · · ·	
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adv seismic conditions (e.g., condition of supports is adequate and fi conditions of cable trays appear to be inside acceptable limits)?	rerse
	•
	· ·
	· · · ·
	•
	EN-DC-168 RE

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 211 of 224

	HMENT 9.7 2 of 4		······································			Section of the sector of the s				BY CHECKL
		Checklis	t (AWC)	AWC- 05	9			Status	Y⊠	
ocatio	on: Bldg.	<u>BR-1</u>	Floor El	. 272	Room, A	\rea				
4.	Does it a spatial in and light	teractions	the area is f with other e	free of pote quipment ir	ntially adve the area (e	rse seismic e.g., ceiling	tiles	YX N	U	N/A
			• •							
, ,					entially adve pray in the a		· .	Y⊠N□	υ	N/A
٠						· .		<b>,</b>		
6.			the area is uld cause a		entially adve area?	rse seismic	;	Y⊠ N⊟	υ	N/A .
•										
									,	
7.	interaction	ons associa equipment	ated with ho	usekeeping	entially adve g practices, s ations (e.g.,	storage of		Y⊠ N⊡	U	N/A
							,			
								,		-
							ı			
				•		•			*	

EN-DC-168 REV 0

	Attachment D	Engineering Report No. JAF-RPT-12-0001 Rev. Page 212 of
ATTACHMENT 9.7	· · · · · · · · · · · · · · · · · · ·	AREA WALK-BY CHECKLIST
Sheet 3 of 4		Status: Y⊠ N□ U□
Area Walk-By Checklist (AWC)	······································	
8. Have you looked for and four	El. <u>272</u> Room, Area nd no other seismic conditions th	nat could YX N U
adversely affect the safety fu	nctions of the equipment in the a	area?
· · ·	·	
<u>Comments</u> (Additional pages may b		
	noor arain. It does not pas throu	igh anchorage. No seismic concern.
A Porch	C. Dand	10-30-12
•		
	•	
		<b>-</b>
· · · · ·		
		<ul> <li>A second sec second second sec</li></ul>
		EN-DC-168 REV 0
· · · · · · · · · · · · · · · · · · ·		

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 213 of 224

# ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 4 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 059 Location: Bldg. BR-1 Floor El. 272 Room, Area SWEL Components: SWEL1- 501 Photographs Note: Battery Room A Note: Battery Room A

Attachment D Engine	ering Report No. JAF-RPT-12-00 Re Page 214
	Page 214
ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-060</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>SU</u> Floor El. <u>227</u> Room, Area	· · · · · · · · · · · · · · · · · · ·
SWEL Components: <u>SWEL1-172</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	Y⊠ N∏ U∏ N/A∏
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	Y N N U N/A
	1
	·
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
	1

.

	Attachment D	Engineering Report No. JAF-	Page 2
ATTACHMENT 9.7	·····	AREA WALK-B	у Снеск
Sheet 2 of 3	· · · · · · · · · · · · · · · · · · ·	Status: YX N	งโา เป
Area Walk-By Checklist (AWC) <u>AWC-0</u>	60		
Location: Bldg. <u>RB</u> Floor El. <u>227</u>	Room, Area <u>V</u>	Vest Crescent	
4. Does it appear that the area is free of possible spatial interactions with other equipment and lighting)?			/A 🗌
:		N	
<ol><li>Does it appear that the area is free of po interactions that could cause flooding or</li></ol>	otentially adverse seis spray in the area?	smic Y⊠N⊡U⊡N/	/A
6. Does it appear that the area is free of po interactions that could cause a fire in the		smic Y⊠N⊡U⊡N	/A
<ol> <li>Does it appear that the area is free of po- interactions associated with housekeepi portable equipment, and temporary insta shielding)?</li> </ol>	ing practices, storage	of	/A
	······		
2		,	
· · · · · · · · · · · · · · · · · · ·			

.

.

.

• •

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 216 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIST
Sheet 3 of 3	Status: Y⊠ N∏ U∏
Area Walk-By Checklist (AWC) <u>AWC-060</u>	
Location: Bldg. <u>SU</u> Floor El. <u>227</u> Room, Area	······································
<ol> <li>Have you looked for and found no other seismic conditions that ca adversely affect the safety functions of the equipment in the area?</li> </ol>	
e e e e e e e e e e e e e e e e e e e	
Comments (Additional pages may be added as necessary)	
· · ·	
Evaluated by: <u>R. Casella</u> Rich Casella	Date: <u>11/01/12</u>
R. S. Kester	<u>11/01/12</u>
	· · ·
· · · · ·	
	•
	• •
	· ·

Attachment D Engineerin

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 217 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKLIS
heet 1 of 3 Area Walk-By Checklist (AWC) <u>AWC-061</u>	Status: Y⊠ N∏ U∏
ocation: Bldg. <u>RB</u> Floor El. <u>300</u> Room, Area	Col. 6 Line R
SWEL Components: <u>SWEL1-439, 462</u>	
nstructions for Completing Checklist	
This checklist may be used to document the results of the Area Wal space below each of the following questions may be used to record Additional space is provided at the end of this checklist for docume	the results of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free potentially adverse seismic conditions (if visible without nece opening cabinets)?</li> </ol>	
2. Does anchorage of equipment in the area appear to be free significant degraded conditions?	of YX N UNA
<ol> <li>Based on a visual inspection from the floor, do the cable/con raceways and HVAC ducting appear to be free of potentially seismic conditions (e.g., condition of supports is adequate a conditions of cable trays appear to be inside acceptable limit</li> </ol>	adverse nd fill

· .

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 218 of 224

TTACHMENT 9.7			} 	AREA WALK-BY CHECKLI
heet 2 of 3				Status: Y🛛 N🗌 U
rea Walk-By	Checklist (AV	VC) <u>AWC-06</u>	<u>1</u>	
ocation: Bldg.	<u>RB</u> F	loor El. <u>300</u>	Room, Area <u>Col. 6 Line</u>	<u>R</u>
	eractions with c		ntially adverse seismic n the area (e.g., ceiling tiles	
				÷
		rea is free of pote use flooding or sj	entially adverse seismic pray in the area?	
	. •			
		use a fire in the a	entially adverse seismic area?	Y⊠ N∏ U∏ N/A∏
		,		
interactio	ns associated v equipment, and	ith housekeeping	entially adverse seismic g practices, storage of ations (e.g., scaffolding, lead	Y N N U N/A
of notaling,	,.			
•				
				· .
	,			
				•
		· .		

	Attachment D	Engineeri	ng Report N	o. JAł	RPT-12-0 R Page 219	ev. 0
Аттаснмент 9.7			AREA V	ALK-E	Ву Снескці	ST
Sheet 3 of 3 Area Walk-By Checklist (AWC) <u>AWC-(</u>	061		Status:	Y⊠	N[] U[]	
Location: Bldg. <u>RB</u> Floor El. <u>300</u>	Room, Area	Col. 6 Line R				-
<ol> <li>Have you looked for and found no other adversely affect the safety functions of t</li> </ol>			Y⊠ N□	υ	-	
	. •					
Comments (Additional pages may be added a	s necessary)	4ma - F., (	· · · · · · · · · · · · · · · · · · ·	;		
						•
					1	
		,				
Evaluated by: <u>AI G. Porch</u>	L		Date: <u>11/1</u>	1/12		— . —
C. Sawatzke			11/:	1/12		
······································				·· · ·		=
· · · ·						ł

· . · .

• • •

.

,

.

Engineering Report No. JAF-RPT-12-00015 Rev. 0<sup>---</sup> Page 220 of 224 Attachment D

	AREA WALK-BY CHECKLIS
Sheet 1 of 5	Status: YX N U
Area Walk-By Checklist (AWC) <u>AWC- 062</u>	
Location: Bldg. <u>YD</u> Floor El. <u>293</u> Room, Area <sup>1</sup>	
SWEL Components: <u>SWEL2-013</u>	,
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?	Y⊠ N∏ U∏ N/A∏
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?	Y⊠ N□ U□ N/A□
,	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 221 of 224

ATTACHMENT 9.7	AREA WALK-BY CHECKL
Sheet 2 of 5 Area Walk-By Checklist (AWC) <u>AWC- 062</u>	Status: Y⊠ N⊡ U
ocation: Bldg. <u>YD</u> Floor El. <u>293</u> Room, Area	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?	
۱	
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	
	•
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	
	×
<ol> <li>Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead</li> </ol>	
shielding)?	

			4	Page 222
ATTACHMENT 9.7	30		AREA WAL	
Sheet 3 of 5			Status: Y[	⊠ N□ U□
Area Walk-By Checkli	st (AWC) <u>AWC</u>	<u>2-062</u>		
Location: Bldg. <u>YD</u>	Floor El. <u>293</u>	Room, Area		
		ner seismic conditions the of the equipment in the a		]
	·		•	
` _	Ę			
Comments (Additional pa	ages may be added	as necessary)		
seismic effect. 71MCC-120-0	Corrosion at base ( E1) on both east ar	of anchorage connection nd west sides. Anchors	. These cracks pose no cre ns for JB generator (located are sat. Also, surface cor	l just south of rosion at
seismic effects	1043 and 291044 v Rich (	vere generated to addre	ditions will not result in any ss the issues. Date: <u>11-14-</u>	
seismic effects Work requests 29	1043 and 291044 v	vere generated to addre	ss the issues.	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12
seismic effects Work requests 29 Evaluated by: <u>R Casella</u>	1043 and 291044 v Rich (	vere generated to addre	ss the issues. Date: <u>11-14-</u>	12

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 223 of 224 ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 4 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC- 062 Location: Bldg. YD Floor El. 293 Room, Area SWEL Components: SWEL2-093 Photographs Note: Surface rust on baseplate for raceway Note: Cracks in grout panel at enclosure that is adjacent to (south of) 71MCC-120-OE1. support (back, i.e., west side, of 71MCC-120-OE1).

