

**Area Walk-By Checklist (AWC)**

Assets: *E1151C001C*

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> SRHRPR, Div. I Pump Room

**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

*There are no observed adverse seismic conditions. See photo DSC 01357.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*Some stains and peeling paints, only minor corrosion. No loss of cross section. See photo DSCN 0389.*

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

*HVAC, cable/conduit raceways are adequately supported.*

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

*No ceiling tiles, lighting are adequately supported.*

<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)**

Assets: *E1151C001C*

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Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area<sup>1</sup> *SRHRPR, Div. I Pump Room*

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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

*Not any fire protection piping, only detectors attached to the ceiling.*

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

*No flammable material identified 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

*None identified.*

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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

*None identified.*

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**Comments** (Additional pages may be added as necessary)

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*None*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  N  U

RHR1-1

**Area Walk-By Checklist (AWC)**

Assets: *E1151C001C*

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Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> SRHRPR, Div. I Pump Room

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*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1: *[Signature]* Date: 8/14/12

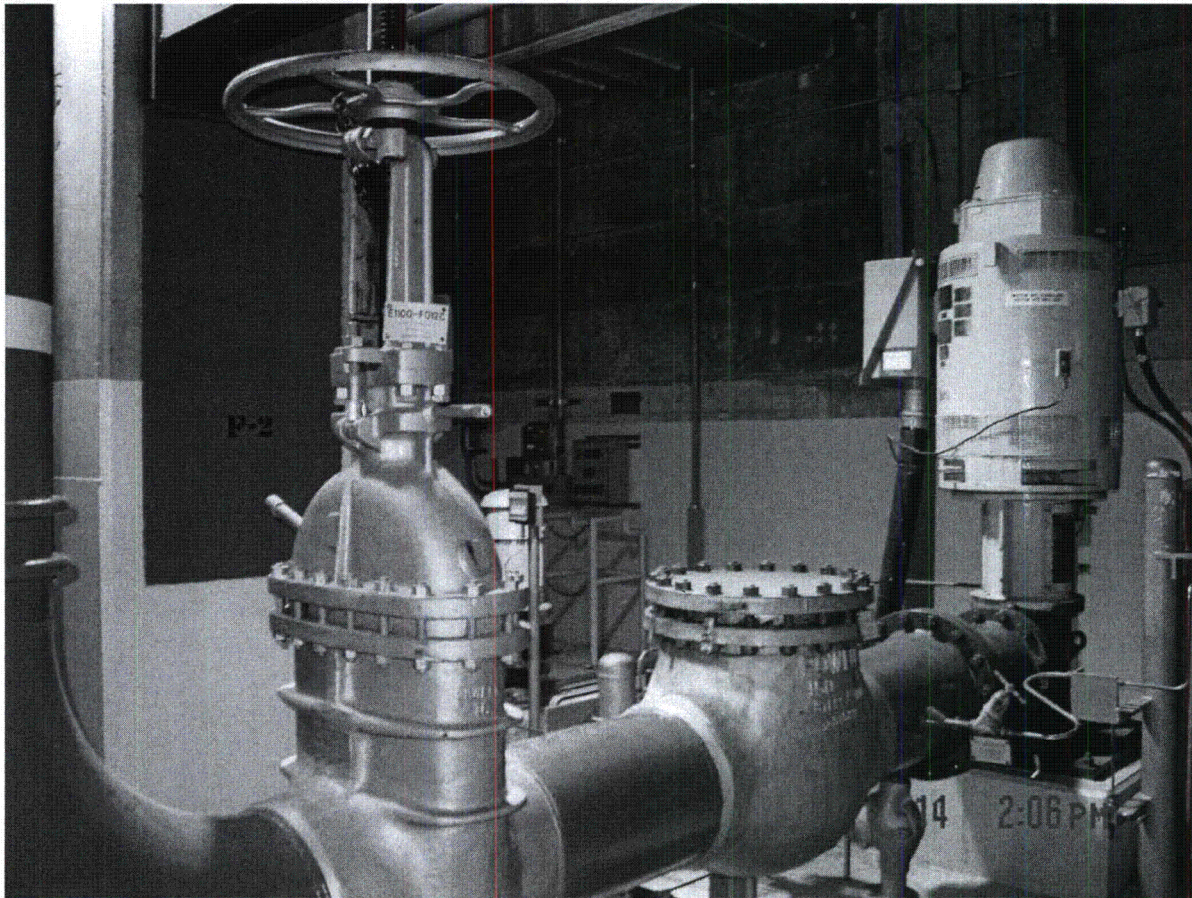
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2: *[Signature]* Date: 08/14/12

Area Walk-By Pictures

RHR1-1

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Div. I Pump Room

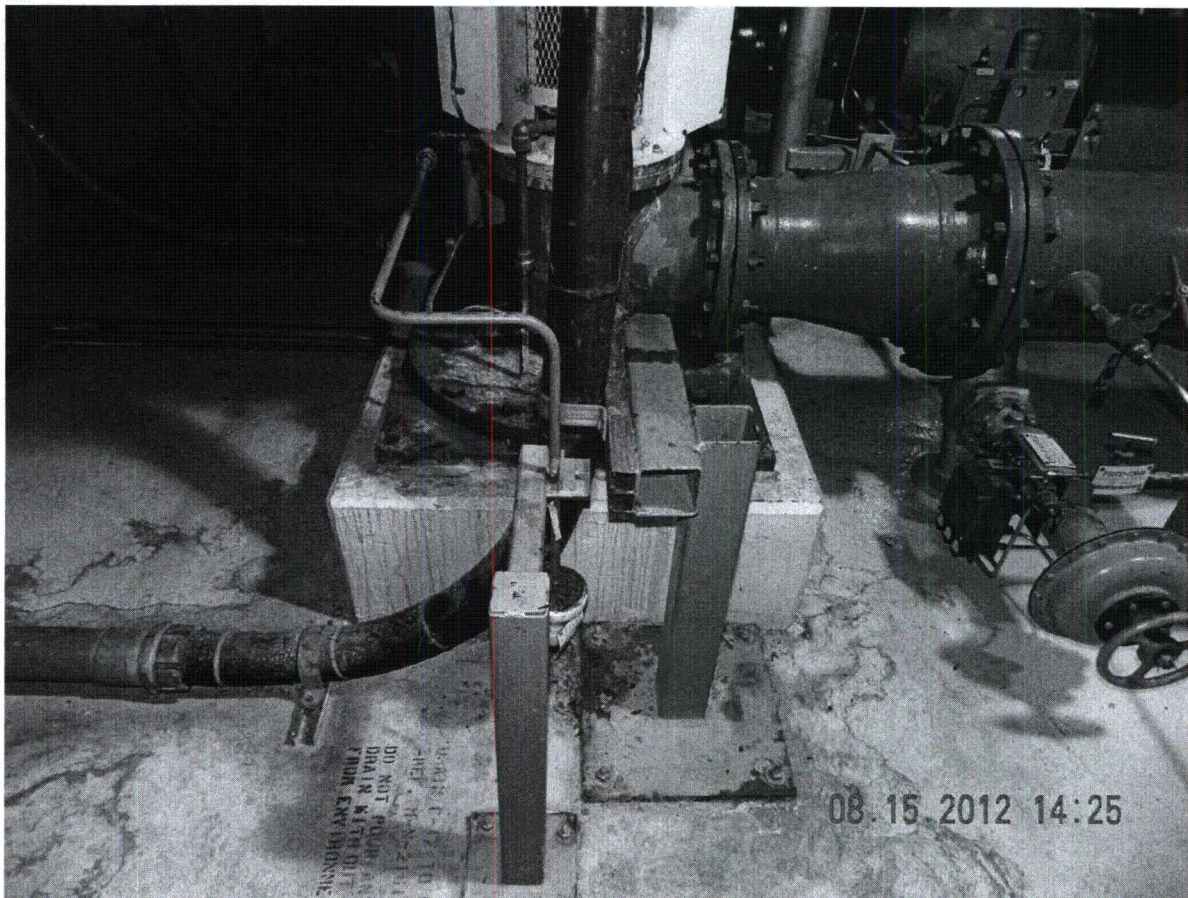


(DSC 01357)

Area Walk-By Pictures

RHR1-1

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Div. I Pump Room



(DSCN 0389)

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

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Sheet 1 of 3  
Status:  Y  N  U

RHR1-2

**Area Walk-By Checklist (AWC)**

Assets: P4500C002B

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> NRHRPR, Col. E-11

**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

*All equipment nearby is adequately anchored.  
(See Picture 10)*

JAM  
10/11/12

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No significant degradation in the area.*

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

*Some of the embedded plates in the ceiling support the HVAC on the west side of the room exhibit minor surface corrosion, but not enough to affect seismic operability. All raceways and ducting are appropriately supported.*

*(See Picture 13)*

JAM  
10/11/12

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

*There are two pieces of portable equipment nearby (firefighting cart and emergency eye wash) that are appropriately restrained per MOP23.*

MPS 10/4/12

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR1-2

**Area Walk-By Checklist (AWC)**

Assets: P4500C002B

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> NRHRPR, Col. E-11

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

*No flooding or spray concerns.*

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

*There are no fire hazards in the vicinity.*

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

*See comments for 4.*

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

*None identified.*

**Comments** (Additional pages may be added as necessary)

*None.*

MPS 10/4/12

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: (Y) N U

Area Walk-By Checklist (AWC)

ASSETS: P4500C002B

RHRI-2

Location: Bldg. RHR Floor El. 1 Room, Area' Div. 2 Pump Room (area near P4500C002B)

NRHR PR, COL. E-11

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #1: Mill P. Sasso Date: 8/16/12

Seismic Engineer Walkdown PSE-53 Qualified

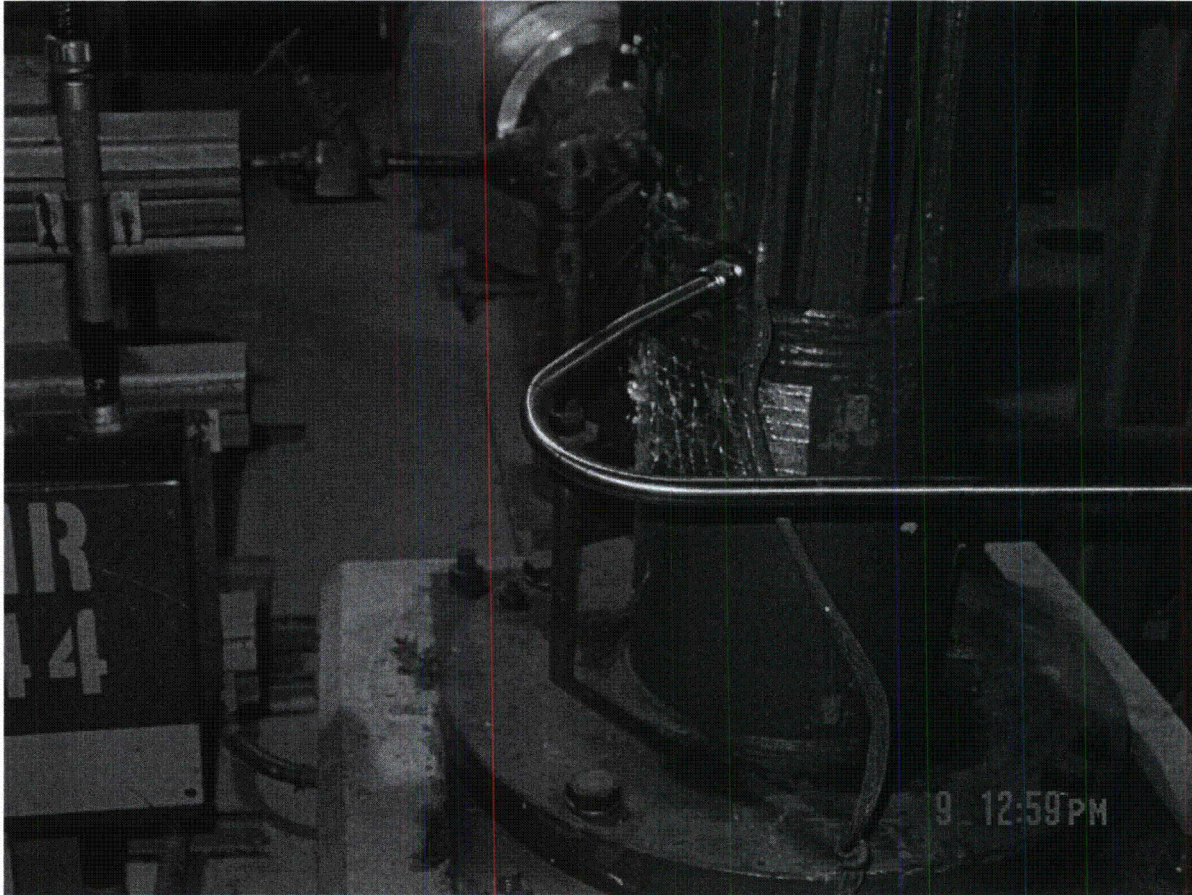
Evaluator #2: Scott Dauen Date: 8/16/12



Area Walk-By Pictures

RHR1-2

Location: Bldg. RHR Floor El. 1 (590'-0") Room, Area NRHRPR, Col. E-11



(Picture 10)

