Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 1 of 5

Status: Y N U

Seismic Walkdo	wn Checklist (S	WC)	· .		
Equip	oment ID No.: _2-	2001-3-AO			
Equi	ipment Class: <u>(7</u>	) Fluid-Operated Valv	/es		
Equipmen		ĹV, DW FLOOR DRA SCH VLV	IN SUMP - U-2 DW	FLR DRN SUMP I	PMP UPSTREAM
		Quad Cities 2 SWE	<u> </u>		
Location (Bldg, E		RB, 554.00 ft, ALL	,		F
	nufacturer/Model:		· · ·		
	Completing Che	cklist		<u></u>	······································
SWEL. The spa	ce below each of	ument the results of the following question ded at the end of this	is may be used to re	cord the results of	judgments and
Anchorage					
	rage configuratior . items requiring s	verification required uch verification)?	(i.e., is the item one	of the 50%	No
. •					
·. · ·	• • •				
2. Is the an	chorage free of be	ent, broken, missing c	or loose hardware?		Not Applicable
94 - C			· ·	-	·
	· .			· · · ·	
3. Is the an	chorage free of co	prrosion that is more t	han mild surface oxi	idation?	Not Applicable
	•	ļ			e e e
	· .	· · · · ·			
4. Is the an	chorage free of vi	sible cracks in the co	ncrete near the anch	lors?	Not Applicable
			· .		
•	"·	, I	ъ.	•	
This que	stion only applies	ation consistent with p if the item is one of th			Not Applicable
configura	ation verification is	s requirea.)			•
		· · · · · · · · · · · · · · · · · · ·			
	n the above ancho ly adverse seismi	orage evaluations, is t	the anchorage free o	of	Yes
Potonia	., aarsise soloim				. ,
· .		• · · · · · · · · · · · · · · · · · · ·			
			the state of the s		· · · · · · · · · · · · · · · · · · ·
		· · · ·	4		

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 5

Status: Y N U

Seismic Walkdo	wn Checklist (SWC)	· .	
Equi	ment ID No.: <u>2-2001-3-AO</u>	-	
	pment Class: <u>(7) Fluid-Operated Valves</u> VLV, DW FLOOR DRAIN S t Description: DSCH VLV	UMP - U-2 DW FLR DRN SI	JMP PMP UPSTREAM
Interaction Effe			
	argets free from impact by nearby equipme	nt or structures?	Yes
			1
	· ·	т. <sub>1</sub>	
	nead equipment, distribution systems, ceilin block walls not likely to collapse onto the e		Yes
9. Do attac	ned lines have adequate flexibility to avoid o	Jamage?	Yes
	•		· ·
	<u>.</u>		
	n the above seismic interaction evaluations, y adverse seismic interaction effects?	is equipment free of	Yes
			x • • •
Other Adverse	Conditions		······
	I looked for and found no adverse seismic on affect the safety functions of the equipment		Yes
	• •	· ·	
		·	• 1
Comments			· · · · · · · · · · · · · · · · · · ·
Seismic Walkdo	vn Team: J. Griffith & M. Wodarcyk - 8/10/2	012	
Evaluated by:	Jma D. Appt James Griffith	Date:	10/4/2012
	Michael J. Wadmyth Michael Woda		10/4/2012
		<b>4</b>	
<u></u> ,			

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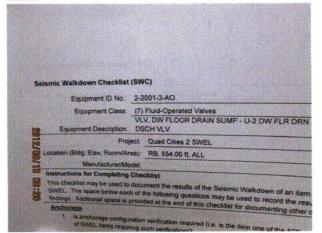
Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 5

Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2-2001-3-AO
Equipment Class:	(7) Fluid-Operated Valves
	VLV, DW FLOOR DRAIN SUMP - U-2 DW FLR DRN SUMP PMP UPSTREAM
Equipment Description:	DSCH VLV