Attachment D Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 224 of 224

# ATTACHMENT 9.7 AREA WALK-BY CHECKLIST Sheet 5 of 5 Status: YX N U Area Walk-By Checklist (AWC) \_\_\_\_\_AWC-062\_\_\_ Location: Bldg. YD Floor El. 293 Room, Area SWEL Components: SWEL2-013 Note: Area view in vicinity of 71MCC-120-Note: Corrosion at base of JB Generator (box-OE1 like component in center of photo)

Engineering Report No. JAF-RPT-12-00015 Rev. 0

## Attachment E

# "Potentially Adverse Seismic Conditions"

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 1 of 6

#### ATTACHMENT 9.8

LB # SWC/AWC# LICENSING BASIS EVALUATION CONCLUSION RESOLUTION IDENTIFIED CONDITION STATUS Hairline cracks were found on concrete pedestal for 93TK-78, Diesel Fuel Day Tank. The cracks pass through 7 of the 8 anchored locations. The crack lengths range from 1-1/2 inch to 6 inch maximum. All cracks were less than 1/32 inch width. See attached for representative photo. CR-JAF-2012-06090 In addition, small section on east side of east pedestal has been chipped out. This likely occurred during installation of adjacent piping Per the CRG, Address and correct the identified condition per EN-LI-CR-JAF-2012-06090 N/A SWEL 1-683 to allow for pipe movement. In the "as-found" condition, 3/4 inch Day N/A 102. Perform disposition review within 30 days and ensure actions Resolved Tank drain line has clearance of approximately 3/16 inch with pedestal. are assigned as applicable to correct the problem. Initiate CAs for Based on preliminary evaluation, cracks are minor and do not impact the actions not completed. the structural integrity of the anchor bolts and pedestal. Since the Day Tank oil drain pipe is at ambient temperature, pipe thermal expansion will be negligible. In a seismic event, movement of the pipe is not expected to result in loss of structural integrity of the drain pipe. 1. A flexible conduit (approx. 3 inch) carrying spare cable terminating in safety related Cable Tray 1TH604R in the southeast comer of the "A" Emergency Pump Room is supported above the tray by a tie-wrap to a CR-JAF-2012-06191 is rod supporting the cable tray. This does not conform to station closed. configuration standards. For both items, in a postulated seismic event. CR-JAF-2012-06191 no credible seismic interactions resulting from movement of the 1. Initiated WR 285300 N/A AWC-017 N/A Remove flex conduits from the tray. flexible cable are postulated. 2. Initiated WR 285298 2. A flexible conduit (approx. 1/2 inch) carrying spare cable in safety related Cable Tray 1TH604R in the "A" Emergency Pump Room is partially hanging over the side of the cable tray. This does not conform to station configuration standards. CR-JAF-2012-06185 Bolted floor connection at base of UNISTRUT supporting tube track in the "A" Emergency Pump Room has heavy surface rust. See attached Request Operability Input per EN-OP-104. The tubing support picture. The tube track supports 3/8 inches tubing to 10DPIS-277A, RHR identified in the condition report is obviously damaged and meets SW Pump Discharge Strainer A Differential Pressure Indication Switch. the criteria of EN-OP-I 04 Attachment 9.1 Table 1 [49]. Engineering CR-JAF-2012-06185 N/A AWC-017 The support is located approximately 3 ft. east of the 10S-5A1 pedestal. N/A Input is needed in order to classify as Operable-DNC or Operable-OP Initiated WR 285301 Floor drain is located directly south of the support. In the "as-found" EVAL. condition, the bolted connection remains rigidly fixed to the floor and EC Reply 40018 has been approved. The degraded support will the UNISTRUT. The structural integrity of the support is not expected to continue to perform its design function for all conditions including be compromised in a seismic event. the design basis earthquake.



#### POTENTIALLY ADVERSE SEISMIC CONDITIONS

## Engineering Report No. JAF-RPT-12-00015

Rev. 0 Page 2 of 6

18.4	Curc laure a				STATUS
N/A	<b>SWC/AWC #</b>	<b>IDENTIFIED CONDITION</b> The Battery Room B Exhaust Fan 72FN-46D (Battery Charger room Elev. 282 mezzanine) is mounted to the floor with two structural channel flange supports, each with four 1/4 in. anchor assemblies. Nuts on both anchors on the north end of the west support are loose (i.e., gaps between 1/8 in. and 1/4 in.). The remaining six anchors of the fan assembly are secure. Based on the evaluation of this component during the USI A-46 SQUG walk-downs (Ref. Screening Evaluation Worksheet, SEWS, for 72FN-46D), the approximate loads on each of the anchor bolts was determined to be less than 100 lbs. Since the capacity of each 1/4 in. anchor bolt is 300 lbs. In tension and 530 lbs. In shear, the load carrying capacity of the six remaining bolts exceeds the design loads. The as-found configuration does not affect the support's ability to perform its design function in a seismic event.	N/A	RESOLUTION CR-JAF-2012-06539 Repair per WR.	CR-JAF-2012-06539 is closed. Initiated WR 285515 Initiated WO 328339
N/A	AWC-006	UNISTRUT support for conduits 1CX257NE, 1CC269BC, and 1CC269BO located in the B Battery Charger room on the mezzanine level is mounted to the floor by three bolts. The nut on the east bolt is loose. The remaining two anchors are secure. The support is located in front of 72E-72B. The canacity of each of the 1/4 in anchors is 300 lbs in	N/A	CR-JAF-2012-06537 Repair per WR.	CR-JAF-2012-06537 is closed. Initiated WR 285513 Initiated WO 328337
N/A	SWEL 1-519	The Battery Room B Exhaust Fan 72FN-46B (Battery Charger room Elev. 282 mezzanine) is mounted to the floor with two structural channel flange supports, each with four 1/4 in. anchor assemblies. On the west support, the nut on the northeast anchor is loose (approximately 1/2 in. gap between bottom of nut and washer). On the east support, the northeast anchor is missing. The remaining six anchors of the fan assembly are secure. The missing anchor condition was identified and accepted during the USI A-46 SQUG walk-downs as documented on the Screening Evaluation Worksheet (SEWS) for 72FN-46B. Based on the SEWS evaluation, the approximate load on each of the anchors is less than 100 lbs. Since the capacity of each 1/4 in. anchor bolt is 300 lbs. in tension and 530 lbs. in shear, the load carrying capacity of the six remaining bolts exceeds the design loads. The as-found configuration does not affect the support's ability to perform its design function in a seismic event.	N/A	CR-JAF-2012-06538 Repair per WR.	CR-JAF-2012 <sup>-</sup> 06538 is closed. Initiated WR 285514 Initiated WO 328338

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0

Page 3 of 6

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-050	<ul> <li>Inspection of 93EDG-D resulted in the following findings:</li> <li>1. Crack in concrete floor at column lines A3-28 extending in the north- south direction from the north wall of the 93EDG-D</li> <li>bay to the joint that connects with the slab that supports the 93EDG-D</li> <li>unit.</li> <li>2. Hairline cracks in the grout and concrete foundation at or near several of the 1 in. bolts that anchor 93EDG-D to the concrete.</li> <li>3. Crack in concrete at base plate for support of air start 2 in. pipe on the south side of the unit approximately 14ft. west of east end of checker plate plate form.</li> <li>4. Two of four bolts in base plate for support of air start 2 in. pipe do not have full thread engagement of the nut. The lack of engagement is less than one thread. This condition is typical for support on both the north and south side of the unit.</li> <li>5. Hairline cracks in concrete of piers for 93TK-7D at anchor bolts connecting the tank to the pier. This condition was identified on CR-JAF-2012- 06090 to address cracking on 93TK-7B.</li> </ul>	N/A	CR-JAF-2012-06345 Provide Operability input to the Shift Manager for cracks and thread engagement. See EC 40051. Plant Engineering recommends this CA to be closed. No repairs required.	CR-JAF-2012-06345 is closed.
-		On items 1, 2, and 3, EDG pedestal is 7ft deep and founded on bedrock. The adjacent floor slabs are founded on concrete fill. The cracks will not impact structural integrity of the floor structure. Continue to monitor floor crack in accordance with maintenance rule. For item 4, sufficient remaining capacity in connection. For item 5, shrinkage cracks. No impact on structural integrity of pedestal.			
N/A	AWC-055 AWC-037	The following deficiencies were observed on equipment associated with temperature elements for ADS SRV Tailpipes D, F, K. 02TE-113D has a loose threaded conduit connection to the thermo-well. 02TE- 113F has a loose and bent threaded conduit connecting to the thermo- well. 02TE-112A (TE for 02RV-71K tailpipe) mineral insulated cable is pinched between steel grating and beam. Additional: The pinched cable may be older condition since it matches the historical photo in Maxgraphics. Also it is metal jacketed but cable and silica insulation could be adversely affected. Found during Fukushima Seismic Walk-downs (note- not seismic related concerns). This condition relates to loose temperature element connection heads and a pinched cable. There are no adverse seismic interactions adverse associated with this issue.	N/A	CR-JAF-2012-06495 Notified I&C supervisor. Initiated WRs- 285455, 6, 7. Do not close until WO# is entered in CR References and CR# is entered in INDUS. Review of CR operability tab shows equipment determined to be non-functional. No further action required under this CA.	CR-JAF-2012-06495 is closed. WOs 328147, 328148, and 328149 are resolved.
N/A	AWC-054	Damaged section of grating at EL 294 Drywell is an industrial safety hazard. Location is in the walkway between G and L SRV about 180 Azimuth. There is no part of the grating loose enough to be a seismic 2 over 1 concern but it deflects enough to potentially cause an injury. This was found by structural engineers involved in Fukushima Seismic Walk-down Program. Note - this grating section is significantly worse than observed last outage.	N/A	CR-JAF-2012-06452 Initiated WR 285392 to repair or replace grating section.	CR-JAF-2012-06452 in progress. Generated WO 00328133.

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0

Page 4 of 6

LB #	SWC/AWC#	IDENTIFIED CONDITION	UCENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-045	Two UNISTRUT supports for copper tubing Instrument Air line 3/4"-Al- 21 B-150 (Ref. FM-39N) located in the torus room Valve Farm along the east side of the El. 272 ft. concrete floor beam in the vicinity of 27AOV- 111 are degraded. The north UNISTRUT support is not attached to the concrete beam (only attached to the copper tubing). There are no anchors present. The next support 47" south of the first degraded support has a damaged clamp (it is bent and completely detached from the tubing). Note: Tape is wrapped between 3/4" copper tubing and stainless steel tubing running above it at a single location in vicinity of the north degraded tubing support. The 3/4" copper tubing is resting on a junction box south of the degraded supports. The next support 40" south is intact. The support configuration is degraded; however there is sufficient support before and after the two degraded supports to prevent the tubing from falling or breaking. In a seismic event, no adverse impact to safety related components is anticipated. In the same general location just north of the north degraded tubing support there is a conduit support on the underside of the referenced concrete beam with loose anchor bolts. There are two safety related 2- 1/2" conduits mounted on the UNISTRUT support. Label was illegible but conduits appear to be terminating at CAD AOVs located in the Valve Farm. The southernmost anchor is at approximately 1/4" from the beam and the northern anchor is at approximately 1/4" from the beam and the northern anchor is at approximately 1/8" from the bottom of the beam. The anchors are still providing some degree of support and the conduits are in no danger of falling and will continue to perform their intended design functions until the degraded conduit support. The conduits are no no danger of falling and will continue to perform the ir nenchor a re still providing some degree of support and the conduits are supported before and after this degraded conduit support. The conduits are no no danger of falling and will	N/A	CR-JAF-2012-07069 Repair the deficient IAS tubing supports (2) and conduit support (1) and remove tape between copper tubing and stainless steel tubing. Engineering to initiate CA-00002 to allow Maintenance personnel to reinstall the supports that have detached from the tubing to provide rigidity to the tubing and to reduce the excessive span length. (Reference WR #00286710 and EC 40286). Initiated WRs 286512 and 286513.	Generated WO
N/A	SWEL 1-457	Found during Fukushima Seismic Walkdown: 71 DC-A2 Relay Room Distribution Cabinet has a minor discrepancy at one of its four mounting bolt connections. At the lower right panel connection the spring nut is misaligned within the UNISRUT support channel and the channel is slightly distorted at the bolt location. The spring nut and bolt are fully engaged and the connection is tight and secure. The portion of the support channel that is distorted is localized and does not diminish the load capacity of the channel nor does it affect the way that the panel attaches to the building column. The overall integrity of the panel mounting is not affected and there is significant load capacity design margin per review of the seismic evaluation SEWS for this equipment. Also the panel mounting has additional vertical and lateral restraint at the bottom provided by three short rigid conduits connected to the panel asse and anchored in the concrete.	N/A	CR-JAF-2012-07954 Condition acceptable "as-is."	CR-JAF-2012-07954 in progress.