**Area Walk-By Pictures**

**RHR1-2**

Location: Bldg.   RHR   Floor El. 1 (590'-0") Room, Area   NRHRPR, Col. E-11  



(Picture 13)

**Area Walk-By Checklist (AWC)**

Assets: R3000A011

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG11, Col. 6-6<sub>1</sub>/B-D

**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

*All nearby equipment was found to be well anchored, therefore, nearby equipment will remain in place during a seismic event.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No corrosion or 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

*No cable trays or HVAC ductwork in this area. Cable/conduit raceways are adequately supported. (see Photo DSCN 0528)*

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

*No ceiling tiles in the area. Suspended lights are adequately secured. (see Photo DSCN 0529)*

<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)**

Assets: R3000A011

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG11, Col. 6-6<sub>1</sub>/B-D

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

*The area does not have fire protection piping or sprinkler system. CO<sub>2</sub> lines and other piping are adequately supported. No concern with flooding or spray in this 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

*Fire detectors/sensors are in the area. Part of the area houses emergency diesel generator. No adverse seismic interaction conditions were found that could cause a fire.*

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

*Housekeeping and storage of portable equipment are not a concern. Overall area is in good condition.*

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 identified that could adversely affect equipment safety functions. Overall area is clean*

**Comments** (Additional pages may be added as necessary)

N/A

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  N U

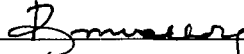
RHR1-3

**Area Walk-By Checklist (AWC)**

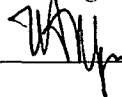
Assets: R3000A011

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG11, Col. 6-6<sub>1</sub> / B-D

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1:  Date: 8-17-12

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2:  Date: 08/17/12

Area Walk-By Pictures

RHR1-3

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG11 / Col. 6-6, B-D

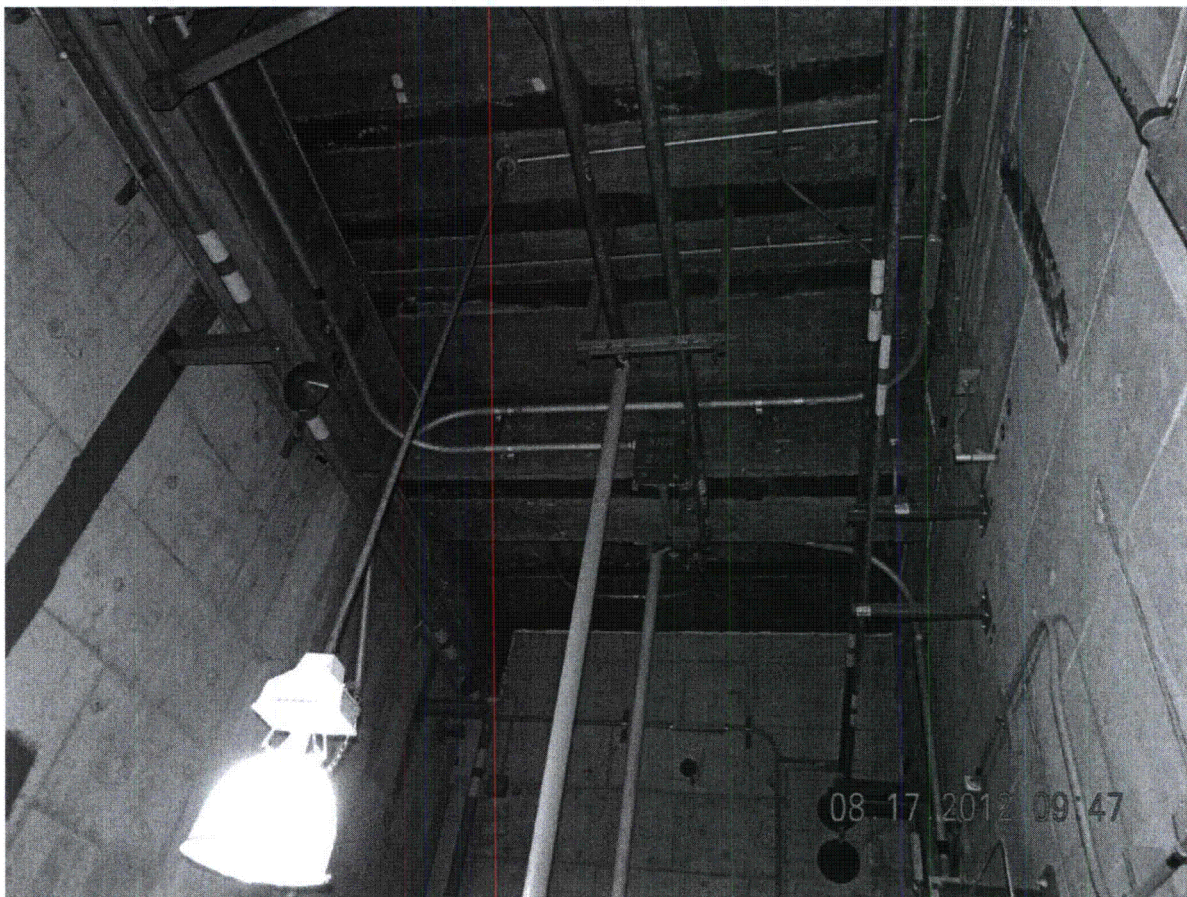


(DSCN 0528)

**Area Walk-By Pictures**

**RHR1-3**

Location: Bldg.   RHR   Floor El.   590'-0"   Room, Area   EDG11 / Col. 6-6, /B-D  



(DSCN 0529)

RHR1-4

**Area Walk-By Checklist (AWC)**

Assets: R3000D002

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG12/Col. C-5.1

**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

*Anchorage of components is free of adverse seismic conditions – no loose, broken or bent anchorages.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y  N  U  N/A

*No degraded conditions found in the area.*

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

*No cable trays or HVAC ductwork in this area. Cable/conduit raceways are adequately supported.*

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

*No ceiling tiles in the area. Lights are securely attached to the ceiling.*

<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)**

Assets: R3000D002

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Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG12/Col. C-5.1

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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   
*The area does not have fire protection piping or sprinkler system. CO<sub>2</sub> lines and other piping are adequately supported. No concern with flooding or spray in this area (see Photo DSCN 0535).*

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   
*Since part of the area houses an emergency diesel generator, there are numerous fire detectors/sensors in the area. No adverse seismic interaction condition found that could cause a fire.*

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   
*No temporary installations were identified. The overall area is considered to be in good clean condition and free of potentially adverse seismic interaction conditions.*

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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 adverse seismic conditions found (see Photo DSCN 0538).*
- 

**Comments** (Additional pages may be added as necessary)

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N/A

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  Y  N  U

RHR1-4

**Area Walk-By Checklist (AWC)**

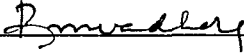
Assets: R3000D002

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Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG12/Col. C-5.1

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*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 :  Date: 8-17-12

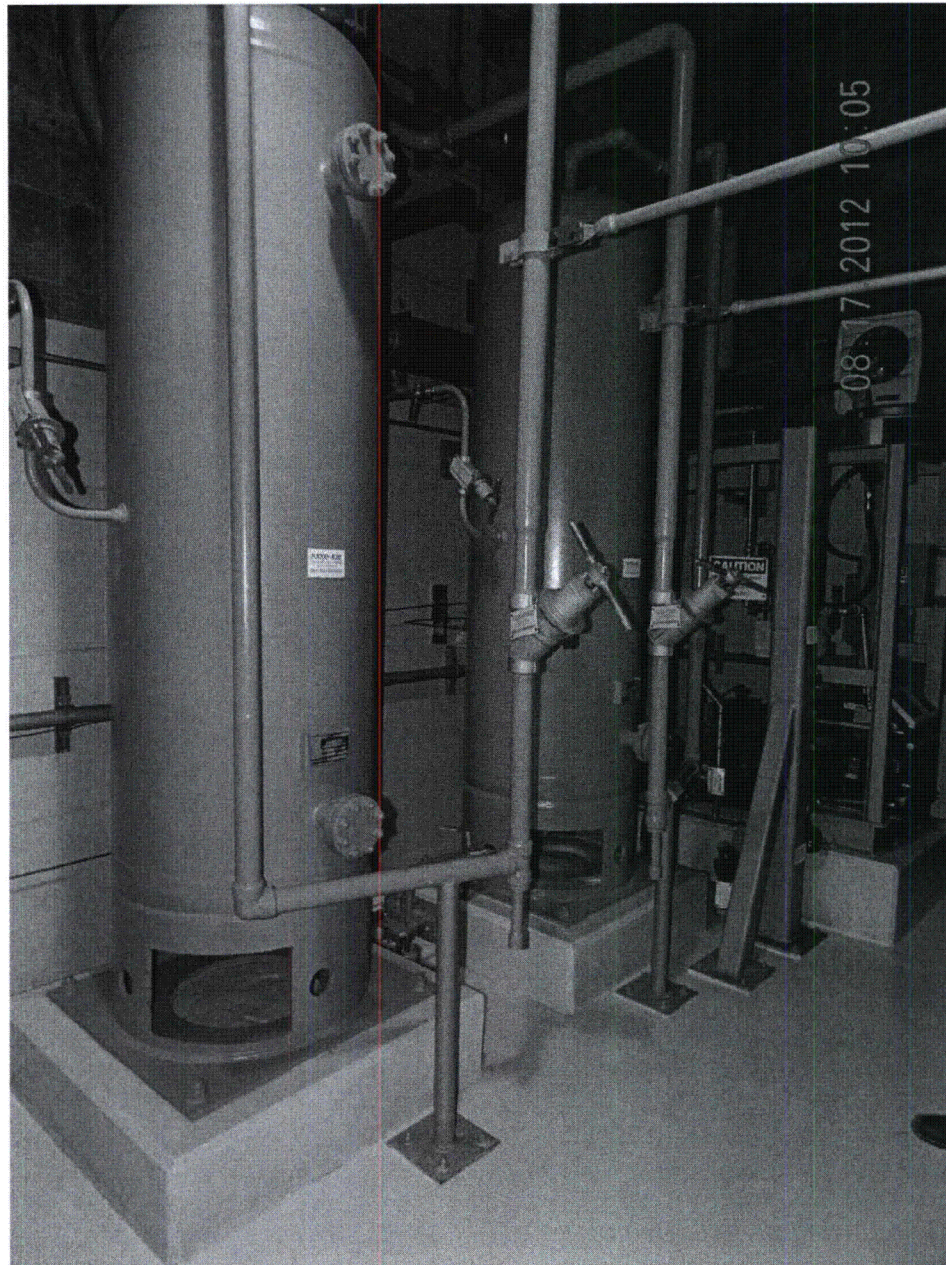
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 :  Date: 08/17/12