### **Photos**



20120810-QuadCities-2 005



20120810-QuadCities-2 008

20120810-QuadCities-2 007



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 5

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2-2001-3-AO

Equipment Class: (7) Fluid-Operated Valves

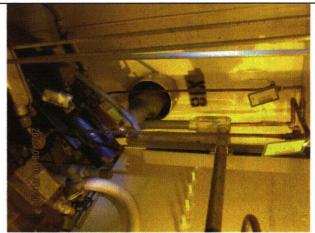
Equipment Description: DSCH VLV



20120810-QuadCities-2 010



20120810-QuadCities-2 012



20120810-QuadCities-2 011



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 5

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2-2001-3-AO
Equipment Class:	(7) Fluid-Operated Valves
Equipment Description:	VLV, DW FLOOR DRAIN SUMP - U-2 DW FLR DRN SUMP PMP UPSTREAM DSCH VLV
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mar and	
A Damage of T	
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- BOPE	

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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 1 of 8

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2202-29A	
Equipment Class: (18) Instruments on Racks	
Equipment Description: INSTR RACK 2202-29A	,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Project: Quad Cities 2 SWEL	<u>.</u>
Location (Bldg, Elev, Room/Area): RB, 554.00 ft, ALL	
Manufacturer/Model:	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of e SWEL. The space below each of the following questions may be used to record the results of findings. Additional space is provided at the end of this checklist for documenting other com	of judgments and
Anchorage	<u></u>
1. Is anchorage configuration verification required (i.e., is the item one of the 50%	Yes
of SWEL items requiring such verification)? Racks 2202-29A and 2202-29B tied together via the anchorage and braces. Therefore, there is no seismic interaction concern due to the racks acting independently. Judged to be acceptable.	
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
Mild corrosion judged to be acceptable.	
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
Minor shrinkage cracks in wall judged to be acceptable.	
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.)	Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 8

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2202-29A	
Equipment Class: (18) Instruments on Racks	
Equipment Description: INSTR RACK 2202-29A	·····
Interaction Effects	Maa
7. Are soft targets free from impact by nearby equipment or structures?	Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Overhead light fixtures with open S-hooks. Fixture will not impact rack due to hard targets (pipes, etc.) in between light fixture and rack.	Yes
9. Do attached lines have adequate flexibility to avoid damage?	Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Yes
Other Adverse Conditions	
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?	Yes
	• •
Comments	
SEWS Anchorage Notes:	
Rack is braced back to reinforced concrete wall and anchored by 1/2" diameter concrete ex	xpansion anchors
***** Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/9/2012	
Evaluated by: James Griffith Date: 1	0/4/2012
Minhael J. Wod-yk	
Michael Wodarcyk1	0/4/2012

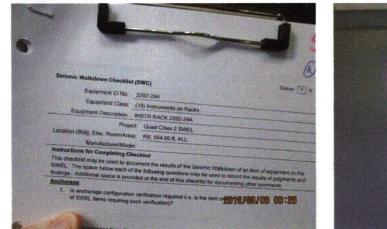
Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 8

Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2202-29A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	INSTR RACK 2202-29A	

### **Photos**



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20120809-QuadCities-2 108

20120809-QuadCities-2 107



HPCI STS. RACK 2202-28 SECT. A

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 8

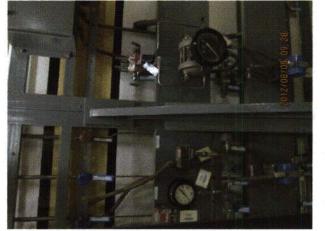
Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-29A
Equipment Class:	(18) Instruments on Racks
Equipment Description:	INSTR RACK 2202-29A



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20120809-QuadCities-2 113

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 8

Status:	V	NI.	1.1
Status.	T	IN	U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-29A

Equipment Class: (18) Instruments on Racks

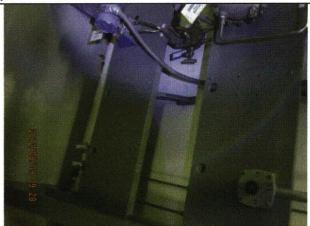
Equipment Description: INSTR RACK 2202-29A



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20120809-QuadCities-2 116



20120809-QuadCities-2 115



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 8

Status:	1 1 1		
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olalus.		1.4	0

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-29A	Al
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	INSTR RACK 2202-29A	



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20120809-QuadCities-2 120



20120809-QuadCities-2 119



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-29A
Equipment Class:	(18) Instruments on Racks
Equipment Description:	INSTR RACK 2202-29A



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2202-29A	ini 
Equipment Class:	(18) Instruments on Racks	