#### Engineering Report No. JAF-RPT-12-00015

Rev. 0

#### Page 5 of 6

.

LB#	SWC/AWC#	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-015 SWEL 1-234 SWEL 1-232 SWEL 1-213 SWEL 1-210	[Found During Fukushima Seismic Walkdowns] Two adjacent PIOOI UNISTRUT Channel functioning as a support frame with intermediate lateral cross members span the width of the HPCI enclosure in the East Crescent approximately 12 ft. above Floor Elev. 227. The span length is approximately 20 ft. The UNISTRUT supports numerous conduit (sizes ranging from? in. to 2 ? in.) and 3 Junction Boxes associated with the HPCI system. There is no known design documentation that qualifies this safety related assembly. This is a non-standard configuration and based on the span length and the numerous conduit loads, the acceptance of the UNISTRUT support frame cannot be readily determined. This Condition Report is being initiated to document the condition and ensure a thorough evaluation is performed. Based on USI A-46 (SQUG) guidance for equipment in this area, the peak seismic demand is 0.25g acceleration. Using this seismic criteria, an initial evaluation of the applied loads to the UNISTRUT frame shows there is reasonable assurance the assembly will remain functional and its structural integrity will be maintained in a postulated seismic event. In addition, a field inspection performed by a Structural Engineer confirmed that the structural frame is relatively rigid and no hardware deficiencies exist.	N/A	CR-JAF-2012-07990	CR-JAF-2012-07990 in progress.
N/A	AWC-018	Tube-track is disconnected from its support resulting in an 11 foot long unsupported section at mid-span of the tube track. The tube track contains a three-eighths inch SS tube downstream of 10SOV-264A, and a quarter inch copper tube which leads to 10AOV-71A(OP) Positioner. These components and the affected tubing are NSR. There are no sensitive SR components below this tube track which could pose a seismic 2 over I target. The remainder of the tube track is well supported at each end in proximity to the referenced components. This is located in south east corner of A-RHR HX room about 6 feet above floor, and was found during Fukushima Seismic Walkdowns.	N/A	CR-JAF-2012-07912 Initiated WR 289749.	CR-JAF-2012-07912 in progress.
N/A		Area walk-by by Entergy. Missing bolt on tube track protecting 1/4" copper tubing running between 93AC-C1 and 93EDG-23C. No support deficiency for tubing air line, since this portion of tube track only serves as a protective guard and not as actual support. This condition does not result in any potential adverse seismic interaction.	N/A _	CR-JAF-2012-07963 Initiated WR 289960 to install anchor bolts.	CR-JAF-2012-07963 in progress.

#### Engineering Report No. JAF-RPT-12-00015

LB#	SWC/AWC#	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
LB-01	SWEL 1-625	Top of the 93ECP-B Control Panel is unsupported. The SEWS evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically in to the panel without any lateral support to minimize the interaction load to the panel. The SWE determined that a potential adverse seismic condition could exist. During seismic event significant North South lateral load from conduits will contribute to the moment arm transferred to 4 (3/4") base anchors which might result in failure of the anchors and overturn the Control Panel. For pictures see SWC 1-625, Attachment C.	In Licensing Bases Evaluation it was concluded that the weight of		N/A
LB-02	SWEL 1-690	The Core Spray System Channel "A" Rack is bolted to steel plates which are welded to a structural steel I-beam. The spacing as noted on the drawing 7.70-81D should be 18" between anchor bolts, but due to interference with the I-beam, the spacing between the anchors was reduced to 15". Due to reduced spacing the SWE determined that this could be a potential adverse seismic condition. For pictures see SWC 1- 690, Attachment C.	From review of the SEWS evaluation it was determined that the. minimum design factor of a member is 31.1. This approximately results in only 3.2% load capacity used. The moment arm acting at a smaller distance will result in lower prying affect and reduce tension on the West anchors, but as a result increasing load on East anchors. Based on evaluation performed in LB-03, there is sufficient capacity to accommodate load shift from West to East anchors. The 31.1 design factor was for a different instrument rack. However, based on the significant available margin, IR-25- 01 was found to be acceptable by comparison. Based on simple computation, that shows that Interaction Ratio (IR) for tension and shear is less than 0.25.	CR-JAF-2012-08186 Revise drawing to reflect "as-found" bolt spacing for Instrument Rack IR-25-01 on drawing 7.70-81.	CR-JAF-2012-08186 in progress.
LB-03	AWC-045	North side of 27AOV-116 valve/operator assembly has a 1/8 in. clearance with conduit 1CC584BV1 (Blue).	The valve assembly is located near the Torus shell where it is anchored. The line temperature as given in the JAF Line Designation Table is ambient. Therefore, negligible thermal growth in piping. No contact with the conduit during normal plant operation. In a postulated seismic event, possible soft contact could occur between the valve assembly and the condulet threaded into the end of the 2" conduit. This will not result in any adverse seismic interaction. The 27AOV-116 valve assembly and the wires within the conduit/condulet will continue to perform their design function.	WR 291400 is generated to increase the gap from 1/8 in. to 1 in., between North side of 27AOV-116 valve/operator assembly and conduit 1CC584BV1 (Blue). The condition needs to be addressed prior to startup following RO21.	Generated WR 291400.

Prepared by:

Yaroslav Losev /

Date: \_\_\_\_\_11/21/2012\_\_\_\_

Reviewed by:

Tom Panayotidi /

Date: 11/21/2012

Peer Review Team Member

Engineering Report No. JAF-RPT-12-00015 Rev. 0

## Attachment F

## "Licensing Basis Evaluation Forms"

Rev. 0

Page 1 of 5

#### ATTACHMENT 9.9

LICENSING BASIS EVALUATION FORMS

#### Licensing Basis (LB) Evaluation Form

LB Evaluation No. 01 Originating SWC/AWC SWEL 1-625

Equipment ID No. 93ECP		<u>B</u> Equi	p. Class	20-Instrument	t and Control Panels
Equipment Descrip	otion	EDG B Engi	ne Contro	ol Panel	
Location: Bldg.	Floor El.	272'	_ Room, Area	EG Room B, Col. 26, Line A3	

#### **Condition**

Top of the 93ECP-B Control Panel is unsupported. The SEWS evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically in to the panel without any lateral support to minimize the interaction load to the panel. Based on engineering judgment, during seismic event significant North South lateral load from conduits will contribute to the moment arm transferred to 4 (3/4") base anchors which might result in failure of the these anchors and overturn the Control Panel. For pictures see SWC 1-625, Attachment C.

#### **Documents Reviewed**

References:

1. SEWS walk-down evaluation for equipment 93ECP-B (same as 93ECP-A).

#### **Licensing Basis**

The 93ECP-B Control Panel contains essential relays for EDG-B. Seismic qualification is based on SQUG engineer judgment on SEWS package.

#### **Evaluation**

The condition is not specifically addressed on the SEWS package. However, the evaluation presented here demonstrates that the judgment applies.

W = 850lb, weight of the cabinet and components [Ref. 1, Sheet 2] a = 0.44g, acceleration in North-South direction [Ref. 1, Sheet 6]

The minimum design factor of 3.958 [Ref. 1, Sheet 10] was calculated in SEWS evaluation.

For simplification, treat the geometry of the Control Panel as a simple cantilever pinned at the bottom to get the maximum lateral load the anchors can experience. The moment is not taken into account in this LBE since the cabinet is fairly flexible and will allow some lateral deflection between anchorage of the cabinet and "Substantially Welded Steel Frame", shown on SEWS, Field Sketch for 93ECP-A/B [Ref.1]; therefore the anchorage was treated as pinned connections, releasing moments at the anchorage between steel frame and concrete. Based on above the moment transferred to the anchors between steel frame and concrete will be negligible.

The stresses that the anchors endure are directly proportional to the loading of the joints (i.e. Maximum Load divided by Allowable Load). Calculating the maximum weight that the anchors have to take to fail and

comparing that load to the maximum weight of 10ft of flexible conduits attached on the top of the Control Panel.

Let "X" equal to the weight which would fail the component with minimum design factor of  $3.958 \times (850 \text{ lb}) = 3.958 \times (850 \text{ lb}) =$ 

#### X > 3,364.3 lb

With a lateral acceleration of 0.44g this means that the applied lateral seismic load to the top of the control panel cannot exceed:

X/(0.44) = 7,646 lb

Based on the seismic acceleration levels for this area and flex conduit connections into top of panel, it is not credible that the transferred weight of the flexible conduits to the top of the Control Panel can be more than 7,646 lb; therefore the Control Panel is adequately supported and can withstand design basis seismic event.

Conclusion	Condition Meets the Licensing Basis:	Yes No
Prepared by:	<u>Yaroslav Losev</u> Licensing Basis Reviewer	Date <u>11/07/2012</u>
Reviewed by:	Jeffrey H. Horton Peer Reviewer	Date <u>11/12/2012</u>

Engineering Report No. JAF-RPT-12-00015 Rev. 0

Page 3 of 5

#### ATTACHMENT 9.9

LICENSING BASIS EVALUATION FORMS

#### Licensing Basis (LB) Evaluation Form

LB Evaluation No. \_\_\_\_\_ 02 Originating SWC/AWC SWEL 1-690

Equipment ID No.	IR-25-	<u>01</u> Ec	quip. Class _	18-Instrument	Racks
Equipment Descrip	Core Spra	y System C	hannel A Racl	<	
Location: Bldg.	RB	_ Floor El.	242.8'	Room, Area	Col. 4, Line A

#### **Condition**

The Core Spray System Channel "A" Rack is bolted to steel plates which are welded to a structural steel Ibeam. The spacing as noted on the drawing 7.70-81D should be 18" between anchor bolts, but due to interference with the I-beam, the spacing between the anchors was reduced to 15". Due to reduced spacing the SWE determined that this could be a potential adverse seismic condition. For pictures see SWC 1-690, Attachment C.