Area Walk-By Pictures

RHR1-4

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. C-5.1

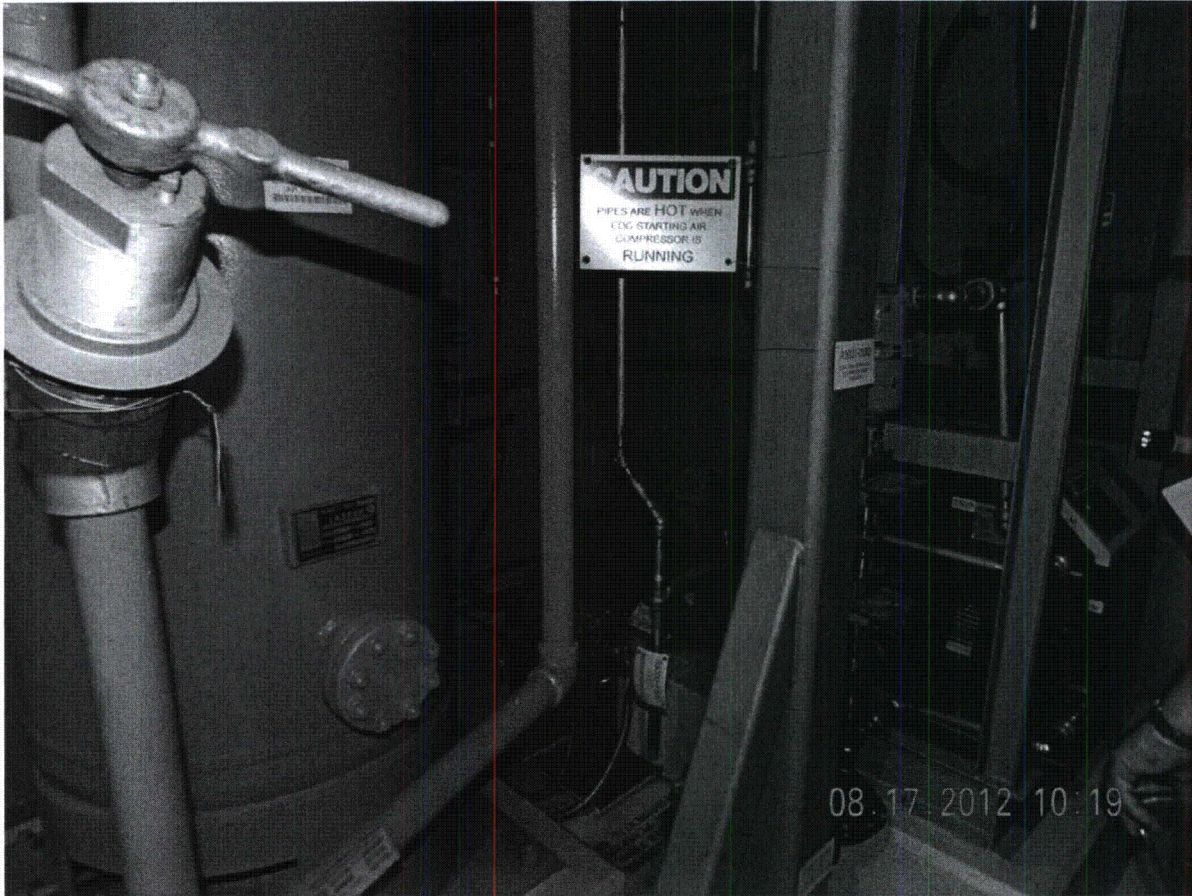


(DSCN0535)

Area Walk-By Pictures

RHR1-4

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. C-5.1



(DSCN0538)

**Area Walk-By Checklist (AWC)**

Assets: R3000F023D

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. E-8

**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

*All equipment in the area is securely restrained and anchored.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No anchorage degradation was observed in the area.*

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

*All conduits and HVAC are properly anchored and restrained.*

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

*Lights in the area are on swivel rods that are designed to sway and not break. No other seismic spacial interactions were observed. (See Picture B7)*

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR1-5

**Area Walk-By Checklist (AWC)**

Assets: R3000F023D

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Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. E-8

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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  
*There is a fire hose in the area; however there are no observed interactions that produce the potential for its rupture or the rupture of any other vessels or piping systems.*

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  
*The room is designed with a fire suppressant system due to the fact that it houses the diesel generator. There were no observed seismic concerns.*

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  
*No housekeeping concerns were observed. Portable equipment is either restrained or too far away to be a concern.*

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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 adverse seismic conditions found.*

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**Comments** (Additional pages may be added as necessary)

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*None.*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: Y N U

**Area Walk-By Checklist (AWC)**

RHR1-5

ASSETS: R3000F023D

Location: Bldg. RHR Floor El. 1(590'-0") Room, Area' EDG 14 (area near R3000F023D)

COL. E-8

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #1: Michael P. Sasso Date: 8/14/12

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #2: Scott Bauer Date: 8/14/12

**Area Walk-By Pictures**

**RHR1-5**

Location: Bldg.   RHR   Floor El.   1 (590'-0")   Room, Area   EDG14, Col. E-8  



(Picture #B7)



**Area Walk-By Checklist (AWC)**

Assets: R3001B004

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. D-7.1

**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

*All equipment in the area is securely restrained and anchored.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No degradation was observed in anchorage in the area.*

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

*All conduits and HVAC are properly anchored and restrained.*

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

*Lights in the area are on swivel rods that are designed to sway and not break. No other seismic spatial interactions were observed. See picture B7.*

MPS 10/4/12

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR1-6

**Area Walk-By Checklist (AWC)**

Assets: R3001B004

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. D-7.1

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

*There is a fire hose in the area; however there are no observed interactions that produce the potential for its rupture.*

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

*The room is designed with a fire suppressant system due to the fact that it houses the diesel generator. There were no observed seismic concerns.*

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

*No housekeeping concerns were observed. Potable equipment is either restrained or too far away to be a concern.*

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)

MPS 10/4/12

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: (Y) N U

Area Walk-By Checklist (AWC)

RHR1-6

Location: Bldg. RHR Floor El. 1(590'-0") Room, Area' EDG 14, Col. D-7.1

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1: Mike P. Lasso Date: 8/14/12

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2: Scott Bainer Date: 8/14/12

**Area Walk-By Pictures**

**RHR1-6**

Location: Bldg.   RHR   Floor El. 590'-0" Room, Area   EDG 14, Col. D-7.1  



(Picture B7)

**Area Walk-By Checklist (AWC)**

Assets: R3001C006

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> Room SRHRPR, Col. E-6

**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

*Anchorage of equipment in the area is free of potentially adverse seismic conditions. See Photos DSCN 0396 & DSCN 0397.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No degraded conditions exist.*

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

*All commodities are adequately supported. See Photo DSCN 0397.*

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

*No ceiling tiles in this area. Lights are adequately supported. See Photos DSCN 0398 & 0404.*

<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)**

Assets: R3001C006

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> Room SRHRPR, Col. E-6

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

*The existing piping is adequately supported, and floor drains are also in the area. There is no threat of flooding or water spray in this 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

*No combustible material stored in this 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 are no temporary installations in this area. The area is free of potentially adverse seismic interactions. Overall area is in good condition.*

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

*Pump R3000C005 contains diagonal braces which do not appear on Vendor Dwg. MD-21144, Sheet 1, Rev. M. See Photo DSCN 0396. CARD 12-26977 was written to revise the vendor drawing to refer to hanger Dwgs. R30-C005-G01, Rev. 0, to R30-C008-G01, Rev 0.*

*During the walkdown, a broken label was found on Valve E1150F605A. See Photo DSCN 0406. CARD 12-27150 was written.*

Comments (Additional pages may be added as necessary)

*ALL DOCUMENTS REFERENCED (LATEST REVISION) WERE REVIEWED AND NO APPLICABLE POSTINGS WERE FOUND. ~ DSK 10/12/12*

**Area Walk-By Checklist (AWC)**

Assets: *R3001C006*

---

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area<sup>1</sup> *Room SRHRPR, Col. E-6*

---

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : *[Signature]* Date: *8/14/12*

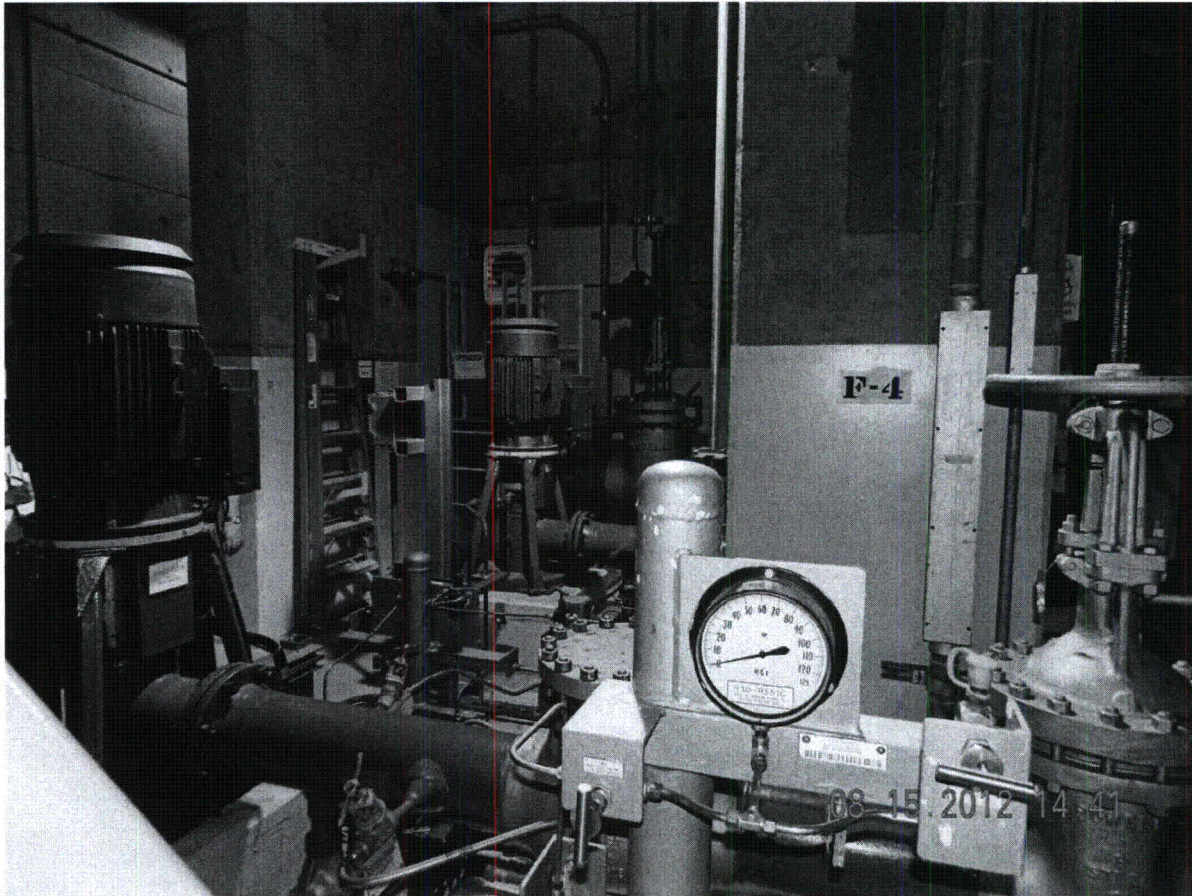
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : *[Signature]* Date: *08/14/12*

Area Walk-By Pictures

RHR1-7

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Col. E-6



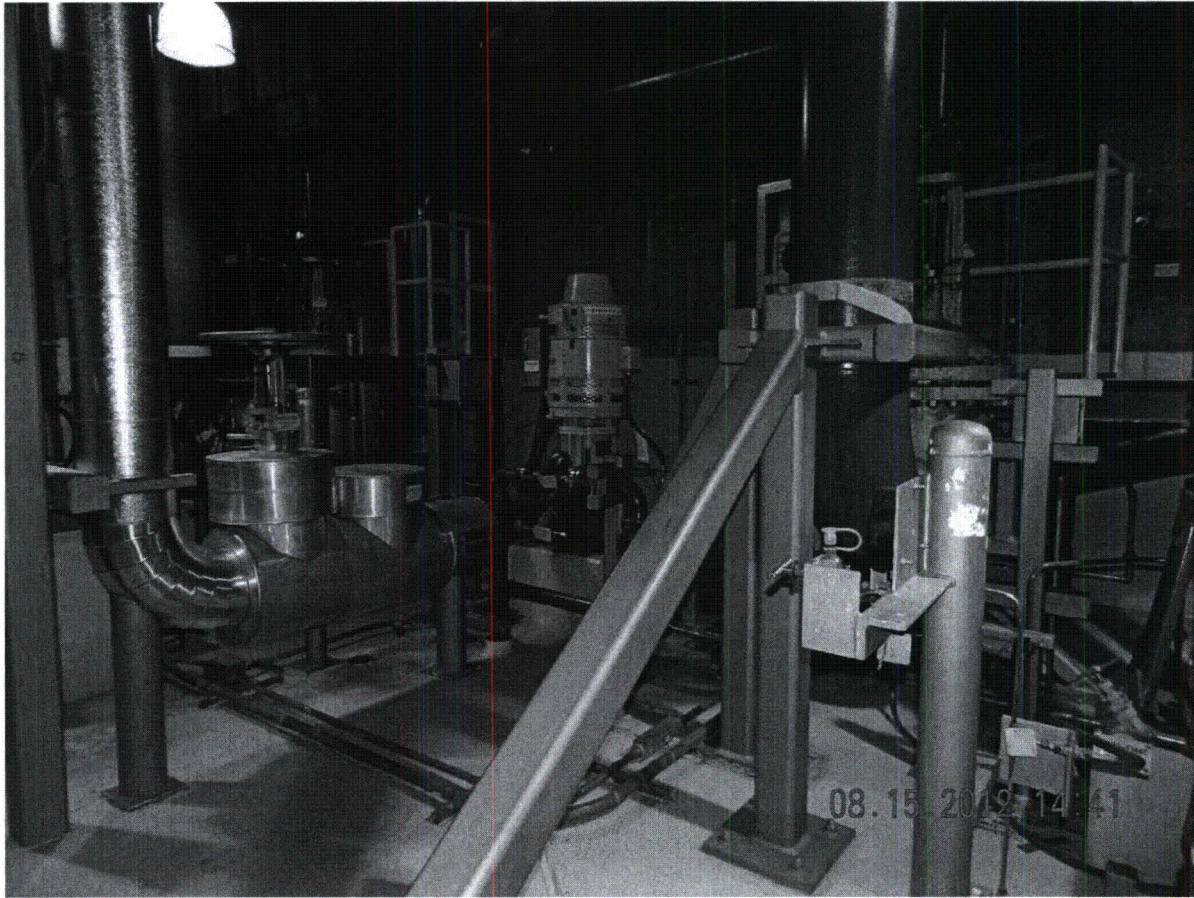
(DSCN 0396)