Equipment Description: INSTR RACK 2202-29A



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Seismic Walkdown Checklist (SWC)	us: YNU
Equipment ID No.: _2202-32	••••••••
Equipment Class: _(18) Instruments on Racks	<u></u>
Equipment Description: RACK, AUTO BLOWDOWN	
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area):	
Manufacturer/Model:	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of equipm SWEL. The space below each of the following questions may be used to record the results of judg findings. Additional space is provided at the end of this checklist for documenting other comments	gments and
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Yes
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
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.)	Yes
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Rack is also braced to wall at top.</li> </ol>	Yes

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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 8

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2202-32	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK, AUTO BLOWDOWN	
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	Yes
7. Are sold largels nee non impact by hearby equipment of structures?	105
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Overhead light fixtures judged to be acceptable.	Yes
9. Do attached lines have adequate flexibility to avoid damage?	Yes
	• •
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Yes
Other Adverse Conditions	
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?	Yes
	. •
Comments	
SEWS Anchorage Notes:	
Instrument panel on 13" base plate (legs). Panel itself is 60" high and 60" wide and 12" de 1/8" thick baseplate 11.5" deep by 8" wide. Each leg anchored by two 1/2" CEAs.	ep. Each leg has an
****	
Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/6/2012	
Evaluated by: James Griffith Date: _1	0/4/2012
Mistral J. Woodmark	
	0/4/2012

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-32
Equipment Class:	(18) Instruments on Racks
Equipment Description:	RACK, AUTO BLOWDOWN



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 8

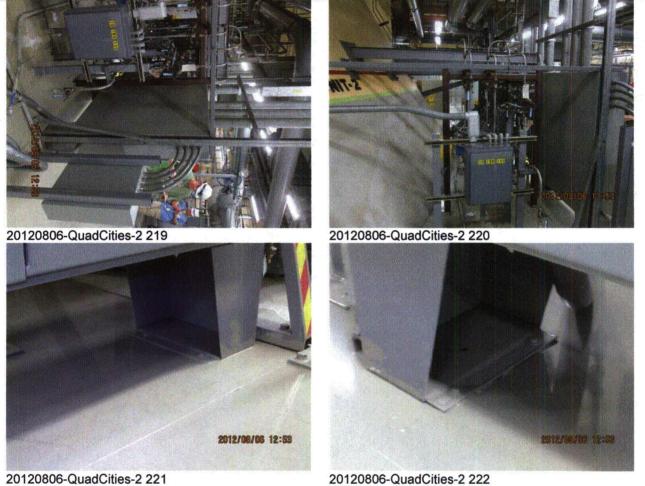
Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-32

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK, AUTO BLOWDOWN



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 8

Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-32	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK, AUTO BLOWDOWN	LTI



20120806-QuadCities-2 223



20120806-QuadCities-2 225



20120806-QuadCities-2 224



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)



20120806-QuadCities-2 229

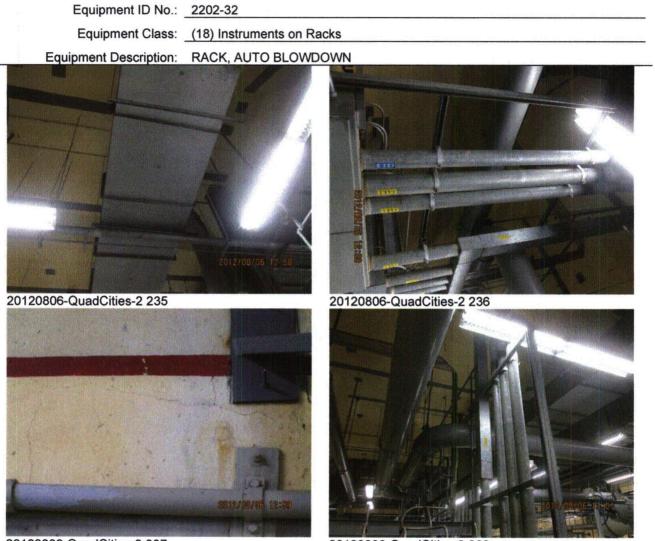
Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 8

Seismic Walkdown Checklist	(SWC)		Status: Y N U
Equipment ID No.:	2202-32		
Equipment Class:	(18) Instruments on R	acks	
Equipment Description:	RACK, AUTO BLOW	DOWN	
20120806-QuadCities-2 231	ZUIEJORJOS 12:57	20120806-QuadCities-2 232	SUISJODJES 12:57
20120806-QuadCities-2 233	2012/08/05 12-55	20120806-QuadCities-2 234	2012/03/05 12/68