#### **Documents Reviewed**

**References:** 

- 1. Drawing 11825-7.70-81D.
- 2. SEWS walk-down evaluation for equipment 25-60 (same as IR-25-01).

#### Licensing Basis

The IR-25-01 Core Spray System Channel "A" Rack provides support to Core Spray electrical, mechanical and I&C equipment.

#### **Evaluation**

During a subsequent walk-down it was determined the spacing is actually 12" (3" less than what was noted) and that there are 6 bolts with  $\frac{1}{2}$ " diameter. There will be no shear reduction since material and area resisting shear is not changed.

The moment arm acting at a smaller distance will result in lower prying affect and reduce tension on the West anchors, but as a result increasing load on East anchors. From review of the SEWS evaluation it was determined that the minimum design factor of a component is 31.1. This approximately results in only 3.2% load capacity used. SEWS Evaluation was done for IR-25-60. IR-25-01 was compared to IR-25-60 and accepted.

Since moment is directly proportional to the distance the maximum load increase of East anchors will be 100% \*(1 - 12"/18") = 33.3%. Approximately 96.8% capacity is sufficient to accommodate load shift of 33.3% from West to East anchors.

Conclusion	Condition Meets the Licensing Basis:	🛛 Yes 🗌 No
Prepared by:	<u>Yaroslav Losev</u> Licensing Basis Reviewer	Date <u>11/07/2012</u>
Reviewed by:	Jeffrey H. Horton Peer Reviewer	Date <u>11/12/2012</u>

#### Engineering Report No. JAF-RPT-12-00015

Rev. 0

Page 4 of 5

#### ATTACHMENT 9.9

LICENSING BASIS EVALUATION FORMS

#### Licensing Basis (LB) Evaluation Form

LB Evaluation No. \_\_\_\_\_03 Originating SWC/AWC AWC-045

Equipment ID No.	27AOV	<u>'-116</u> Ec	uip. Class	N/A	
Equipment Description	on	Torus Pure	ge and Inert	Isolation Va	lve
Location: Bldg.	SU	Floor El.	262.6'	Room, Area	a <u>Col. 6, Torus Room</u>

#### **Condition**

North side of valve/operator assembly for 27AOV-116 has 1/8 in. clearance with conduit 1CC584BV1 (Blue). For pictures see AWC-045, Attachment D.

#### **Documents Reviewed**

FM-18B FE-3HW MSK-309A1 11825-L1ST-1 JAFNPP Line Designation Table UFSAR

#### **Licensing Basis**

27AOV-116 is a Torus Purge Inlet Isolation Valve. It is a safety related valve that provides primary containment (torus) isolation along with 27AOV-115. The basic function of these valves is to provide necessary isolation of the containment in the event of accidents or similar critical conditions when the free release of containment atmosphere cannot be permitted (Ref. UFSAR Section 5.2.3.5).

#### **Evaluation**

The valve is located in the torus room approximately 6 ft. from the Torus shell. Since the Torus shell anchors the pipe and the temperature of line 27-20"-N-152A-7 is ambient, thermal expansion of the pipe is negligible.

A length of approximately 2 ft. of 2" conduit runs from Junction Box JB-PCI30. A condulet is threaded into the end of the 2ft. conduit run. The 1/8" clearance is between a flange on the valve assembly and the condulet. Each end of the condulet connects to flexible conduit that terminates at 27AOV-116. Review of the wiring diagram (FE-3HW) shows 3-12 gauge wires routed in the conduit from the junction box to the valve.

In a postulated seismic event, the flange could contact the condulet, causing the condulet to displace laterally. The weak link would be the connection of the conduit to the junction box.

Since 27AOV-116 is located so close to the Torus shell (anchor point), expected movements in a seismic event are minimal. In addition, the routing of the conduit to the junction box is curved, providing some measure of flexibility in the conduit. It is concluded that the conduit, acting as a cantilevered beam has sufficient flexibility to ensure its structural integrity is not compromised in a seismic event. Structural integrity of the conduit and condulet will ensure the internal wires will be able to perform their respective design functions. Contact between the 27AOV-116 assembly and the conduit/condulet will have no impact on the valve to perform its safety related function.

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0

Page 5 of 5

,	🛛 Yes	🗌 No	
Rick Casella / Z. Caulla Licensing Basis Reviewe		Date _	11-17-12-
	•	Date _	11/17/12
	Licensing Basis Reviewer A. G. Porch / LC. D.	Licensing Basis Reviewer A. G. Porch / LC. Dad	Licensing Basis Reviewer A. G. Porch / LC. Date DateDateDate

Engineering Report No. JAF-RPT-12-00015 Rev. 0

### Attachment G

· .

## "Peer Review Checklist For SWEL"

́л

ATTACHMENT 9.11 Sheet 1 of 1

₿ <sub></sub>	Entergy				Submittal Report	· · ·
Engineering Report Num	iber JAF-	RPT-12-00015	Rev.	Title Peer Revie	w Checklist Comments	
Quality Rel	ated: 🛛 Yes	No			ions: See altached E-Mails du 12112 which supplement this re	
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
1	Question 2b	The team should also conside Base List) and the new three s		•	RHRSW Strainer 10S-5A1 and 02RV- 71E (new 3-Stage SRV) have been added to the SWEL 1 list.	RCC for
2	Question 2d	All components listed the same conditions. The could breakdo conditions further to provide so inside primary containment, in	own the e	nvironment imination such as	Table 9.4.2 from EN-DC-168 is the Seismic Equipment Walkdown List (SWEL 1) and Table 9.4.5 is the SWEL 2. As shown on EN-DC-168 Attach. 9.4, Sheet 9 of 11 (page 47 of 80 in the procedure), Item 25 designates various environment items (T) High Temp, (H) Humid, (I) Inside, (O) Outside, and (B) Borated. The SWEL has been broken down into each of these environments. The appropriate environments have been added to the SWEL lists. The column titled "BLDG." on both SWEL 1 & 2 shows location of each component, such as PC for Primary Containment and EG for EDG structures. We do not have to list HELB environment because the purpose of this effort is to look at the normal environmental conditions.	R Securios N RCC for R. Succident

EN-DC-168 REV 0

PEER REVIEW COMMENT FORM

Attachment G

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 1 of 8

Was an appropriate justification documented for spent EN-DC-168 Section 5.5[4](a) states, "All Question 3b ZCC for fuel pool related items not included in SWEL 2? SSCs which could potentially cause the spent fuel pool to drain rapidly (Rapid RSound Drain Down), as described in EPRI 1025286, Section 3, shall be selected for SWEL 2 and documented in Attachment 9.4. EN-DC-168, Table 9.4.4 (Rapid Drain-Down List) includes a column labeled "Basis for Inclusion/Exclusion." EPRI Walkdown Guidance states that if there are no SFP penetrations below about 10 ft. above the top of the fuel assemblies, then no rapid drain-down items would be added to the SWEL. Since this is the case for JAF, we do not have any entries on EN-DC-168 Table 9.4.4. Question 4 Why doesn't the base list include all the items listed in B-The Base List was chosen by first RCC for 72. Success 2 of the EPRI document? Example, CRD Pumps, considering the A-46 Composite Safe suppression pool, RHRSW Strainers. Shutdown Equipment List (SSEL). This list was then compared to the IPEEE Table 3A.1, JAF Seismic Margin Assessment Shutdown List. The Base List was reduced to those items which were on both the A-46 SSEL and IPEEE Table 3A.1. Core Spray Pump 14P-1A and RHRSW Strainer 10S-5A1 (both on the IPEEE, but not on A-46) were added to complete the Base List. The CRD pumps (03P-16A, 16B) are not on the IPEEE Table 3A.1 and therefore were not included in the Base List. Various components within the systems listed in Table B-2 such as HPCI, Core Spray, and LPCI were included on the Base List.

4

EN-DC-168 REV 0

Attachment G

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 2 of 8

Page 2 of

Reviewed By: Site/Department:	₩	Date	SWEL to discard 72HV-7A.	h.
	Many components selected did r one of the 5 Safety Functions" po of these components were electr system and probably support on functions. According to figure 1- document, these components sh SWEL 1.	er the Base List. Many rical components or CAD e of the five safety 1 in the EPRI 1025286	EPRI Seismic Walkdown Guidance Report 1025286 states on page 3-4 states that the USI A-46 program Safe Shutdown Equipment List address the first four safe shutdown functions listed above (i.e., in the EPRI Report). On page 3-3 of the EPRI report, it is stated that the IPEEE program was intended to address the seismic margin of SSCs associated with all of the above 5 safety functions. The items on SWEL 1 are listed on IPEEE or A-46 (in 2 cases, a SEWS evaluation walkdown was performed indicating the component was part of A-46, but could not find item on the A-46 Safe Shutdown Equipment List). One exception, 72HV-7A was neither on A-46 or IPEEE. There are	RCC for A. Sullino

\* RICH SULLIVAN (OPERATIONS) PROVIDED REVIEW COMMENTS ON EMAIL DATED 9/3/12 (SEE DITACHED)

R Comble 11/13/12

JAF-RPT-12-00015 Rev. 0 Page 3 of 8

Page 1 of 1

r 03, 2012 6:35 PM acanskas, Vincent P; Saunders, Michelle; Wallace, David J; Brey, Sheila; Porch, Alan,
oney, Jeffrey; phansen@enercon.com
lon, Christopher; Locy, Roger
eismic Walkdowns - SWEL 1 & SWEL 2 Prepared

Rick,

Porch, Alan

Here are my comments. I used the format in the EPRI document.

Thanks,

Rich

#### From: Casella, Richard

Sent: Friday, August 31, 2012 6:57 PM

To: Bacanskas, Vincent P; Saunders, Michelle; Wallace, David J; Brey, Sheila; Sullivan, Richard; Porch, Alan; Favara, John A; Cooney, Jeffrey; phansen@enercon.com

Cc: Grabowski, Bill; Carlon, Christopher; Locy, Roger

Subject: Fukushima - Seismic Walkdowns - SWEL 1 & SWEL 2 Prepared

To all,

Please find attached the prepared JAF SWEL 1 and SWEL 2 (Spent Fuel Pool related) lists comprising the proposed components to be walked down <u>during RO21</u>. The lists were prepared in accordance with EN-DC-168 and EPRI Report 1025286, Seismic Walkdown Guidance. The lists were prepared by myself, Roger Locy, and Jeff Cooney. <u>The expectation is that the SWEL 1 and SWEL 2 lists will be issued by close of business on Thursday, 9/6/12</u>. The Peer Review team consists of Rich Sullivan, Al Porch, and John Favara.