Area Walk-By Pictures

RHR1-7

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Col. E-6

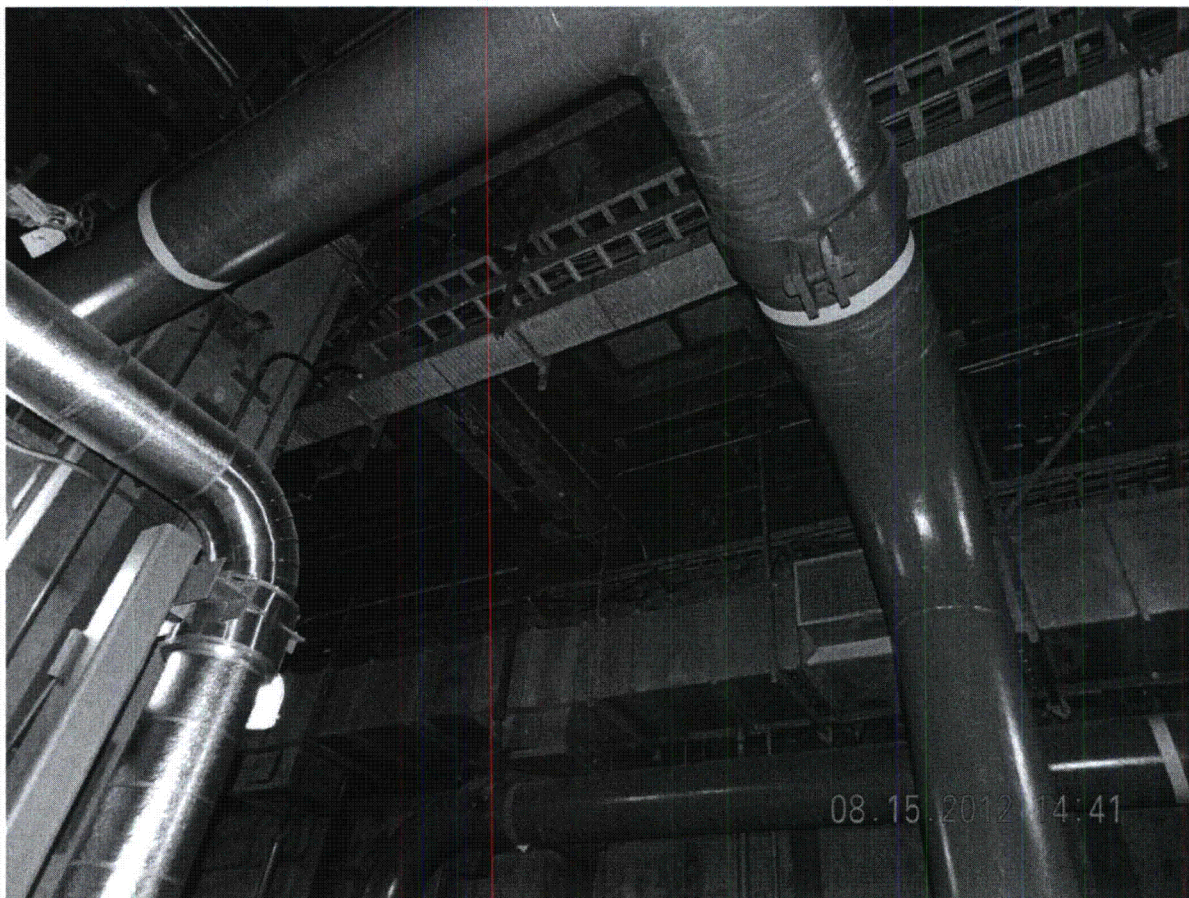


(DSCN 0397)

Area Walk-By Pictures

RHR1-7

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Col. E-6

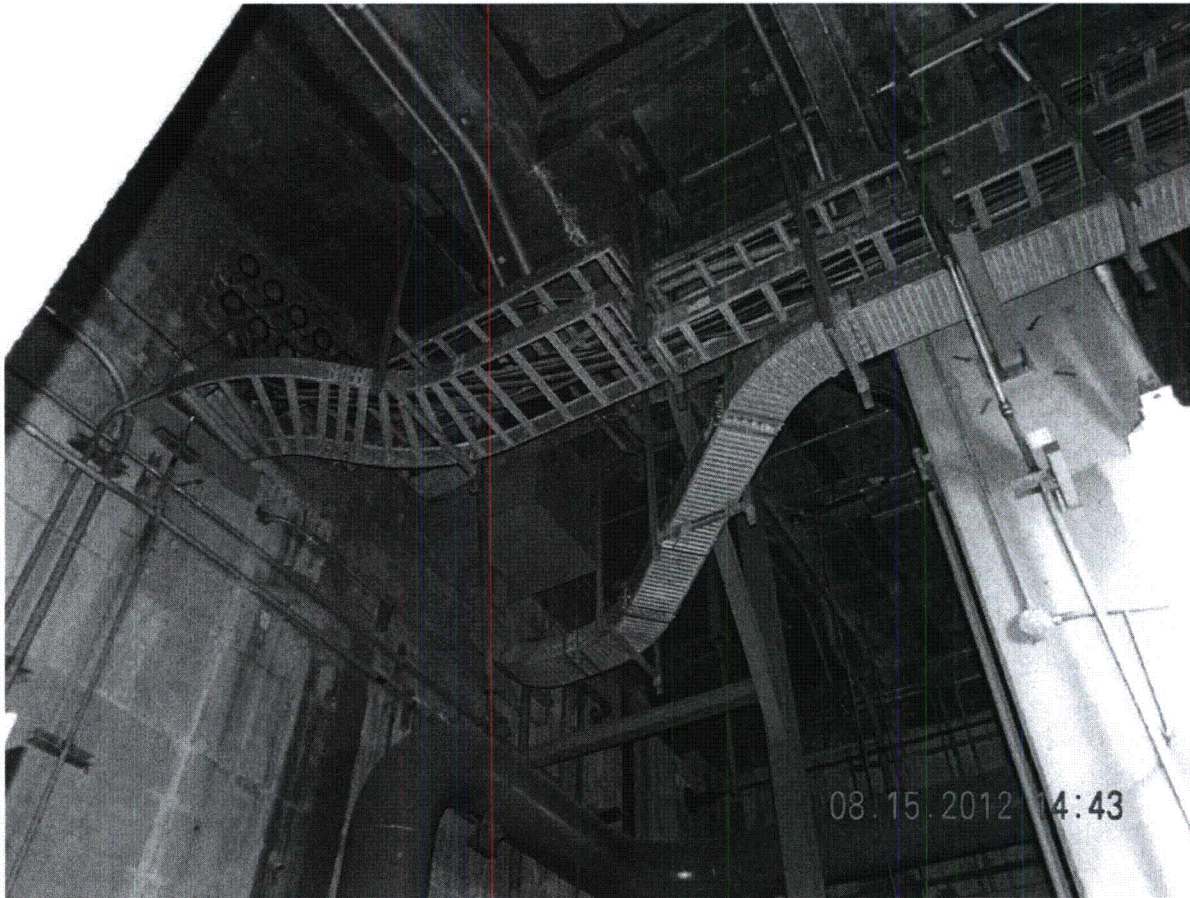


(DSCN 0398)

Area Walk-By Pictures

RHR1-7

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Col. E-6



(DSCN 0404)

Area Walk-By Pictures

RHR1-7

Location: Bldg. RHR Floor El. 590'-0" Room, Area SRHRPR, Col. E-6



(DSCN 0406)

**Area Walk-By Checklist (AWC)**

Assets: R3001S001

590'-0" JAM  
10/24/12

Location: Bldg. RHR Floor El. ~~595'-0"~~ Room, Area<sup>1</sup> EDG11, Col. E-6 to E-7

**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

*All equipment in the area appears robust with adequate anchorage.  
(See Photo DSC00079 and DSC00088)*

JAM  
10/11/12

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y  N  U  N/A

*No degraded anchors were observed. All piping appears to be seismically supported.*

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

*HVAC ducts supported on robust hangers. All supports are in good condition.  
(See DSC00087)*

JAM  
10/11/12

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

*There are no ceiling tiles in this area. Light fixtures hung from the ceiling by conduit, with redundant wire cable.  
(See DSC00085 and DSC00088)*

JAM  
10/11/12

<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.

JML

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHRI-8

**Area Walk-By Checklist (AWC)**

Assets: R3001S001

590'-0"

JAM  
10/24/12

Location: Bldg. RHR Floor El. 595'-0" Room, Area<sup>1</sup> EDG11, Col. E-6 to E-7

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

*All water piping is seismically supported, and risk of leakage is low.  
Floor drains are provided throughout 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

*No combustible material is stored 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

*Scaffolding is tied off and seismically restrained. Ladders are stored in approved racks.*

(See DSC00081, DSC00082 and DSC00083)

JAM  
10/11/12

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)

None

JML

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  N  U

Area Walk-By Checklist (AWC)