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 8

Status: Y N U

# Seismic Walkdown Checklist (SWC)



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 1 of 11

State Stat	tus: YNU
Equipment ID No.: 2202-59A	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK	
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area): RB, 554.00 ft, ALL	
Manufacturer/Model:	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of equipr SWEL. The space below each of the following questions may be used to record the results of jud findings. Additional space is provided at the end of this checklist for documenting other comment	igments and
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Yes
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
2 anchors more corroded than others. Scale only; no separation of material observed. Judged to be acceptable.	
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
Minor shrinkage cracks in wall judged to be acceptable.	
<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>	Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 11

Spierrie Malledour Charlet (SMC)	Status: Y N U
Seismic Walkdown Checklist (SWC)	
Equipment ID No.: 2202-59A	
Equipment Class: _(18) Instruments on Racks	
Equipment Description: RACK	
Interaction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	Yes
Cage roof protects soft targets. Tubes touch cage support structure. Tubes are flexible, cage is rigid. Judged to be acceptable.	
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Overhead light fixtures judged to be acceptable.	Yes
9. Do attached lines have adequate flexibility to avoid damage?	Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Yes
Other Adverse Conditions	
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?	Yes
<u>Comments</u>	
SEWS Anchorage Notes:	
Anchorage: Instrument rack anchored by 1/2" concrete expansion anchors on floor and br by 1/2" concrete expansion anchors.	raced back to R/C wall
***** Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/9/2012	
Evaluated by: James Griffith Date:	10/4/2012
Michael J. Woolmagt	
Michael Wodarcyk	10/4/2012

10/4/2012

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 11

Seismic Walkdown Checklist	(SWC)	Status: Y N U
Equipment ID No.:	2202-59A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK	

Photos	
Seismic Walkdown Checklist (SWC) Equipment ID No: 2202:59A	RECIRC. PUMP
Equipment Class (18) Instruments Gritten	
Equipment Loss of the Project Count Course 2 SWEL	
Remark (1998) (1997)	
Construction of the second secon	
Berne A data and the second state of the second state of the second state of the second state of the SO% A view of the second state of the second	2012/08/09 15:09
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RHR/CORE SPRAY SYS. RACK 2202-59A	
2012/08/09 15:09	2012/09/09 15:09
20120809-QuadCities-2 415	20120809-QuadCities-2 416

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Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-59A	
Equipment Class:	(18) Instruments on Racks	3
Equipment Description:	RACK	
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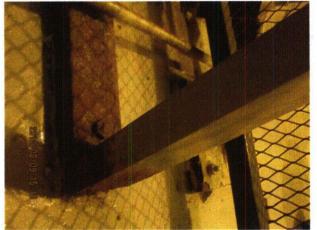


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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 11

Status: Y N U

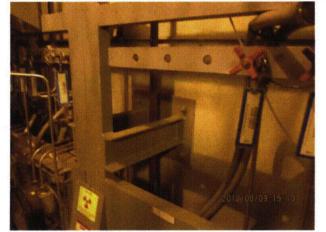
# Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2202-59A	
Equipment Class:	(18) Instruments	on Racks

Equipment Description: RACK



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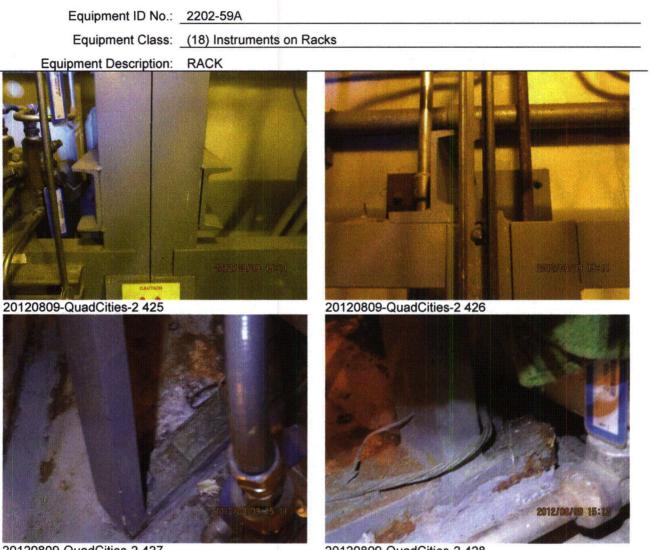
20120809-QuadCities-2 422