There are 111 items listed on SWEL 1 and 13 items listed on SWEL 2. The attachments include "Base List 1" which is the original list of candidate components as taken from the IPEEE (Individual Plant Examination of External Events) and the SSEL (Safe Shutdown Equipment List) from the USI A-46 effort. The 111 items for SWEL 1 were selected from the Base List. Note the SWEL 1 components are yellow highlighted in the Base List.

Please send any comments related to review of SWEL 1 and SWEL 2 to Rick Casella at JAF. I can be reached by phone at (315) 349-6549.

Thanks, Rick ∖

9/4/2012

114/12

#### Peer Review Checklist for SWEL

#### **Instructions for Completing Checklist**

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection?

YES NO

All five safety functions are adequately represented.

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

a. Various types of systems?

 $\boxtimes$ YES  $\square$  NO

- Various systems and components were selected.
- b. Major new and replacement equipment?

**∑YES □**NO

ESW strainers and 71INV-3A were selected both of which were recently modified.

The team should also consider RHRSW strainers (not on Base List) and the new three stage SRV solenoids.

Also selected was 71UPS-1(MTR). This component was recently changed out and replaced by an inverter. The list was not updated.

c. Various types of equipment?

YES NO

Various types of equipment have been selected, MOVs, AOVs, Vertical pumps, horizontal pumps, strainers, MCCs, L-Gear, Inverters, Heat Exchangers, etc.

d. Various environments?

#### TYES NO SEE EN-DC-168 Attach 9.11 For RESOLUTION

All components listed the same environmental conditions. The team could breakdown the environment conditions further to provide some discrimination such as inside primary containment, in HELB environment, etc.

e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program?

YES NO

The "Base List 1" is the original list of candidate components as taken from the IPEEE (Individual Plant Examination of External Events) and the SSEL (Safe Shutdown Equipment List) from the USI A-46 effort.

f. Were risk insights considered in the development of SWEL 1?

XYES NO

3. For SWEL 2:

119/12

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?
 ☑YES □ NO

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?

See EN-DC-168 ATTACH 9.11, FOR RESOLUTION OF YES 🗌 NO THIS ITEM. PEEL REVIEWENS HAVE CONCUDALED. Not sure. I did not see any such documentation.

4. Provide any other comments related to the peer review of the SWELs.

- 1) Why doesn't the base list include all the items listed in B-2 of the EPRI document? Example, CRD Pumps, suppression pool, RHRSW Strainers.
- Many components selected did not "Maintains at least one of the 5 Safety Functions" per the Base List.(Items 168, 213, 241, 247, 317, 322, 336, 391, 394, 409, 429, 460, 465, 473, 475, 476, 490, 492, 494, 496, 497, 498, 501, 510, 519, 521, 522, 557, 579, 580, 583). Many of these components were electrical components or CAD system and probably support one of the five safety functions. According to Figure 1-1 in the EPRI 1025286 document, these components should not be part of SWEL 1.

5. Have all peer review comments been adequately addressed in the final SWEL?

pic YES NO SEE EN-DC-168 ATTACA 9.11 FOL RESOLUTION 11/14/12 R. Caulle R. SULLIVAN Peer Reviewer #1: Date: 1 C. DARCH Peer Reviewer #2: Date: 1114/12

\* SIGNED FOR R SULLIVAN PER E-MAIL AUTHORIZATION DATED ILIZ/12, 6:22 PM.

R. Coulle 11/14/12

Page 1 of 2

نغُ

#### Casella, Richard

From: Sullivan, Richard

Sent: Monday, November 12, 2012 6:22 PM

To: Casella, Richard; Penny, Phil O

Subject: RE: Fukushima Equipment list Approval

Rick, Phil,

I have reviewed the information and approve it. You can sign for me per this e-mail.

Thanks, .

**Rich Sullivan** 

From: Casella, Richard Sent: Sunday, November 11, 2012 8:06 PM To: Sullivan, Richard; Penny, Phil O Cc: Carlon, Christopher; Porch, Alan; Johnson, Joseph G Subject: RE: Fukushima Equipment list Approval

Rich,

I have attached the SWEL 1 and SWEL 2 lists. I have also attached response to your comments. If acceptable to you, please initial the comment form. I will also forward the sheet from EN-DC-168 for your signature as completing Peer Review of the SWEL. I appreciate your help very much.

Thanks, Rick

From: Sullivan, Richard Sent: Wednesday, November 07, 2012 6:08 PM To: Penny, Phil O Cc: Casella, Richard; Carlon, Christopher Subject: RE: Fukushima Equipment list Approval

Where is the list? I had some comments. How were those disposed? BTW, I am Columbia this week and next.

Rich

From: Penny, Phil O Sent: Tuesday, November 06, 2012 8:31 AM To: Sullivan, Richard Cc: Casella, Richard; Carlon, Christopher Subject: RE: Fukushima Equipment list Approval

Rich,

11/13/2012

Page 2 of 2

Please Approve the list you already concurred with via this email. You are the only signature left for completion.

Thanks

Phil Penny Supervisor Design Electrical Engineering JAF Nuclear Power Station Entergy Nuclear Operations (ph) 315-349-6832

(ph) 315-402-9358 ppenny@entergy.com

From: Carlon, Christopher Sent: Monday, November 05, 2012 1:58 PM To: Sullivan, Richard; Locy, Roger Cc: Casella, Richard; Penny, Phil O Subject: Fukushima Equipment list Approval

Richard, Roger

I need your signature for participating in the Seismic Walkdown Equipment List (SWEL) review/preparation back in early September. Please signed the attached file and send back to me ASAP.

Thank you

#### **Christopher Carlon**

Design Engineering - Mechanical J.A. Fitzpatrick Nuclear Power Plant Phone: 315-349-6916 Email: ccarton@entergy.com

Engineering Report No. JAF-RPT-12-00015 Rev. 0

### Attachment H

2

## "Seismic Walkdown Engineer Training Certificates"

Engineering Report No. JAF-RPT-12-00015 Attachment H Rev. Page 1 of 11 **Certificate of Completion** is hereby granted to Harpreet Ghuman for successful completion of TRAINING ON NEAR TERM TASK FORCE **RECOMMENDATION 2.3** PLANT SEISMIC WALKDOWNS MWEn July 26, 2012 Mark W. Eli, SCE, P.E. Date Certified Seismic Walkdown Engineer Palo Alto, CA June 27, 2012

Engineering Report No. JAF-RPT-12-00015 Rev. ( Page 2 of 11

## Certificate of Completion

is hereby granted to Donald Koberg

for successful completion of TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

## PLANT SEISMIC WALKDOWNS

A R E S

July 26, 2012

Date

Mark W. Eli, SCE, P.E. Certified Seismic Walkdown Engineer Palo Alto, CA June 27, 2012

MWEW

Engineering Report No. JAF-RPT-12-00015 Rev. U Page 3 of 11

### ENERCON Excellence—Every project: Every day.

# Certificate of Completion

# Yaroslav Losev

for successful completion of TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt Arlington, NJ

Keyin Bessell Certified Seismic Walkdown Engineer Palo Alto, CA = 6/13/2012 Alex Smerch Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Engineering Report No. JAF-RPT-12-00015 Rev. C Page 4 of 11

## ENERCON Excellence-Every project: Every day

# Certificate of Completion

# Pouria Pourghobadi

for successful completion of TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

evin Bessell

Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Alex Smerch Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Engineering Report No. JAF-RPT-12-00015 Rev.



Certificate of Achievement This is to Certify that

## **Rick Casella**

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course Held June 11-15, 2007



Richard G. Starck<sup>II</sup>, MPR Associates, In-

SOUG Instructor

Paul D' Baughman, ARES Corporation

Engineering Report No. JAF-RPT-12-00015 Rev. Page 6 of 11

EPRI ELECTRIC POWER RESEARCH INSTITUTE

Certificate of Completion

## **Alan Porch**

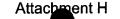
Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

> July 19, 2012 Date

. .

P. Kassawa

Robert K. Kassawara EPRI Manager, Structural Reliability & Integrity



### Engineering Report No. JAF-RPT-12-00015 Rev. Page 7 of 11

# SQUG

# Certificate of Achievement

This is to Certify that

## Bob Kester

has Completed the SQAC Walkdown Screening and Seismic Evaluation Training Course Held August 2–6, 1993



Samon Love

David A. Freed, MPR Associates SQUG Training Coordinator

nul P. Smith,

Neil P. Smith, Commonwealth Edison SQUG Chairman R. P. Knosum

Robert P. Kassawara, EPRI SQUG Program Manager

ELECTRIC POWER RESEARCH INSTITUTE Engineering Report No. JAF-RPT-12-00015 Rev. Page 8 of 11

Certificate of Completion Christopher Sawatzke Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

EPPI

July 11, 2012

R.P. Kassanana

Robert K. Kassawara EPRI Manager, Structural Reliability & Integrity

Engineering Report No. JAF-RPT-12-00015 Rev. Page 9 of 11

## ENERCON Excellence Every project. Every day

# Certificate of Completion

# Tom Panayotidi

### for successful completion of TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell

Certified Seismic Walkdown Engineer Palo Alto, CA, – 6/13/2012

Alex Smerch

Alex Smerch Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 10 of 11

Enercon Walkdown Team Lead for PNPS

Excellence—Every project. Every day.

## **Certificate of Completion**

**F**JENERCON

is hereby granted to

Laura Maclay

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

Awarded: 7/26/2012 in Mt. Arlington, NJ

Kenneth Whitmore Certified Seismic Walkdown Engineer Alexandria, VA – 6/20/2012

Engineering Report No. JAF-RPT-12-00015 Attachment H Rev ( Page 11 of 11 **E**JENERCON Excellence—Every project. Every day. **Certificate of Completion** is hereby granted to Jeff Horton for successful completion of TRAINING ON NEAR TERM TASK FORCE **RECOMMENDATION 2.3** PLANT SEISMIC WALKDOWNS Awarded: 7/26/2012 in Mt. Arlington, NJ

Kenneth Whitmore Certified Seismic Walkdown Engineer Alexandria, VA – 6/20/2012

Engineering Report No. JAF-RPT-12-00015 Rev. 0

### Attachment I

### "Peer Review Comments"

· .