RHR1-8

ASSETS: R 3 001 S001

EDG11, Col. E6-E7

Location: Bldg. RHR Floor El. 590'-0" Room, Area RHR COMPLEX E6 to E7

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #1: David G Dickerson

Date: 8/21/2012

Seismic Engineer Walkdown PSE-53 Qualified

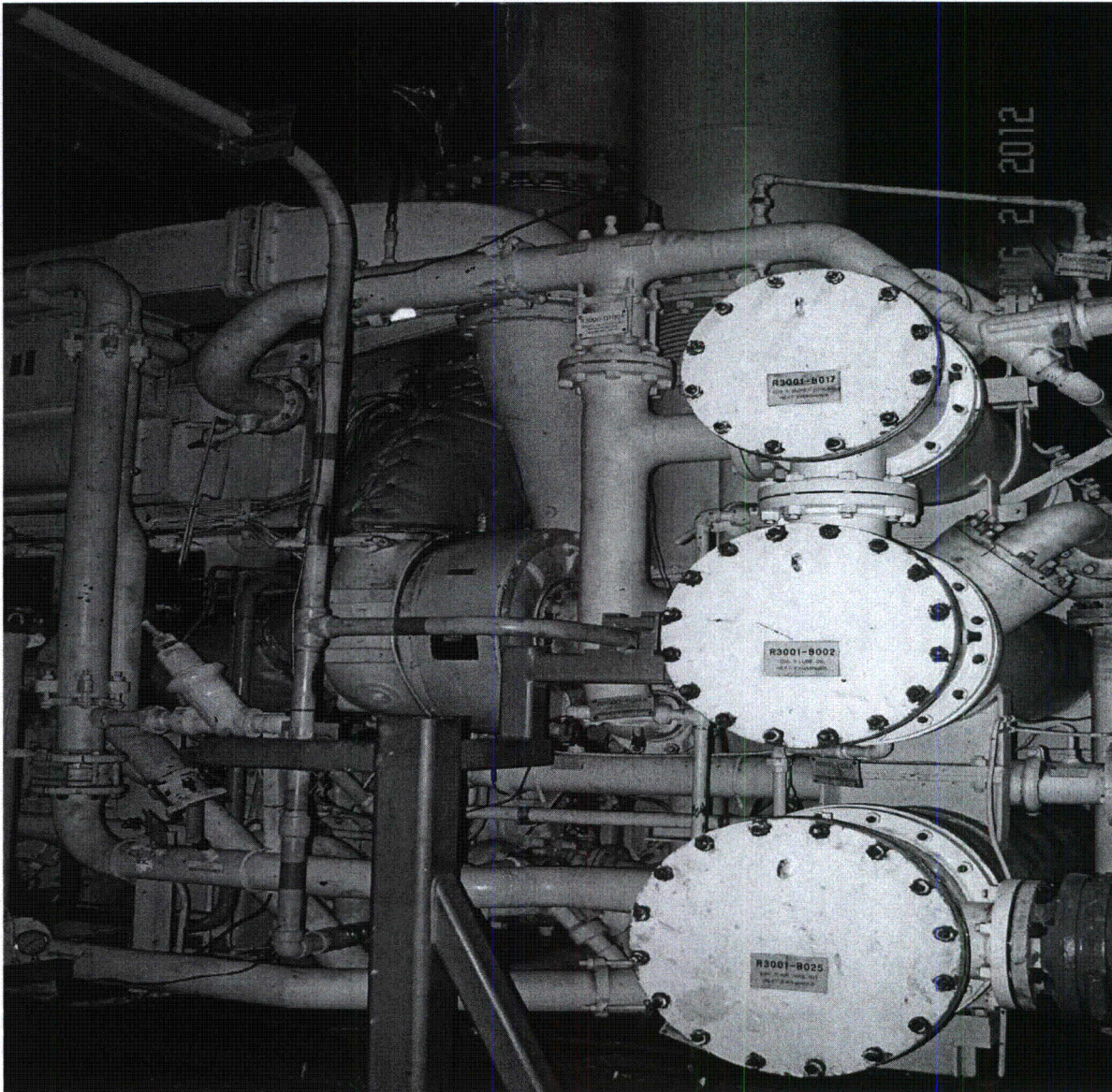
Evaluator #2: Joseph M LaVere

Date: 08/22/2012

Area Walk-By Pictures

RHR1-8

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6 -E-7



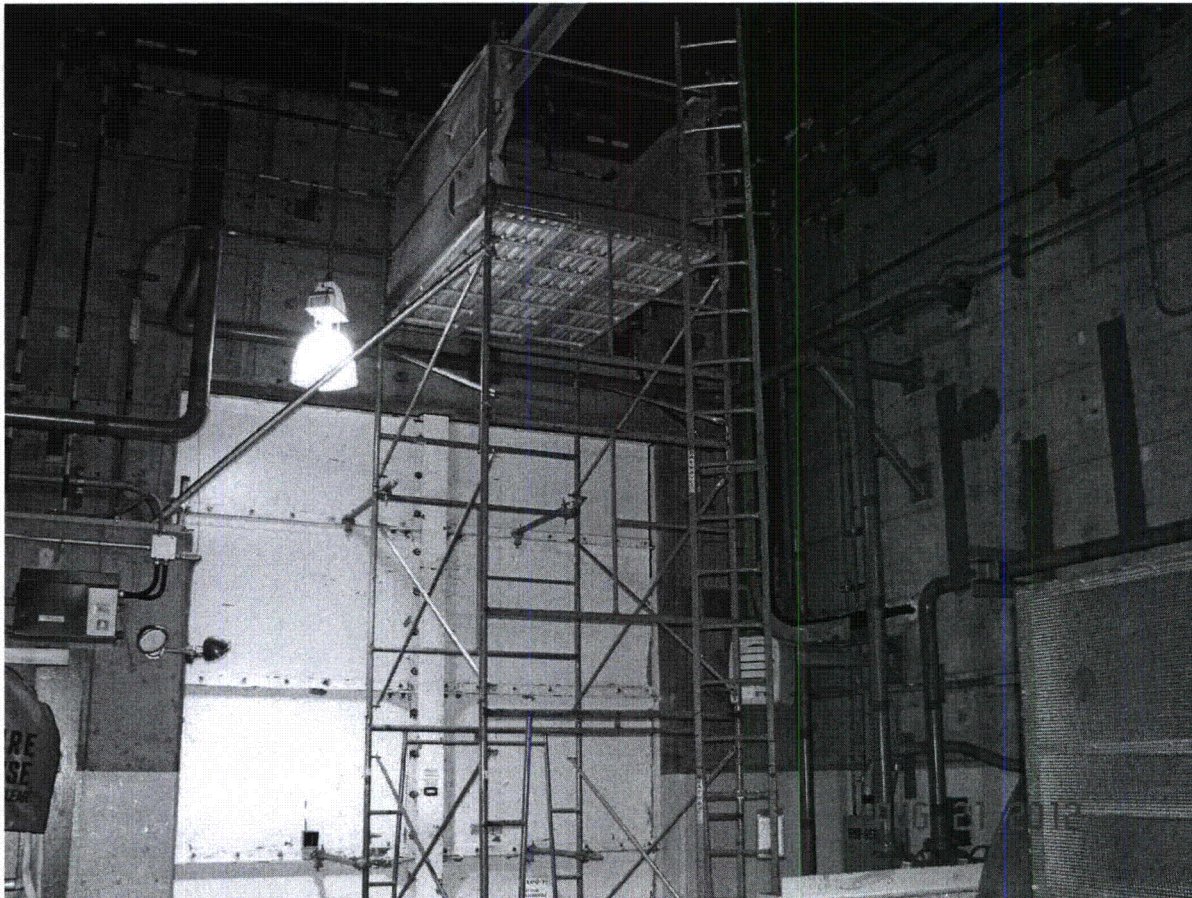
(DSC00079)



**Area Walk-By Pictures**

**RHR1-8**

Location: Bldg.   RHR   Floor El.   590'0"   Room, Area   EDG11 / Col. E-6 -E-7  



(DSC00081)

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6 -E-7



(DSC00082)

Area Walk-By Pictures

RHR1-8

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6-E-7



(DSC00083)

Area Walk-By Pictures

RHR1-8

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6 -E-7

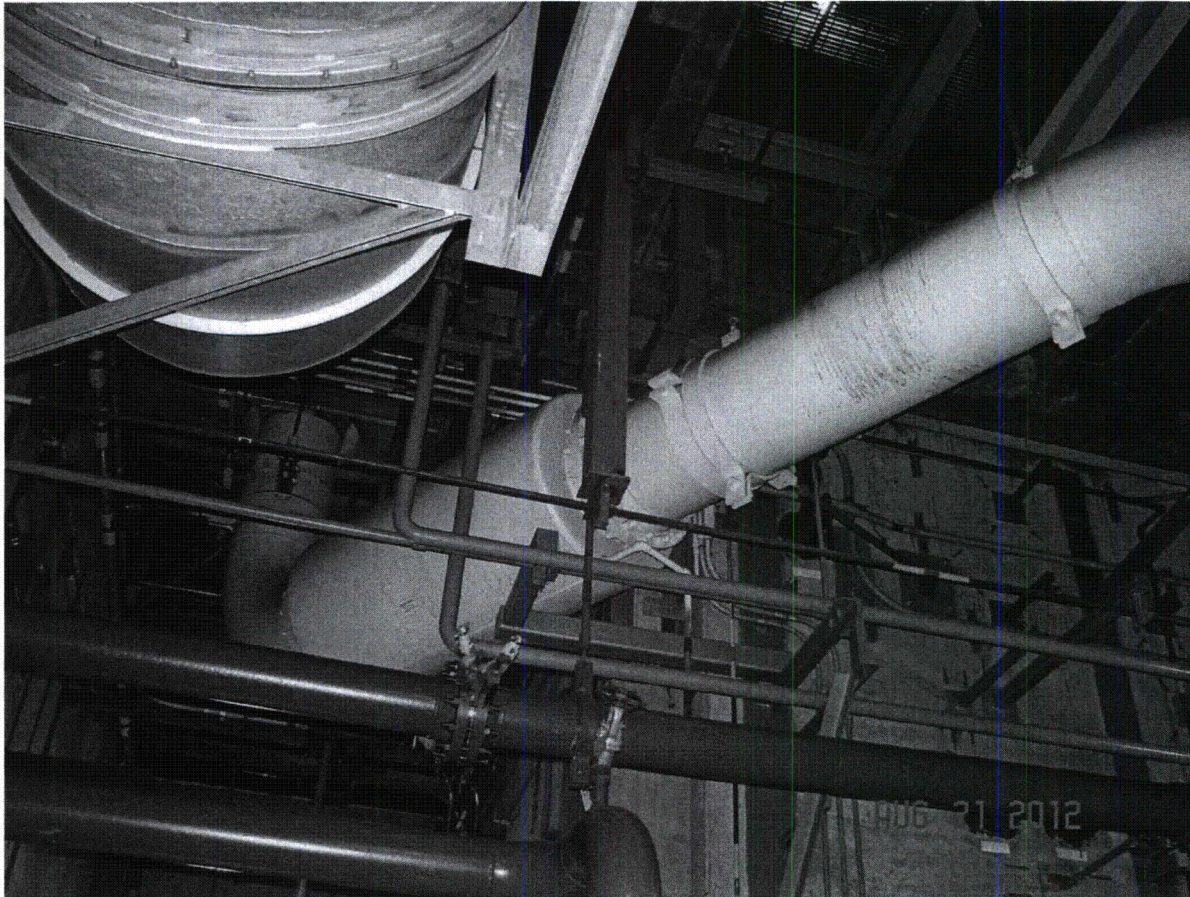


(DSC00085)

Area Walk-By Pictures

RHR1-8

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6-E-7

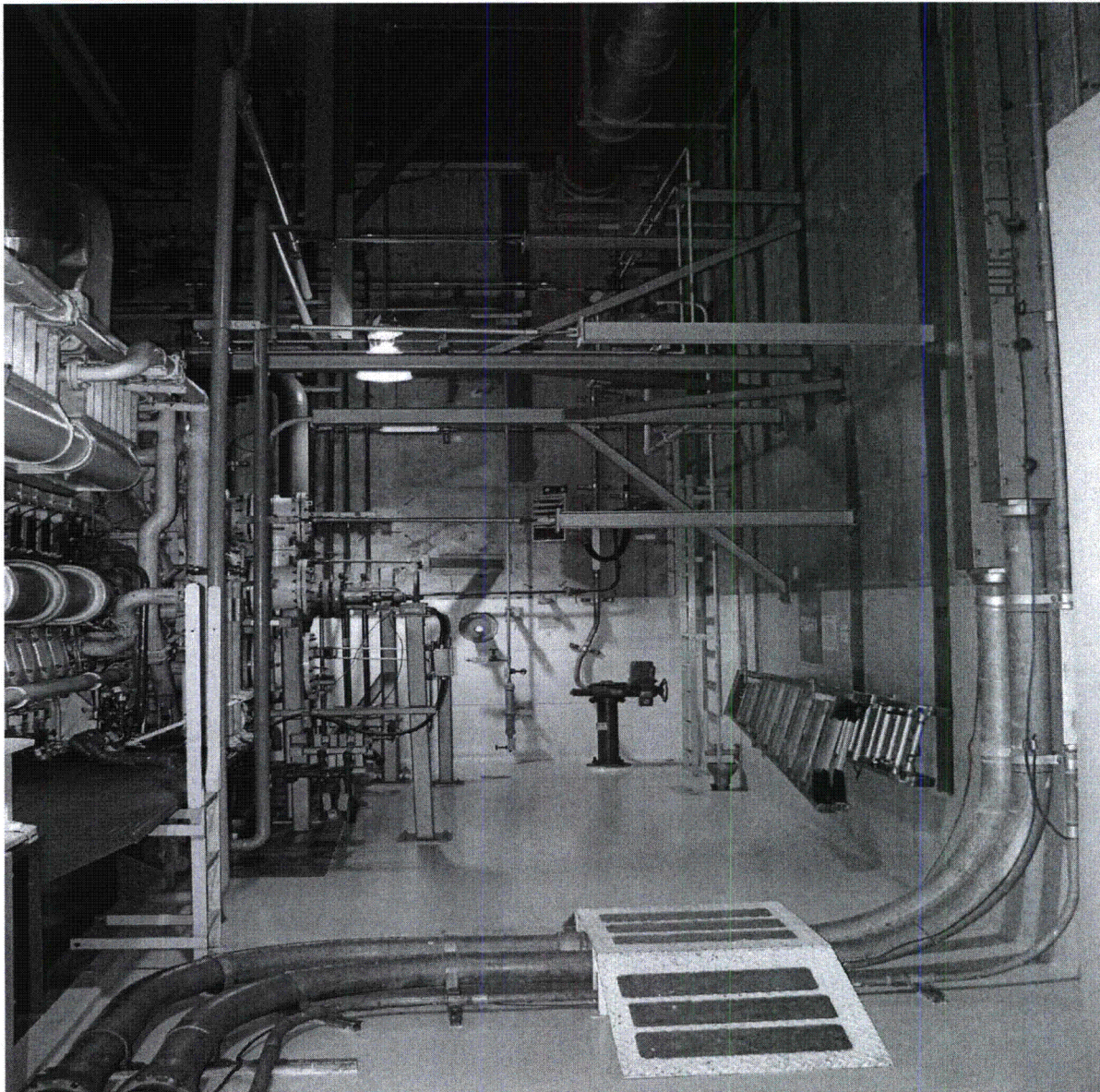


(DSC00087)

Area Walk-By Pictures

RHR1-8

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG11 / Col. E-6 -E-7



(DSC00088)

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 1 of 3  
Status: Y  N  U

RHR1-9

**Area Walk-By Checklist (AWC)**

Assets: R30FA05B

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG13

**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

*No adverse conditions observed.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*Piping system asset is part of supports. Visually inspected and found no degraded conditions in 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)?  Y  N  U  N/A

*No adverse conditions observed.*

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

*The light on the north west corner of the room is installed right next to the large heat exchanger pipe. The pipe is approx. 10" in diameter and will not be subject to damage per Engineering Judgment. See pictures B1 and B2. The concern with the location of the light is documented under CARD 12-26861.*

<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.