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 11

Status: Y N U

# Seismic Walkdown Checklist (SWC)



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 11

Status: Y N U

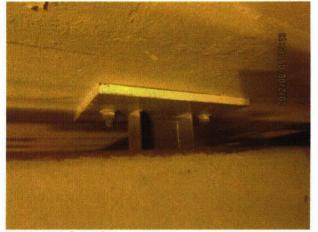
# Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2202-59A
Equipment Class:	(18) Instruments on Racks

Equipment Description: RACK



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 11

Status: Y N U

# Seismic Walkdown Checklist (SWC)

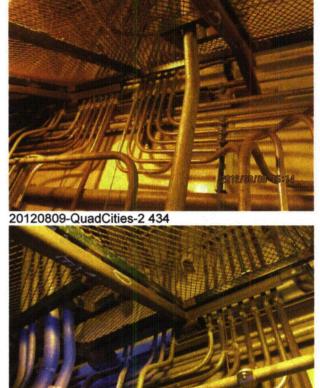
Equipment ID No.:	2202-59A	e cit. KVV., ödiktere
	(18) Instruments on Racks	
Equipment Description:	RACK	



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 9 of 11

Status:	Y	N	U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-59A	
Equipment Class:	(18) Instruments on Racks	

Equipment Description: RACK



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20120809-QuadCities-2 438



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 10 of 11

Status:	Y	N	U
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# Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-59A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK	



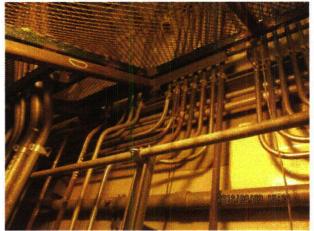
20120809-QuadCities-2 441



20120809-QuadCities-2 443



20120809-QuadCities-2 442



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 11 of 11

# Seismic Walkdown Checklist (SWC) Equipment ID No.: 2202-59A Equipment Class: (18) Instruments on Racks Equipment Description: RACK

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2202-7	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK	
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area): RB, 595.00 ft, ALL	
Manufacturer/Model:	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of e SWEL. The space below each of the following questions may be used to record the results findings. Additional space is provided at the end of this checklist for documenting other con	of judgments and
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Yes
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? <i>Minor shrinkage cracks in wall and floor judged to be acceptable.</i>	Yes
<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>	Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 8 4

Seismic W	alkdown Checklist	(SWC)	Status: Y N U
	Equipment ID No.:	· · · · · · · · · · · · · · · · · · ·	
		(18) Instruments on Racks	
	ipment Description:	RACK	
Interaction 7. Are		n impact by nearby equipment or structures?	Yes
mii		k. Rack is rigid and vertical seismic acceleration is iver will not jump off of cradle. Phone judged to be	
		nt, distribution systems, ceiling tiles and lighting, and t likely to collapse onto the equipment?	Yes
9. Do	attached lines have	adequate flexibility to avoid damage?	Yes
		smic interaction evaluations, is equipment free of mic interaction effects?	Yes
Other Adv	erse Conditions		
		d found no adverse seismic conditions that could ety functions of the equipment?	Yes
Comments			
	horage Notes:		
	rack composed of ar concrete wall by strue	ngle iron and anchored by concrete expansion anchors ctural rolled shapes.	and braced back to a
****			
Seismic Wa	alkdown Team: J. Gri	iffith & M. Wodarcyk - 8/6/2012	
See north I	HCU bank area walk-	by for further notes.	