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 1 of 20

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

Entergy			Seismic Walkdown Submittal Report Review Comments and Resolutions Form					
Engineering Report Number		JAF-RPT-12-00015		Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic			
Quality Related: Yes X N		Yes 🛛 N	No	Special Notes or Instructions: N/A				
Comment Section/Page No. Number		n/Page No.	Review Comment	t		Response/Resolution	Reviewer's Accept Initials	
Attachme	ent C	-						
1	Cover	sheet	Cover sheet is missing. This comment applies to all attachments for this report.		Comment incorporated	LM		
2	Genera	al	Add a header on each page with an overall page count. This comment applies to all attachments for this report.			Comment incorporated	LM	
3	Genera	al	The SWEL numbering doesn't appear to be sequential or correctly labeled per EN-DC-168, page 46, number 16. Each item for SWEL 1 should be labeled SWEL1-XXX, <i>and</i> sequential. The SWEL 2 items appear to be labeled correctly.			Comment incorporated.	LM ·	
4	Genera	al	Typical <i>all</i> sheets - remove sheets 6-8 and if the second page of photos (page 5) is not used, delete it. Make sure to update sheet numbering in left corner of each page			Comment incorporated	LM	
5	SWEL-1, Page 1, the equipment description mis SWEL1-1 'valve'				iption misspells	Comment incorporated.	LM	
6	SWEL1-011, 232, and 430 SWEL-11, SWEL-232, and 'Status' box is not checked					Comment incorporated for SWEL1-11 and SWEL1-232. For SWEL1-430 the status was changed to U since this is a deferred item.	LM	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 2 of 20

	Entergy	Seismic Walkdown Submittal Report Review Comments and Resolutions Form					
Engineering JAF-RPT-12- Report Number		00015 Re 0		Rev.       Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdow         0       Report for Resolution of Fukushima Near-Term Task Force         Recommendation 2.3: Seismic			
Quality Re	lated: 🗌 Yes 🛛 No	)	Specia	al Notes or Instruc	ctions: N/A		
Comment Number	Section/Page No.	Review Comment	ļ		Response/Resolution	Reviewer's Accept Initials	
7	SWEL1-032	SWEL-32, some sheets say SWEL-32, some read SWEL-#32, be consistent		Comment Incorporated and format is consistent with EN-DC-168	LM		
8	SWEL1-052	SWEL-52, question #6 is marked both 'Y' and 'U, which is correct?		Status changed to U, item is deferred.	LM		
9	SWEL1-065, 164, 433, 555, 555, 577, 624, 640, 642, 646, 662, 670, 674, 2-1, 2- 3, 2-5, 2-6.	Question #6 is blank on the following SWEL items: SWEL-65, SWEL-164, SWEL-433, SWEL-555, SWEL- 555, SWEL-577, SWEL-624, SWEL-640, SWEL-642, SWEL-646, SWEL-662, SWEL-670, SWEL-674, SWEL2-1, SWEL2-3, SWEL 2-5, SWEL2-6. Each question should have an answer marked, including Question #6. If the item is an in-line mounted valve or similar, it may not explicitly have anchorage. In these cases the question should be marked "Y" with an explanation, as you infer. The explanation could be "In- line mounted component" or similar.		SWEL1-065, SWEL1-164, SWEL1-555, SWEL1-577, SWEL1-642, SWEL1-646, SWEL1-662, SWEL1-670, SWEL1-674, 2-1, 2-3, 2-5 comment incorporated. SWEL1-433, 624,640 status is U, items are deferred.	LM		
10	SWEL1-209, 210, 213, 219	Status' box on page 4 is not checked for the following SWEL items: SWEL-209, SWEL-210, SWEL-213, SWEL-219		209, 210, 213, 219 Comment Incorporated	LM		
11	SWEL1-234	SWEL-234- 'Status' box on page 3 & 4 is not checked			Comment Incorporated	LM	
12	SWEL1-360	SWEL-360- 'Status' box on page 3 is not checked			Comment Incorporated	LM	
13	SWEL1-372, 2-14	SWEL-372 and SWEL2-14 are			Comment Incorporated	LM	
14	SWEL1-373	SWEL-373- 'Status' box on pa	ige 5 is r	ot checked	Comment Incorporated	LM	
15	SWEL1 426	SWEL 426- Question #1 is not	t checke	j	Comment Incorporated	LM	

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 3 of 20

Entergy					Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering JAF-RPT-12-0 Report Number		JAF-RPT-12-	• •			itzPatrick (JAF) Nuclear Power Plant Seismic Walkdown ution of Fukushima Near-Term Task Force n 2.3: Seismic		
Quality Related: Yes X No			Special Notes or Instructions: N/A					
Comment Number	Section/Page No.		Review Comment	H		Response/Resolution	Reviewer's Accept Initials	
16	SWEL1-433		SWEL-433- pages 2-5 are not labeled per the guideline, should have SWEL1-XXX, not just XXX. Also, pages 4 & 5 'Status' boxes are not checked		Status changed to U, the item is deferred.	LM		
17	SWEL	1-439	SWEL-439-page 4 labeled status 'U', but page 5 labeled 'Status' 'Y', which is correct?		Status changed to U, the item is deferred.	LM		
18	SWEL	1-456	SWEL-456-page 4 labeled 'Status' 'U', but page 5 labeled 'Status' 'Y', which is correct?			Status is changed to U. The item is deferred.	ĻM	
19	SWEL	1-475	SWEL-475 Question #6 marked 'U' but status is 'Y'?			Comment incorporated	LM ·	
20	SWEL1-508		SWEL-508, Question #6 not checked and the 'Status' on page 4 is not checked		Comment incorporated	LM		
21	SWEL	1-516, 522	SWEL-516 and SWEL-522, Question #5 marked 'U' but status 'Y'?			Comment incorporated	LM	
22	SWEL	1-628	SWEL-628 is partially blank. Is this a deferred item? If so, status should be marked 'U'		Comment incorporated. The item is differed and the status is changed to U.	LM		
<b>23</b>	SWEL	1-636	SWEL-636, Question #10 is marked 'U', but overall 'Status' is 'Y', should #10 be 'N'? Also, question #6 is not checked.			Response provided by site staff, inconsistency is resolved.	LM	
24	SWEL2-7 SWEL2-7, Question #6 not checked is not checked			ecked, a	nd page 4 'Status'	Comment incorporated	LM	
25	SWEL	2-9	SWEL2-9, page 5 'Status' is not checked.			Comment incorporated.	LM	
26 SWEL1-243 SWEL-243- 'Status' box on p					Comment Incorporated.	LM		
Attachme	nt D			-		• <u> </u>	··• · · · · · · · · · · · · · · · · · ·	
27	Cover sheet Cover sheet is missing. This c attachments for this report.			omment	applies to all	Comment incorporated	LM	

#### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 4 of 20

\$	Entergy	~ .	Seismic Walkdown Submittal Report Review Comments and Resolutions Form				
Engineerin Report Nu	Ig JAF-RPT-12-00	0015	Rev. 0		itzPatrick (JAF) Nuclear Power Plant Seismic Walkdown ution of Fukushima Near-Term Task Force n 2.3: Seismic		
Quality Re	elated: 🗌 Yes 🛛 No	)	Special Notes or Instructions: N/A				
Comment Number	Section/Page No.	Review Comment	<u> </u>		Response/Resolution	Reviewer's Accept Initials	
28	General	Add a header on each page w This comment applies to all at			Comment incorporated	LM	
29	General	Typical all sheets - remove sheets 6-8 and if the second page of photos (page 5) is not used, delete it. Make sure to update sheet numbering in left corner of each page.		Comment incorporated	LM		
30	AWC-003, AWC-011, AWC-012, AWC-013, AWC-014, AWC-019, AWC-023	Pages 4 and 5 of AWC-03, AV AWC-14, AWC-19, AWC-23 a components in the heading			Comment incorporated. Note:AWC-003 and AWC-013 were identical. Hence, AWC-013 was replaced.	LM	
31	AWC-006	AWC-06, the status is marked but it appears that the walkdow Refer to page 67 for an explan It should be 'Y'.	vn has b	een completed.	Comment incorporated	LM	
32	AWC-012	AWC-12 has a different status valid	different status on each page, only one is		Comment incorporated	LM	
33	AWC-024	AWC-24 has 'Y' status on some pages, and 'N' on others, only one is valid.		Comment incorporated	LM		
34	AWC-031, AWC-034, AWC-051	AWC-31; AWC-34 and AWC-4	51 are n	nissing signatures	Comment incorporated.	LM	

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 5 of 20

		·····			Submittal Report				
~	Entergy	.'	Review Comments and Resolutions Form						
Engineerin Report Nu	ng JAF-RPT-12-0	0015	Rev. 0		FitzPatrick (JAF) Nuclear Power Plant Seism lution of Fukushima Near-Term Task Force n 2.3: Seismic	ic Walkdown			
Quality Re	elated: 🗌 Yes 🛛 No	)	Specia	al Notes or Instruc	ctions: N/A				
Comment Number	Section/Page No.	Review Comment	\		Response/Resolution	Reviewer's Accept Initials			
35	AWC-056, AWC-047, AWC-045, AWC-044, AWC-043. AWC-043.			and AWC-58 do	Comment incorporated. Note: The order of some of the AWC's had to be changed and new numbers were assigned to them: • AWC-40 is changed to AWC-056. • AWC-41 is changed to AWC-047. • AWC-42 is changed to AWC-045. • AWC-58 is changed to AWC-044.	LM			
36	AWC-013	AWC-53 does not have any S Question #4 is not checked	tatus bo	kes checked and	Waiting for SWE response and LM clarification. • AWC-53 is changed to AWC-013				
Attachme	ent E								
37	N/A	Remove last row of sheet that			Comment incorporated	LM			
38	N/A	I believe Tom P.'s name should go in the "Reviewed by" line as he is the peer reviewer. I am the internal reviewer.		Comment incorporated	LM				
39	N/A	The LBE forms are not part of belong in Attachment F.	LBE forms are not part of Attachment E. They ong in Attachment F.		Comment incorporated. Removed all LBEs and moved them to Attachment F.	LM			
40	N/A	Remove instruction pages, the report.	ey are no	t part of the final	Comment incorporated	LM			