MPS 10/4/12

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status: Y  N  U

RHR1-9

**Area Walk-By Checklist (AWC)**

Assets: R30FA05B

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG13

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

*Area is free of flooding or spray hazards.*

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

*Area is free of potential fire hazards.*

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

*No inappropriate housekeeping practices or portable equipment storage was observed in the area. Note: Lube oil drain header ISO valve (PIS # R000F122B) is missing a handle per TMPE-97-0439. Acceptable as is.*

DJK  
10/12/12

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 were identified.*

**Comments** (Additional pages may be added as necessary)

*Various valve hand wheels in the RHR were intentionally removed by Operations to prevent the valves from inadvertently opening. Ref. TMPE-97-0439.*

MPS 10/4/12



Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: ~~X~~ ~~N~~ U  
RHR1-9

**Area Walk-By Checklist (AWC)**

ASSETS: R30FA05B

Location: Bldg. RHR Floor El. 1 (550'-0") Room, Area 1 EDG 13 (area near R30FA05B)

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1: Michael P. Sasso Date: 8/16/12

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2: Scott Baner Date: 8/16/12

Area Walk-By Pictures

RHR1-9

Location: Bldg. RHR Floor El. 590'0" Room, Area EDG13



(Picture B1)

**Area Walk-By Pictures**

**RHR1-9**

Location: Bldg.   RHR   Floor El.   590'0"   Room, Area   EDG13  



(Picture B2)

**Area Walk-By Checklist (AWC)**

Assets: R30NA17A

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> RHR Complex, EDG 11, Col. E-6 to E-7

**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

*Inside shaft guard. Protected area – All other observations are applicable to the general area. Anchorage of equipment in general area is 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

*There is not any other equipment inside the shaft guard. Observations are applicable to the general area. Anchorage of equipment in general area is free of equipment with degraded anchors.*

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

*All HVAC ducting, pipes and cable tray are seismically supported. Also this asset is protected by a heavy guard around the shaft.*

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

*No ceiling tiles or lighting within the shaft guard.*

<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.

Ferri 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR1-10

**Area Walk-By Checklist (AWC)**

Assets: R30NA17A

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> RHR Complex, EDG 11, Col. E-6 to E-7

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

*Water piping is robustly supported and not likely to leak.*

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

*There are no combustible materials stored in this 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

*No temporary equipment in the area. Scaffolding is seismically braced. Ladders are stored in approved racks.*

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)

*None.*

*JML*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: (Y) N U

Area Walk-By Checklist (AWC)

RHR1-10

ASSETS: R30NA17A

Location: Bldg. RHR Floor El. 590'0" Room, Area<sup>1</sup> RHR COMPLEX, EDG11, EG TO E7

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #1: David G Dickins Date: 8/21/2012

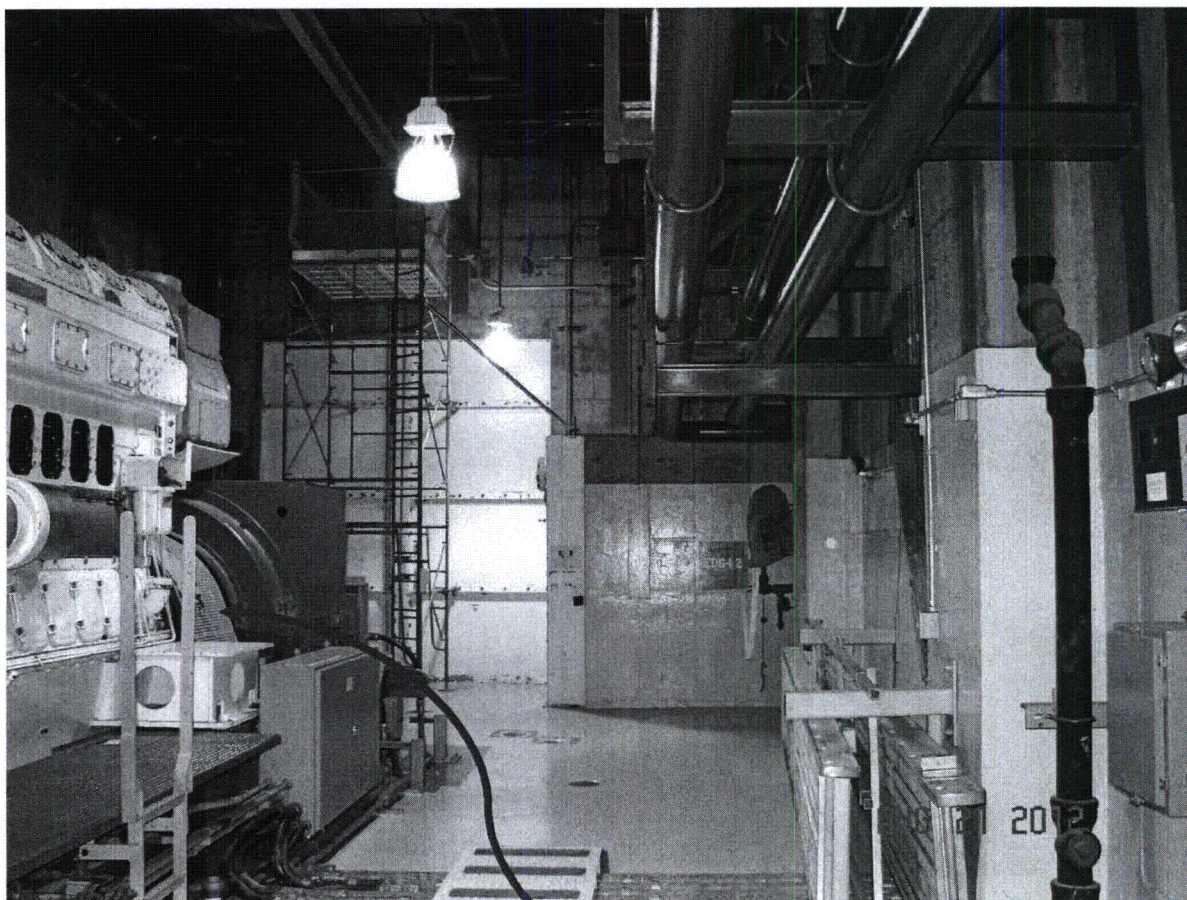
Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #2: Joseph M Balere Date: 08/21/2012

Area Walk-By Pictures

RHR1-10

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG11, Col. E-6 to E-7



R30NA17A is located  
Behind this guard

**Area Walk-By Checklist (AWC)**

Assets: R30P320

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> RHR Complex, EDG12, Col. E-5 to E-6

**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

*All equipment in the area appears robust with adequate anchorage.  
(See Photo DSC00107 and DSC00112)*

JAM  
10/11/12

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

*No degraded anchors were observed. All piping appears to be seismically supported.  
(See Photo DSC00111)*

JAM  
10/11/12

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

*HVAC ducts are supported on robust hangers. All supports are in good condition.  
(See Photo DSC00108 and DSC00110)*

JAM  
10/11/12

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

*There are no ceiling tiles in this area. Light fixtures are hung from the ceiling by rigid conduit, with a redundant wire cable.  
(See Photo DSC00110 and DSC00113)*

JAM  
10/11/12

<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.



Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR1-11

**Area Walk-By Checklist (AWC)**

Assets: R30P320

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> RHR Complex, EDG12, Col. E-5 to E-6

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

*All water piping is seismically supported, and the risk of leakage is low. Floor drains are provided throughout 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

*No combustible material is stored 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

*Scaffolding is tied off and seismically restrained. Ladders are stored in approved racks.*  
*(See Photo DSC00113)*

JAM  
10/11/12

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)

*None.*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: Y N U

Area Walk-By Checklist (AWC)

RHR1-11

ASSETS: R30P320

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> RHR COMPLEX, EDG12, E5 TO E6.

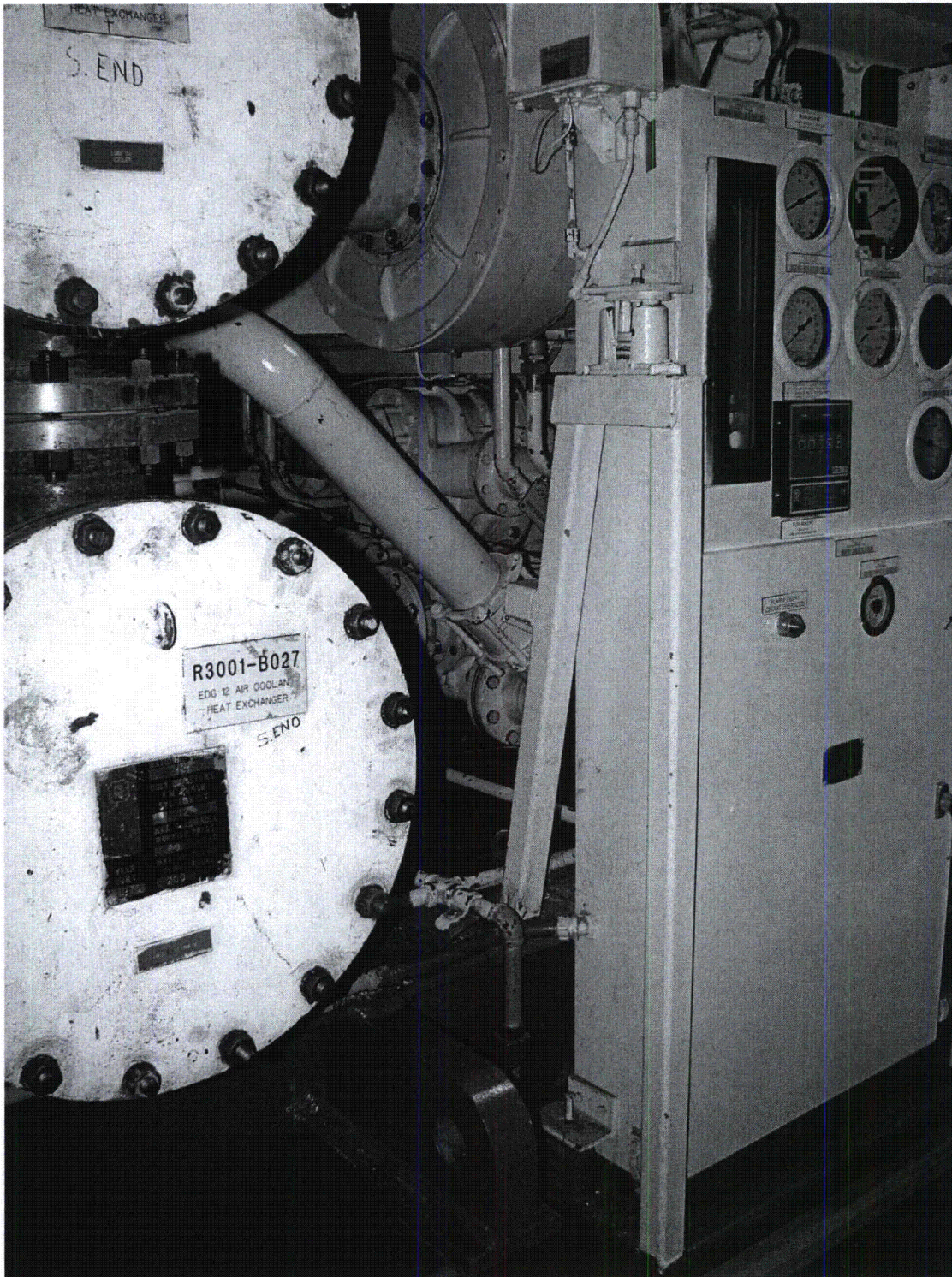
Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #1: David G. Dickinson Date: 8/21/2012