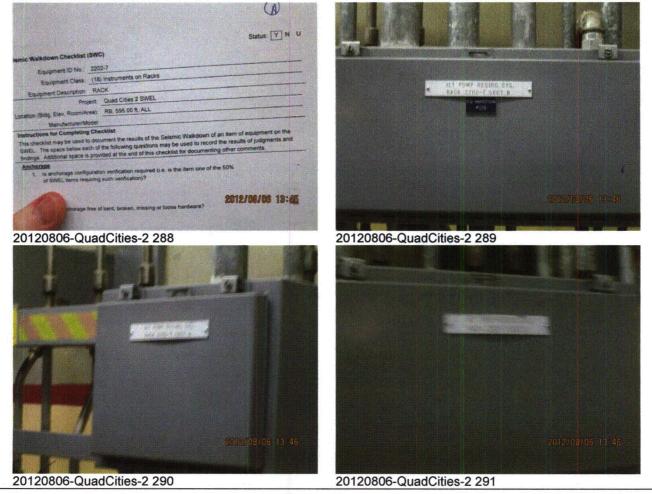
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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 8

Seismic Walkdo	wn Checklist	(SWC)		Status: Y N U
Equip	ment ID No.:	2202-7		
Equi	pment Class:	(18) Instruments on Racks		
Equipmen	t Description:	RACK		
Evaluated by:	June D Auff	村 James Griffith	Date:	10/4/2012
	Minhael	9. Wadwyk Michael Wodarcyk		10/4/2012





Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 8

Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-7

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 292



20120806-QuadCities-2 294



20120806-QuadCities-2 293



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 8

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-7

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 296



20120806-QuadCities-2 298



20120806-QuadCities-2 297



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 8

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-7

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 300



20120806-QuadCities-2 302



20120806-QuadCities-2 301



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 8

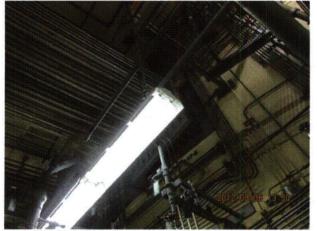
Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-7
Equipment Class: (18) Instruments on Racks
Equipment Description: RACK



20120806-QuadCities-2 304



20120806-QuadCities-2 306



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-7	
Equipment Class:	(18) Instruments on Racks	

Equipment Description: RACK



20120806-QuadCities-2 308



20120806-QuadCities-2 310



Status: [ Seismic Walkdown Checklist (SWC)	Y N U
Equipment ID No.: 2202-73A	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK, ANALOG TRIP	
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area): SB, 609.00 ft, ALL	
Manufacturer/Model: Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment of SWEL. The space below each of the following questions may be used to record the results of judgment findings. Additional space is provided at the end of this checklist for documenting other comments.	
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Yes
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
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.)	Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

.

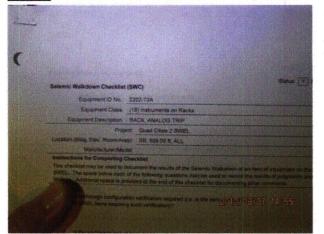
Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 8

	Status: YNU
Seismic Walkdown Checklist (SWC)	P .
Equipment ID No.: 2202-73A	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK, ANALOG TRIP	
Interaction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	Yes
	· ·
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and	Yes
masonry block walls not likely to collapse onto the equipment?	· ·
·	
9. Do attached lines have adequate flexibility to avoid damage?	Yes
	:
10. Based on the above seismic interaction evaluations, is equipment free of	Yes
potentially adverse seismic interaction effects?	
·	
Other Adverse Conditions	
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?	Yes
	9. 19
Commonto	
<u>Comments</u> SEWS Anchorage Notes:	: · · · · · · · · · · · · · · · · · · ·
	ata avrancian anchara
Panel welded to massive base plate assembly. Base plate anchored by six 1/2" concre	ele expansion anchors.
***** Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/7/2012	
Evaluated by: James Griffith Date	5 10///2012
Evaluated by: James Griffith Date	e: <u>10/4/2012</u>
	10/4/2012
1 V Michael Wodarcyk	10/4/2012
· · · ·	

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 8

Seis	mic Walkdown Checklist	(SWC)	Status: Y N U
	Equipment ID No.:	2202-73A	
	Equipment Class:	(18) Instruments on Racks	
	Equipment Description:	RACK, ANALOG TRIP	

#### **Photos**



20120807-QuadCities-2 355



20120807-QuadCities-2 357



20120807-QuadCities-2 356

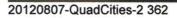


Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 8

U

Seismic Walkdown Checklist Equipment ID No.:			Status: Y N
	(18) Instruments on Ra	oko	
Equipment Description:		013	a strength and a flower and the strength of th
	2012/03/17 14 57		2012/10/177 19:57
20120807-QuadCities-2 359		20120807-QuadCities-2 360	





Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 8

Status: Y N U

## Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-73A
Equipment Class:	(18) Instruments on Racks
 Equipment Description:	RACK, ANALOG TRIP



20120807-QuadCities-2 363



20120807-QuadCities-2 365



20120807-QuadCities-2 364



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 8

Status: Y N U

## Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-73A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK, ANALOG TRIP	



20120807-QuadCities-2 367



20120807-QuadCities-2 369



20120807-QuadCities-2 368



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 8

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-73A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK, ANALOG TRIP	



20120807-QuadCities-2 371



20120807-QuadCities-2 373



20120807-QuadCities-2 372



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 8

Status: Y N U

### Seismic Walkdown Checklist (SWC)

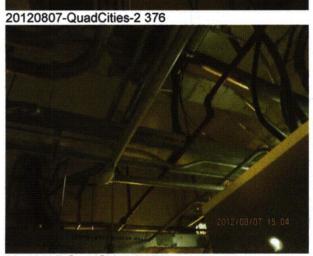
Equipment ID No.:	2202-73A	
Equipment Class:	(18) Instruments on Racks	
Equipment Description:	RACK, ANALOG TRIP	
	A CONTRACTOR OF A CONTRACTOR O	



20120807-QuadCities-2 375



20120807-QuadCities-2 377



	N U
Seismic Walkdown Checklist (SWC)	
Equipment ID No.: 2202-8	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK	
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area):RB, 595.00 ft, ALL	
Manufacturer/Model:	
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 a findings. Additional space is provided at the end of this checklist for documenting other comments.	
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Yes
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? <i>Minor shrinkage cracks in wall judged to be acceptable.</i>	Yes
<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>	Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 2 of 9

Seismic Walkdown Checklist (SW0	C)	Status: Y N U
Equipment ID No.: 2202	2-8	
Equipment Class: (18)	i i i i i i i i i i i i i i i i i i i	÷
Equipment Description: RAC	ĸ	
Interaction Effects		
7. Are soft targets free from imp	pact by nearby equipment or structures?	Yes
	ck is rigid and vertical seismic acceleration is vill not jump off of cradle. Phone judged to be	
masonry block walls not likel	tribution systems, ceiling tiles and lighting, and y to collapse onto the equipment? slightly-open S-hook at east end of fixture. Fixture	Yes
will not fall because hard-win fixture. Judged to be accepta	ed power cord is also at the east end of the ble.	
9. Do attached lines have adeq	uate flexibility to avoid damage?	Yes
10. Based on the above seismic potentially adverse seismic ir	interaction evaluations, is equipment free of nteraction effects?	Yes
Other Adverse Conditions		ι
	nd no adverse seismic conditions that could nctions of the equipment?	Yes
<u>Comments</u>		
SEWS Anchorage Notes:		
Instrument rack composed of angle in	ron and anchored by concrete expansion anchors	and braced back to a

\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/6/2012

See south HCU bank area walk-by for further notes.

reinforced concrete wall by structural rolled shapes.

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 9

Seismic Walkdow	wn Checklist	(SWC)		Status: Y N U
Equip	ment ID No.:	2202-8	:	
Equip	oment Class:	(18) Instruments on Racks	1999	
Equipment	Description:	RACK		
Evaluated by:	Jun D App	村 James Griffith	Date:	10/4/2012
	Mistal	9. Wałyk Michael Wodarcyk		10/4/2012



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 9

Status: Y N U

# Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-8

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 315



20120806-QuadCities-2 317



20120806-QuadCities-2 316



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 9

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-8		
Equipment Class:	(18) Instruments on Racks		
Equipment Description	RACK		



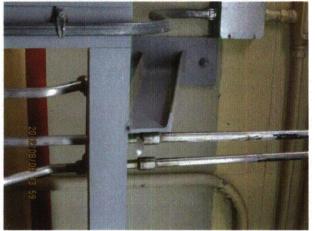
20120806-QuadCities-2 319



20120806-QuadCities-2 321



20120806-QuadCities-2 320



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 9

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2202-8

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 323



20120806-QuadCities-2 325



20120806-QuadCities-2 324



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 9

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-8	
	(18) Instruments on Racks	
Equipment Description:	RACK	