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 6 of 20

					Submittal Report				
	Entergy		Review Comments and Resolutions Form						
Engineerin Report Nu	mber	· ·	Rev. 0	Report for Resolu	nes A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown or Resolution of Fukushima Near-Term Task Force endation 2.3: Seismic				
Quality Re	elated: 🗌 Yes 🛛 N	0	Specia	al Notes or Instruc	tions: N/A				
Comment Number	Section/Page No.	Review Comment	<u>L</u>	· ·	Response/Resolution	Reviewer's Accept Initials			
41	Pages 17 and 18	Pages 17 and 18 are labeled condition items'. This is not pa requirements; I believe it should	art of the	procedural	Comment incorporated. Deleted table.	LM			
42	Page 4 Page 4, first box, second paragra but conduits appear to be <i>termin</i> 'terminate' to 'terminating'.				Comment incorporated.	LM			
Attachme	ent F			-		×			
43	N/A	Missing. Currently the LBE fo section are in Attachment E.	rms that	belong in this	Comment incorporated.	LM			
Attachme	ent G								
44	N/A	Missing – part of final report			SWEL Peer Review to be generated by JAF personnel.	LM			
Attachme	ent H			· · ·					
45		Add a cover sheet as the first	page.		Comment incorporated.	LM			
Attachme	ent B								
46		Remove instruction sheets	-		Comment incorporated.	LM			
47		BOLD SWEL 1 items on BL 1 number 15 in EN-DC-168	as requi	red per page 46,	Comment incorporated.	LM			
48	ر	BOLD SWEL 2 items on BL 2 number 34 in EN-DC-168	as requi	red per page 48,	Comment incorporated.	LM			
50					Comment incorporated. Replaced with check mark.	LM			

# Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 7 of 20

	Entergy		Seismic Walkdown Submittal Report Review Comments and Resolutions Form						
Engineerin Report Nu	Engineering JAF-RPT-12-00015 Report Number				tzPatrick (JAF) Nuclear Power Plant Seism ition of Fukushima Near-Term Task Force 1 2.3: Seismic	ic Walkdown			
Quality Re	elated: 🗌 Yes 🛛 I	No	Specia	al Notes or Instruc	tions: N/A				
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials			
51	Page 13	Page 13, first item says 'retired' in Decay Heat Removal box. This column is only supposed to have checkmarks, no words			Comment incorporated. Replaced with check mark.	LM			
52					Comment incorporated. Added 1-### to SWEL 1 Items and 2-### to SWEL 2 items.	LM			
Report		· · · · · · · · · · · · · · · · · · ·			•	• • • • • • • • • • • • • • • • • • •			
53	General	Coversheet has Quality Relate issuing EC created as quality r is not quality related.			Based on Entergy's plants these reports are non quality related. Changed Quality status to Non quality related.	LM			
54	General	General comment- There's information in this report, sp 8 and 9. I have reviewed th pertains to the procedure, b number from tables, I will ne when the missing informatic prior to the final report subm	becifical le overa but in ord eed to re on is ava	ly sections 5, 6, all format as it der to verify eview it in detail	Information was filled in when inputs where provided by the client.	LM			
55	General	Page 4,5,6,8, 18 refer to tra minor grammatical commen		ments on report,	Grammatical comments incorporated as suggested.	LM			
56	General	Page 7 and 31 verify UFSA be FSAR instead?		rect. Should it	UFSAR is Updated Final Safety Analysis Report. JAF has updated their FSAR throughout plant modifications. The document is UFSAR.	LM			

Senter Enter	Entergy						Submittal Repo d Resolutions		,	
Engineering JAF-RPT-12-00015 Report Number				Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic					
Quality Related:	Yes 🛛 No	)		Speci	al Note	s or Instruc	tions: N/A			
Comment Section	n/Page No.	Review Comme	ent				Response/Reso	olution		Reviewer's Accept Initials
Reviewed By:	Laura I	Maclay FAUNA	Macley		Date	11/20/12	Resolved By:		ı Pourghobadi av Losev	Pp-gle.
Site/Department:	JAF/Er	gineering	Ph.			•	Date:	_	11/20/2012	· · · · · · · · · · · · · · · · · · ·

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 9 of 20

	<u> </u>				Submittal Report	· ·		
	Entergy		Review	w Comments and	d Resolutions Form			
Engineering       JAF-RPT-12-00015         Report Number       Image: Comparison of the second			Rev. 0 Specia					
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials		
57	SWEL1-001       Misspelled the word "Valve"         Q2, Q3, Q4: Explain why N/         answer Y.         Q8: Need a CR #, not an LB         Q9: misspelled the word "att         Delete pp.5-8         58			ecked; otherwise	<ul> <li>Comment Incorporated. SWEL formatting fixed.</li> <li>Answers provided to Q2,3,and 4. Item is an inline valve</li> <li>For this item LB was needed to evaluate the need for a CR.</li> <li>Misspelling is corrected.</li> <li>Pg.5-8 are deleted.</li> <li>Comment Incorporated. SWEL formatting fixed.</li> </ul>	TP		
- 59	SWEL1-032	Q7: Response should be "it Delete pp.5-8 The SWC title should be SV			<ul> <li>The item does not have any soft targets ( pipes, gauges, etc)</li> <li>Pg.5-8 are deleted.</li> <li>Comment incorporated.</li> </ul>	TP		
	SWEL1-052	Q1, Q2: Response to Q1 sh Q6: Should be "U" Q6: Response should be bla Sheet 5: Status should be "I Delete pp.6-8	iould be ank		<ul> <li>Q6 is answered U.</li> <li>Pg.5-8 are deleted.</li> </ul>			

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 10 of 20

	Entergy	. ,			Submittal Report d Resolutions Form		
Engineerin Report Nur	g JAF-RPT-12-	00015	Rev. 0	<ul> <li>Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic</li> </ul>			
Quality Re	elated: 🛛 Yes 🗌 I	No	Specia	al Notes or Instruc	tions: N/A		
Comment Number	Section/Page No.	Review Comment	.L		Response/Resolution	Reviewer's Accept Initials	
60	SWEL1-069	The SWC title should be S\ Q7: Response should be "it Delete pp.5-8			<ul> <li>Comment incorporated. SWEL formatting fixed.</li> <li>The item does not have any soft targets ( pipes, gauges, etc)</li> <li>Pg.5-8 are deleted.</li> </ul>	ТР	
61	SWEL1-137 SWEL1-137 The SWC title should be Q7: Response should be Sheet 4: Caption should say "Illustration" Delete pp.5-8			ot a soft target"	<ul> <li>Comments incorporated.</li> <li>The item does not have any soft targets ( pipes, gauges, etc)</li> <li>Caption changed to picture.</li> <li>Pg. 5-8 deleted.</li> </ul>	TP	
62	SWEL1-157	The SWC title should be SV Q7: Response should be "it Delete pp.6-8			<ul> <li>Comments incorporated.</li> <li>The item does not have any soft targets ( pipes, gauges, etc)</li> </ul>	TP	
63	SWEL1-213	The SWC title should be SV Q2, Q3, Q4: Explain why N answer Y. Q7: Response should be "it Q8: Need a CR #, not an LI Sheet 4: Status should be " Delete pp.5-8	/A is che em is ne BE #	ecked; otherwise	<ul> <li>Comments incorporated.</li> <li>Comment incorporated and answers changed to yes.</li> <li>The item does not have any soft targets ( pipes, gauges, etc)</li> <li>For this item LB was needed to evaluate the need for a CR.</li> <li>Pg. 5-8 deleted.</li> </ul>	TP	

.a.j

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 11 of 20

	Entergy	······································	Seismic Walkdown Submittal Report Review Comments and Resolutions Form							
Engineerin Report Nu	mber	-00015			lution of F	< (JAF) Nuclear Power Plant Seisn ukushima Near-Term Task Force ismic	nic Walkdown			
Quality Re	elated: Xes	No	Specia	al Notes or Instru	ctions: N/	/A				
Comment Number	Section/Page No.	Review Comment	.l	· · · · · · · · · · · · · · · · · · ·	Respo	nse/Resolution	Reviewer's Accept Initials			
64	SWEL1-433	The SWC title should be SV Q2, Q3: Explain why N/A is answer Y. Q6: Should be "Y" Q6: Response should be bl Sheet 4: Status should be " Sheet 5: Status should be " Delete pp.6-8	ank		-	Comments incorporated. Comment incorporated and answers changed to yes. Sheets 4 and 5 are answered u since the item is deferred. Pg 6-8 are deleted.	TP			
65	SWEL1-448	The SWC title should be SV Status should be "Y" Q7: If the answer is "Y", the be deleted Delete pp.6-8				All comments incorporated.	TP			
66	SWEL1-452	The SWC title should be SV Delete pp.6-8	WEL1-4	52	-	Comment incorporated	TP			
67	SWEL1-457	The SWC title should be SV Delete pp.5-8			-	Comment incorporated	TP			
68	SWEL1-474	The SWC title should be SV Q5: should be N/A Delete pp.5-8	VEL1-4	74	-	Comment incorporated	ТР			

6

### Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 12 of 20

	Entergy	· ·	Seismic Walkdown Submittal Report Review Comments and Resolutions Form						
Report Nur	Engineering JAF-RPT-12-00015 Report Number			Rev. Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdo 0 Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic					
Quality Re	lated: 🛛 Yes 🗌 N	lo	Specia	al Notes or Instruc	tions: N	/A			
Comment Number	Section/Page No.	Review Comment	I		Respo	nse/Resolution	Reviewer's Accept Initials		
69	SWEL1-494	The SWC title should be SWEL1-494 Under "Equipment Description", the designation "253-OD3" does not match what's in the SWEL, which is "254-A3A" Q7: Response should be "item is not a soft target" Delete pp.5-8			-	Comment incorporated	TP		
70	SWEL1-501	The SWC title should be SV Delete pp.6-8	NEL1-5	01	-	Comment incorporated	TP		
71	SWEL1-519	The SWC title should be SV Q5: If one bolt is missing, the "N"; otherwise provide justi is "Y". Q7: Response should be "in Sheet 5: Equipment class s	he SWC title should be SWEL1-519 5: If one bolt is missing, then status should be I"; otherwise provide justification why you think it "Y". 7: Response should be "item is not a soft target" heet 5: Equipment class should be "09-Fans" heets 4,5" Caption should say "Photo" instead of lustration"			Response provided in Q.2 and CR generated to track the deficiency. Missing bolt was already identified in previous walkdowns (SEWS) and evaluations indicated it to be acceptable. Equipment class identified as 09-Fan. Caption was fixed. Extra pages deleted.	TP		