Seismic Engineer Walkdown PSE-53 Qualified

Evaluator #2: Joseph M. Balke Date: 08/21/2012

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. E-5 to E-6

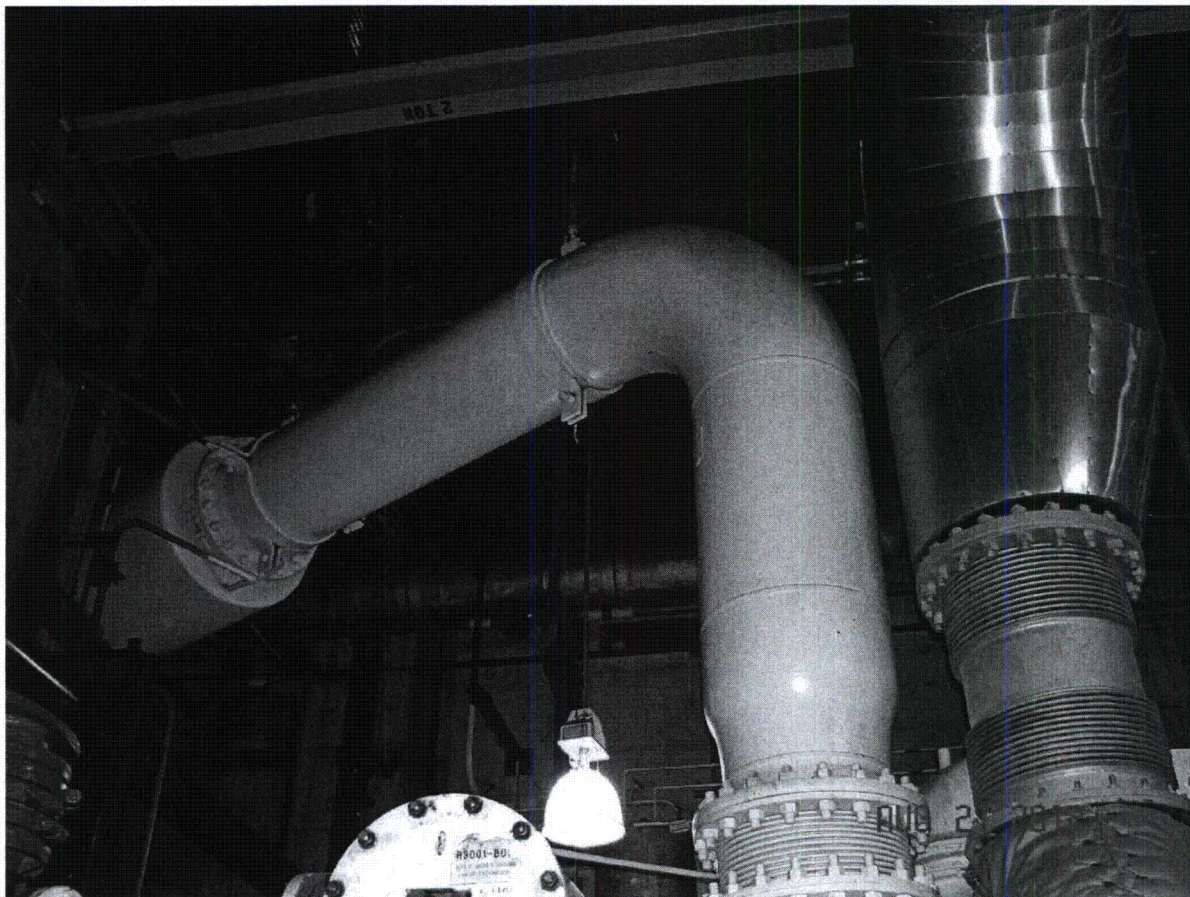


(DSC00107)

Area Walk-By Pictures

RHR1-11

Location: Bldg.   RHR   Floor El.   590'-0"   Room, Area   EDG12, Col. E-5 to E-6  

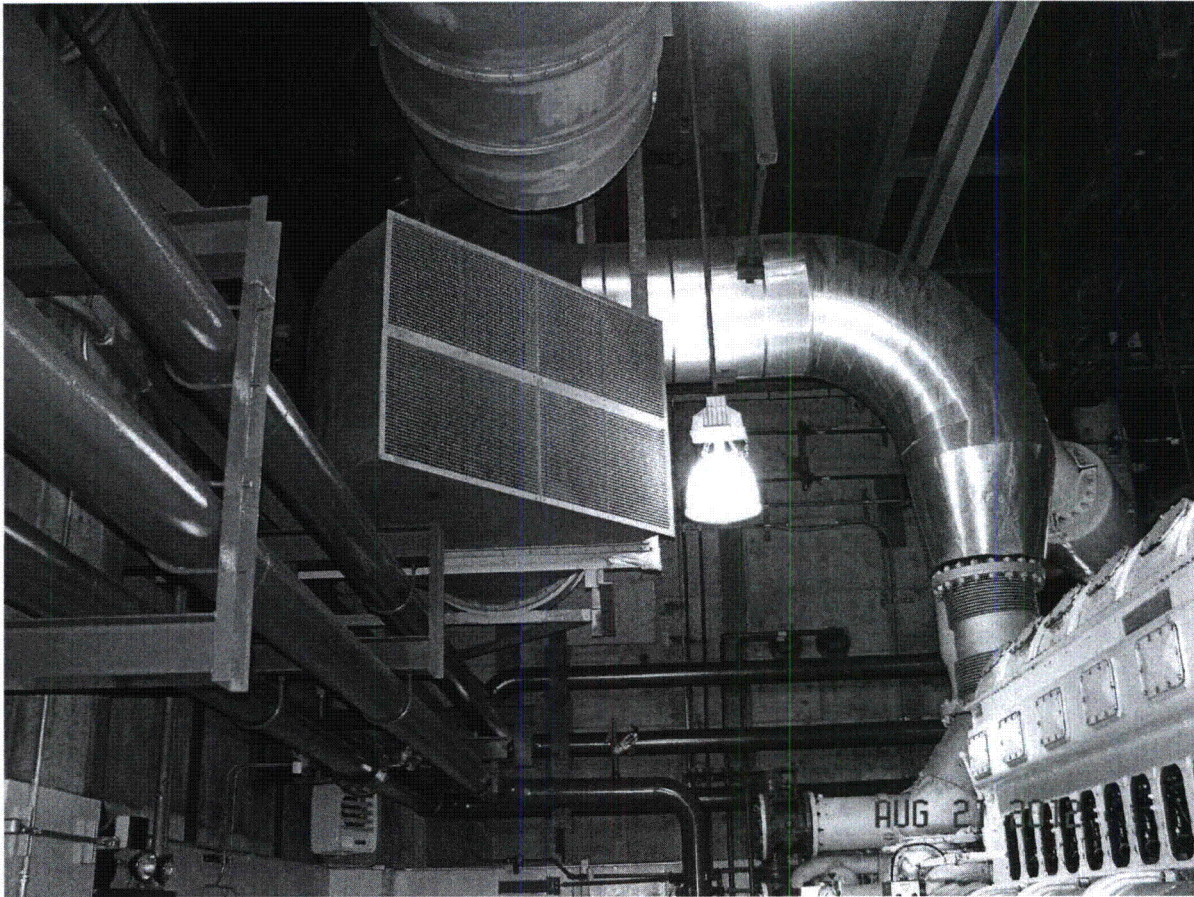


(DSC00108)

Area Walk-By Pictures

RHR1-11

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. E-5 to E-6

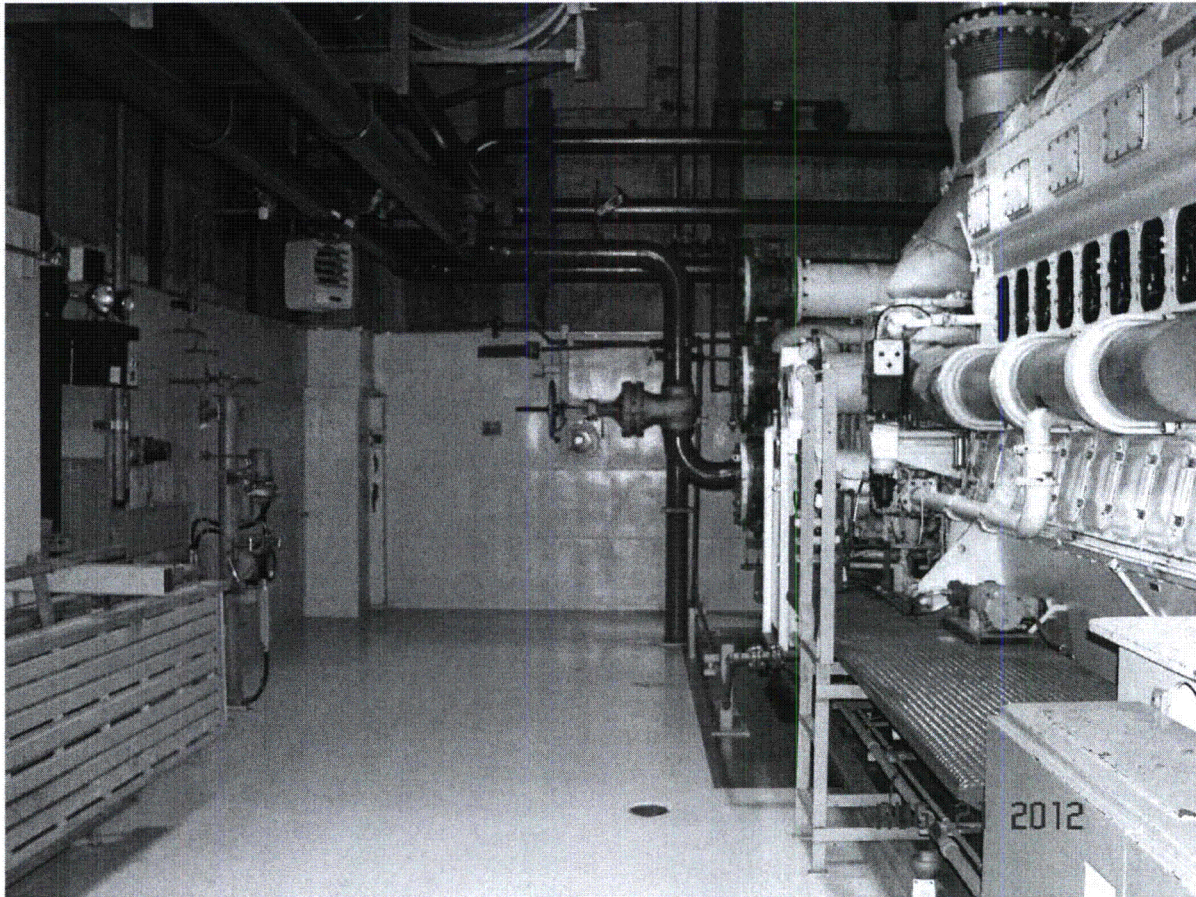


(DSC00110)

Area Walk-By Pictures

RHR1-11

Location: Bldg.   RHR   Floor El.   590'-0"   Room, Area   EDG12, Col. E-5 to E-6  