20120806-QuadCities-2 327



20120806-QuadCities-2 329



20120806-QuadCities-2 328



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 8 of 9

Status:	N	1
Status.	IN	C C

### Seismic Walkdown Checklist (SWC)

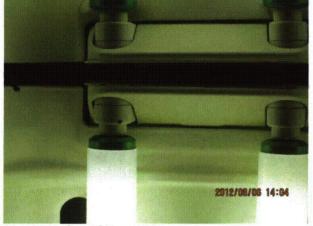
Equipment ID No.: 2202-8

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 331



20120806-QuadCities-2 333



20120806-QuadCities-2 332



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 9 of 9

Status: Y N U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.:	2202-8
Equipment Class:	(18) Instruments on Racks

Equipment Description: RACK



20120806-QuadCities-2 335



Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 1 of 7

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2212-125	
Equipment Class: (18) Instruments on Racks	
Equipment Description: RACK, 1/2 DG ENGINE CONTROL	<u></u>
Project: Quad Cities 2 SWEL	
Location (Bldg, Elev, Room/Area):DG, 595.00 ft, ALL	
Manufacturer/Model:	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an item of SWEL. The space below each of the following questions may be used to record the results findings. Additional space is provided at the end of this checklist for documenting other con	of judgments and
Anchorage	
<ol> <li>Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	No
2. Is the anchorage free of bent, broken, missing or loose hardware?	Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Not Applicable
Bottom of panel has brackets welded to DG skid. Top of panel has bracket bolted to water expansion tank.	· · ·
<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>	Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No.: 2212-125	
Equipment Class: (18) Instruments on Racks	<u> </u>
Equipment Description: RACK, 1/2 DG ENGINE CONTROL	
Interaction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Overhead light fixtures judged to be acceptable.	Yes
9. Do attached lines have adequate flexibility to avoid damage?	Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Yes
Other Adverse Conditions	
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? 1 of 26 sheet metal screws missing. Remaining 25 are judged to be adequate. See IR 1400100.	Yes
Comments	
Seismic Walkdown Team: J. Griffith & M. Wodarcyk - 8/8/2012	
Evaluated by: Jos D April James Griffith Date:	10/4/2012
Michael Wodarcyk	10/4/2012

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 3 of 7

Status: Y N U

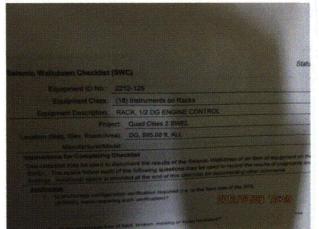
Seismic Walkdown Ch	ecklist (SWC)
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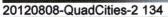
Equipment ID No.: 2212-125

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK, 1/2 DG ENGINE CONTROL

#### **Photos**









20120808-QuadCities-2 135



20120808-QuadCities-2 137

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 4 of 7

Status: Y N U

#### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2212-125

Equipment Class: (18) Instruments on Racks

Equipment Description: RACK, 1/2 DG ENGINE CONTROL



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20120808-QuadCities-2 140



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Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 5 of 7

Status: Y N U

## Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2212-125
Equipment Class: (18) Instruments on Racks

Equipment Description: RACK, 1/2 DG ENGINE CONTROL



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20120808-QuadCities-2 145

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 6 of 7

Status: Y N U

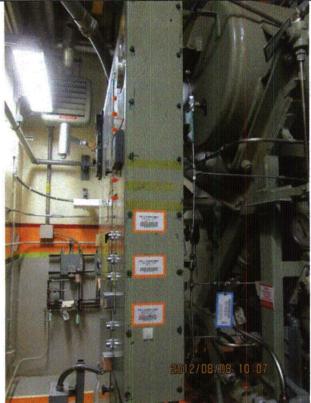
### Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2212-125
Equipment Class:	(18) Instruments on Racks

Equipment Description: RACK, 1/2 DG ENGINE CONTROL



20120808-QuadCities-2 146





20120808-QuadCities-2 148



20120808-QuadCities-2 149

Quad Cities Generating Station Unit 2 12Q0108.40-R-002, Rev. 3 Correspondence No.: RS-12-169 Sheet 7 of 7

Status: Y N U

## Seismic Walkdown Checklist (SWC)

Equipment ID No .:	2212-125	-
Equipment Class:	(18) Instruments on Racks	_
uipment Description:	RACK, 1/2 DG ENGINE CONTROL	