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 13 of 20

	Entergy	Seismic Walkdown Submittal Report Review Comments and Resolutions Form							
Engineerin Report Nu	mber	00015				k (JAF) Nuclear Power Plant Seism Fukushima Near-Term Task Force eismic	ic Walkdown		
Quality Re	elated: Xes	No	Specia	al Notes or Instruct	tions: N	Α	, ,		
Comment Number	Section/Page No.	Review Comment	I	<u> </u>	Respo	nse/Resolution	Reviewer's Accept Initials		
72	SWEL1-624	The SWC title should be SWEL1-624 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Delete pp.6-8			-	Comment incorporated The answers to questions Q.2,3, 4 and 6 are changed to U. the items is deferred.	ТР		
73	SWEL1-646	The SWC title should be SWEL1-646 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Delete pp.6-8			- -	Comment incorporated Waiting for response from SWE to clarify the inconsistency. Extra pages deleted.	ТР		
74	SWEL1-670	The SWC title should be SV Q2, Q3, Q4: Explain why N answer Y. Q6: Should be "Y". Respon- Delete pp.6-8	/A is ch	ecked; otherwise	- -	Comment incorporated Answers changed to Y. Extra pages deleted.	ТР		
75	SWEL1-683	The SWC title should be SW Q1: The sentence "The and was verified and found to be deleted. Q7: Response should be "it Delete pp.6-8	horage e accep	configuration table" should be	-	Comment incorporated Comment incorporated There are no soft targets as part of the equipment.	ТР		

)

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 14 of 20

	Entergy	Seismic Walkdown Submittal Report Review Comments and Resolutions Form							
Engineerin Report Nu	g JAF-RPT-12- mber		Rev. 0		ution of I	k (JAF) Nuclear Power Plant Seism Fukushima Near-Term Task Force eismic	ic Walkdown		
Quality Re	elated: Xes	No	Specia	al Notes or Instruc	tions: N	I/A			
Comment Number	Section/Page No.	Review Comment			Respo	onse/Resolution	Reviewer's Accept Initials		
76	SWEL1-686	The SWC title should be SV Delete pp.6-8	WEL1-6	86	-	Comment incorporated	TP		
77	SWEL1-690	The SWC title should be SV Q5: Need CR #, not LBE # Delete pp.5-8	WEL1-6	90	-	Comment incorporated LBE was needed to be performed to evaluate the need for a CR.	TP		
78	SWEL2-007	The SWC title should be SWEL2-007 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Q7: Response should be "item is not a soft target" Sheet 4: Status should be "Y" Delete pp.5-8			-	Comment incorporated The item is an inline valve. Responses provided. Comment incorporated. Extra pages deleted.	TP		
79	SWEL2-007	The SWC title should be SV Sheet 5: Status should be " Delete pp.6-8		07	-	Comment incorporated Extra pages deleted.	TP		
80	AWC-003	The AWC title should be AW The SWEL components sho Sheets 4,5: Caption should "Illustration" Delete pp.6-8	ould be	"SWEL1-XXX"	-	Comment incorporated Caption is corrected. Extra pages deleted.	TP		

<u>\_</u>\_\_\_\_

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 15 of 20

	Entergy	Seismic Walkdown Submittal Report Review Comments and Resolutions Form							
Engineerin Report Nu	mber						ic Walkdown		
Quality Re	elated: 🛛 Yes 🗌 I	No	Specia	al Notes or Instruc	tions: N	Α			
Comment Number	Section/Page No.	Review Comment	1		Respo	nse/Resolution	Reviewer's Accept Initials		
81	AWC-006	The AWC title should be AN The SWEL components sho Status should be "Y" Delete pp.5-8				Comment incorporated Comment incorporated Extra pages deleted.	ТР		
82	AWC-009	The AWC title should be AV Delete pp.5-8	NC-009	· · ·	-	Comment incorporated	TP		
	AWC-013	The AWC title should be AV The SWEL components sho Sheets 4,5: SWEL compon Sheets 4,5: Caption should "Illustration" Delete pp.6-8	ould be ents sho	"SWEL1-XXX" ould be specified	-	Comment incorporated Comment incorporated Comment incorporated Comment incorporated	TP		
84	AWC-015	The AWC title should be AV The SWEL components sho Status should be "Y" Q1: Need CR# not LBE# Sheets 4: Need photo, sinc adverse seismic condition u Delete pp.5-8	ould be e there	"SWEL1-XXX" is a potentially	-	Comment incorporated Comment incorporated LBE was performed to evaluate the need for a CR.	ТР		

# Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 16 of 20

	Entergy	Seismic Walkdown Submittal Report Review Comments and Resolutions Form							
Engineerin Report Nur	g JAF-RPT-12-	2-00015			FitzPatrick (JAF) Nuclear Power Plant Se lution of Fukushima Near-Term Task For on 2.3: Seismic				
Quality Re	elated: 🛛 Yes 🔲 I	No	Specia	al Notes or Instruc	ctions: N/A				
Comment Number	Section/Page No.	Review Comment	· · ·		Response/Resolution	Reviewer's Accept Initials			
85	AWC-017	The AWC title should be A The SWEL components sh Sheets 4,5: Caption should "Illustration" Delete pp.6-8	ould be	"SWEL1-XXX"	<ul> <li>Comment incorporated</li> <li>Comment incorporated</li> <li>Caption corrected.</li> </ul>	TP			
86	AWC-018	The AWC title should be AWC-018 The SWEL components should be "SWEL1-XXX" Sheets 4: Caption should say "Photo" instead of "Illustration" Delete pp.5-8			<ul> <li>Comment incorporated</li> <li>Comment incorporated</li> <li>Caption corrected.</li> </ul>	TP			
87	AWC-021	The AWC title should be A The SWEL components sh Sheets 4: Caption should s "Illustration" Delete pp.5-8	ould be	"SWEL1-XXX"	<ul> <li>Comment incorporated</li> <li>Comment incorporated</li> <li>Caption corrected.</li> </ul>	TP			
88	AWC-022	The AWC title should be A The SWEL components sh Delete pp.5-8			Comment incorporated     Comment incorporated	TP			
89	AWC-029	The AWC title should be A The SWEL components sh Delete pp.5-8			- Comment incorporated - Comment incorporated	TP			

# Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 17 of 20

Entergy			Seismic Walkdown Submittal Report Review Comments and Resolutions Form						
Engineering Report NumberJAF-RPT-12-0Quality Related:X YesNo		-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic					
		No	Specia	Special Notes or Instructions: N/A					
Comment Number	Section/Page No.	Review Comment			Respo	nse/Resolution	Reviewer's Accept Initials		
90	AWC-033	The AWC title should be AWC-033 The SWEL components should be "SWEL1-XXX" Delete pp.5-8			-	Comment incorporated Comment incorporated	TP		
91	AWC-034	The AWC title should be AWC-034 The SWEL components should be "SWEL1-XXX" Q3: Need CR#, not LBE# Q8: Need CR#, not LBE# Delete pp.5-8			-	ТР			
92	AWC-045	The AWC title should be AWC-045 The SWEL components should be "SWEL1-XXX" Under Comments, insert space before "appear" Delete pp.6-8			-	Comment incorporated Comment incorporated	ТР		
93	AWC-047	The AWC title should be AWC-047 The SWEL components should be "SWEL1-XXX" Room, Area should be "14E" Under Comments, insert space before "appear" Delete pp.5-8			-	Comment incorporated Comment incorporated Comment incorporated	TP		
94	AWC-049	The AWC title should be A The SWEL components sh Delete pp.5-8			- · -	Comment incorporated Comment incorporated	TP		

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 18 of 20

Entergy			Seismic Walkdown Submittal Report Review Comments and Resolutions Form								
Engineering JAF-RPT-12 Report Number		RPT-12-0001	0 Rep			Repo	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic				
Quality Related: X Yes N			o Special Notes or Instruct					tions: N/A			
Comment Number	Section/Page	e No. R	eview Comm	ent	<u> </u>			Response/Resc	lution	Reviewer's Accept Initials	
95	AWC-057	TI	The AWC title should be AWC-049 The SWEL components should be "SWEL1-XXX" Delete pp.5-8			- Comme - Comme	TP				
96	REPORT							- Comme	ТР		
Reviewed By:		Tom Panay	votidi	ananyoth		Date	11/21/12	Resolved By:	Pouria Pourghobadi Yaroslav Losev	Rp-JA.	
Site/Department: JAF/E		JAF/Engine	eering	Ph.			•	Date:	11/21/2012		

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 19 of 20

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

	Entergy		Seismic Walkdown Submittal Report Review Comments and Resolutions Form					
Engineering JAF-RPT-12-00 Report Number		00015	0 Report for Res		A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown solution of Fukushima Near-Term Task Force ation 2.3: Seismic			
Quality Re	lated: 🗌 Yes 🛛 N	10	Specia	al Notes or Instr	uctions: N/A			
Comment Number	Section/Page No. Review Comment				Response/Resolution	Reviewer's Accept Initials		
96	LB-01	Show me where in Ref. 1 850 lbs weight value exists.			Sheets 2 and 6, under "Comments" Section JHH and under "Weight" Section respectively.			
97	LB-01	Same as LBE-01 need to be value was obtained (i.e. Refe SEWS Package.)			Added, Sheet 6 to referenced value.	JHH		
98	LB-01	applied to the top of the Cabin lateral acceleration of 0.44g to	to change the sentence to reflect reaction load d to the top of the Cabinet such as: " With a acceleration of 0.44g this means that the d lateral seismic load to the top of the control cannot exceed:"		s: " With a the			

Engineering Report No. JAF-RPT-12-00015 Rev. 0 Page 20 of 20

	Enterg	 }y	<u> </u>			n Submittal Rep and Resolutions		
			AF-RPT-12-00015		Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic			
Quality Related: 🗌 Yes 🛛 No			0	Specia	al Notes or Instr	ructions: N/A		
Comment Number	Section/	Page No.	Review Comment			Response/Resolu	ition	Reviewer's Accept Initials
99	nber LB-01		Need to revise the c previous comment ( to consider the effect on the moment appl top of the control pa problem with your en to make sure you ha the conduit reaction	Comment # 104). It the seismic later ied by the reaction nel by the conduits ngineering judgme ave considered the force at the top of	Also, you need al load will have applied to the s. I have no nt but you need moment from the panel.	Revised paragraph to incorporate comments above. Added to Evaluation section of the LBE, "The moment is not taken into account in this LBE since the cabinet is fairly flexible and will allow some lateral deflection between anchorage of the cabinet and "Substantially Welded Steel Frame", shown on SEWS, Field Sketch for 93ECP-A/B [Ref.1]; therefore the anchorage was treated as pinned connections, releasing moments at the anchorage between steel frame and concrete. Based on above the moment transferred to the anchors between steel frame and concrete will be negligible."		JHH
100	LB-01		General comment it be flexible conduits		e conduits may	Yes, the conduits are flexible and will JHH reduce transferred load to the top of the panel.		
Reviewed E	Ву:	Jeffrey	H. Horton	Haton	ate 11/12/12	Resolved By:	Yaroslav Losev	Care and
Site/Department: JAF/Er		JAF/E	ngineering Ph		· · · · · · · · · · · · · · · · · · ·	Date:	11/12/2012	

EN-DC-168 REV 0

C