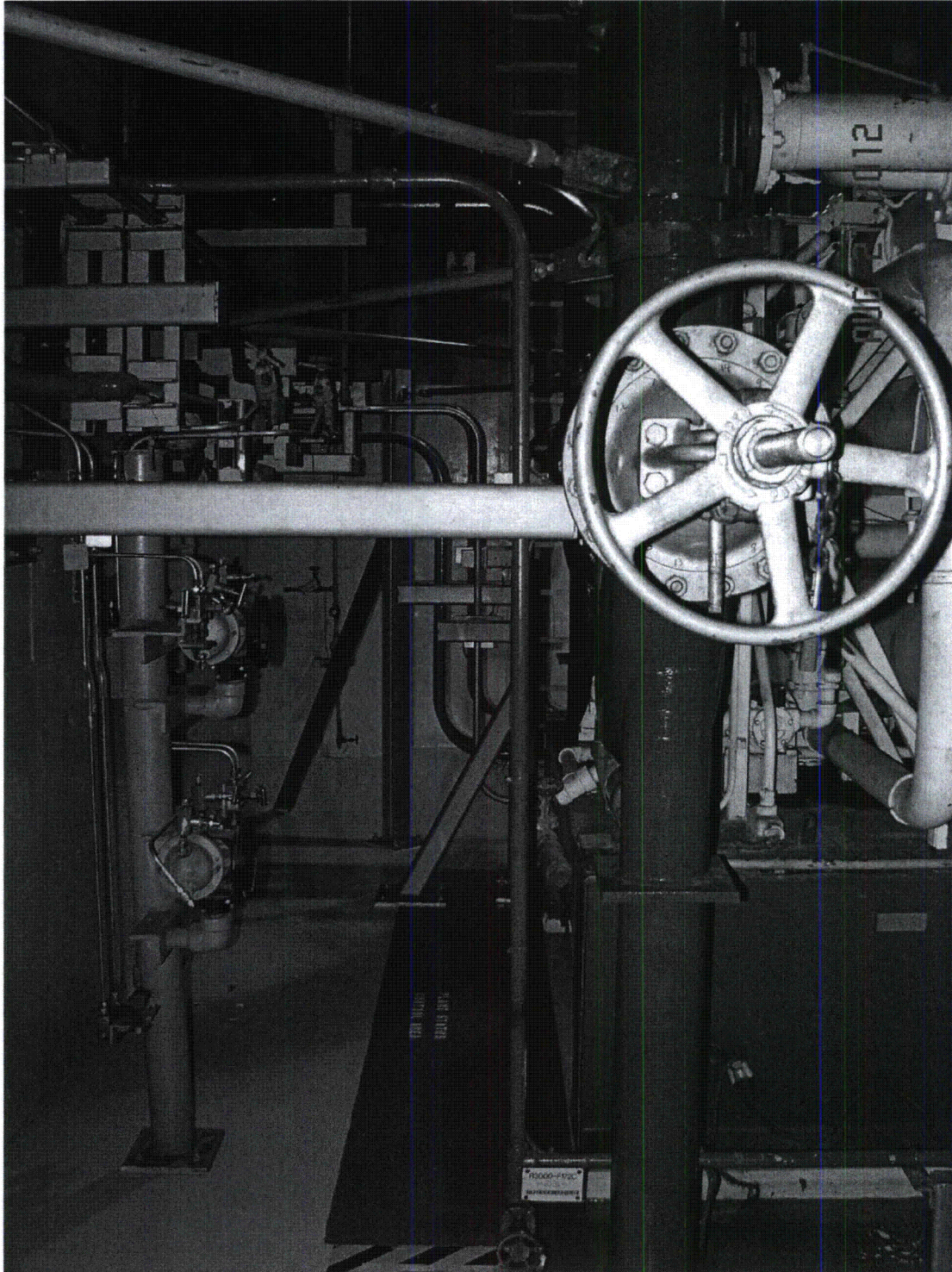


(DSC00111)

Area Walk-By Pictures

RHR1-11

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. E-5 to E-6

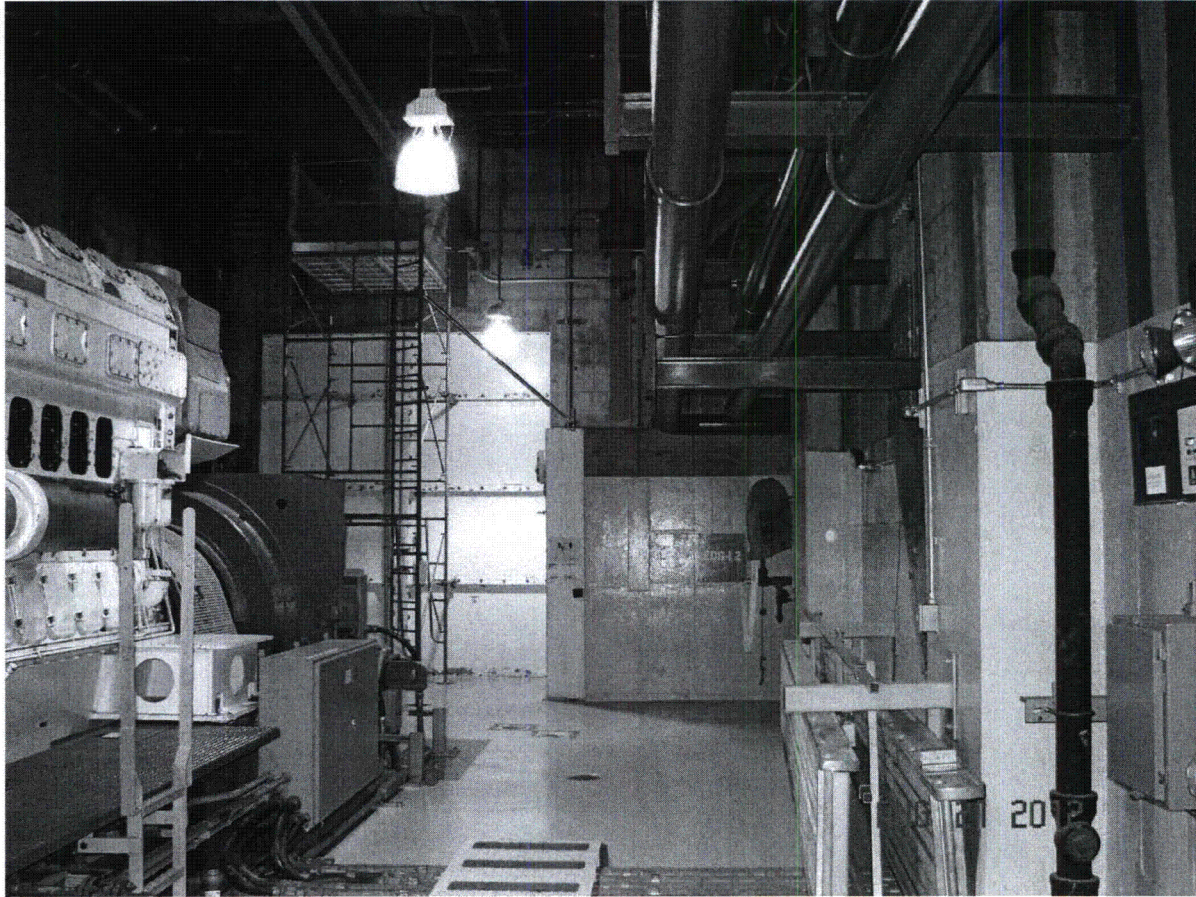


(DSC00112)

Area Walk-By Pictures

RHR1-11

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG12, Col. E-5 to E-6



(DSC00113)



**Area Walk-By Checklist (AWC)**

Assets: R30P343D

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. F-7

**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

*All equipment in the area is securely restrained and anchored.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No degradation was observed in anchorage in the area.*

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

*All conduit and HVAC are properly anchored and restrained.*

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

*Lights in the area are on swivel rods that are designed to sway and not break. No other seismic spacial interactions were observed.*

*(See Picture B7)*

<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.

MPS 10/4/12

**Area Walk-By Checklist (AWC)**

Assets: R30P343D

Location: Bldg. RHR Floor El. 590'-0" Room, Area<sup>1</sup> EDG14, Col. F-7

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

*Process piping in the area is seismically supported in a satisfactory manner and poses no spray or flooding concerns. This includes the fire hose station nearby.*

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

*The room is designed with a fire suppressant system due to the fact that it houses the diesel generator. No items were observed that could result in a fire due to seismic interaction effects.*

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

*No housekeeping concerns were observed. Portable equipment is either restrained or too far away to be a concern.*

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 were identified.*

**Comments** (Additional pages may be added as necessary)

*None.*

MPS 10/4/12

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  Y  N  U

**Area Walk-By Checklist (AWC)**

RHR 1-12

ASSETS: R30P343D

Location: Bldg. RHR Floor El. 1(590'-0") Room, Area' EDG 14, Col. F-7

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1: Michael P. Jasso Date: 8/14/12

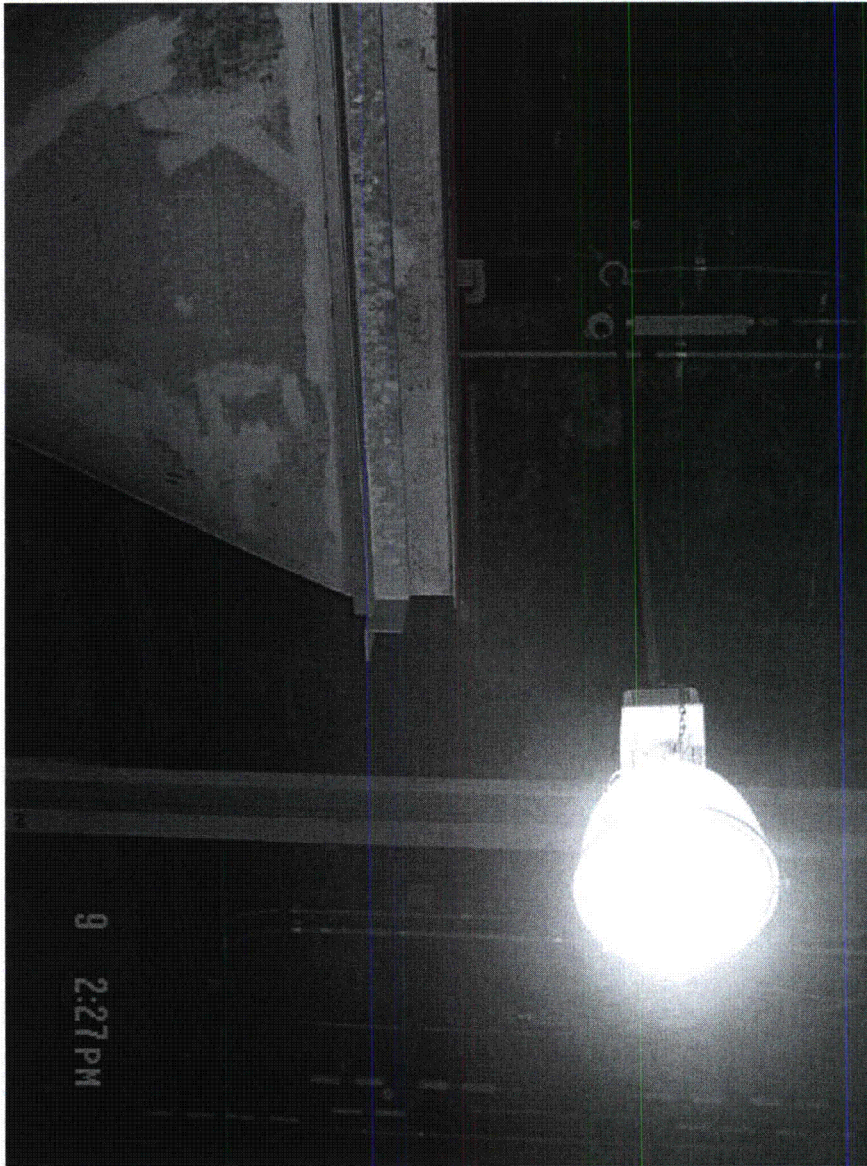
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2: Scott Bowen Date: 8/14/12

Area Walk-By Pictures

RHR1-12

Location: Bldg. RHR Floor El. 590'-0" Room, Area EDG14, Col. F-7



(Picture B7)

**Area Walk-By Checklist (AWC)**

Assets: *E1156C001C*

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> SRHRCT, Col. B-3

**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

*Anchorage of equipment is free of potentially adverse seismic conditions. Also, the only "equipment" in this room is the fan motor, conduit, a junction box and three bottled gas cylinders. See photo DSCN 0418.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No degraded conditions. Surface oxidation only.*

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

*Existing conduit raceways are adequately supported. No HVAC ducts or cable trays.*

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

*No ceiling tiles or lighting.*

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR2-1

**Area Walk-By Checklist (AWC)**

Assets: E1156C001C

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> SRHRCT, Col. B-3

---

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
- This area houses motor/fan, cylinders, conduits and junction boxes. No fire protection piping in the area that could break or cause flooding. See photo DSCN 0418.*

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
- Gas bottles are securely fastened and filled with nitrogen, a non-combustible gas. Refer to photos DSCN 0418 & 0418A.*

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
- No scaffolding or shielding or portable 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?  Y  N  U
- Overall area is clean; there are no other seismic conditions that could adversely impact the safety function of equipment.*
- 

**Comments** (Additional pages may be added as necessary)

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**Area Walk-By Checklist (AWC)**

Assets: *E1156C001C*

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> SRHRCT, Col. B-3

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : *[Signature]* Date: 8/15/12

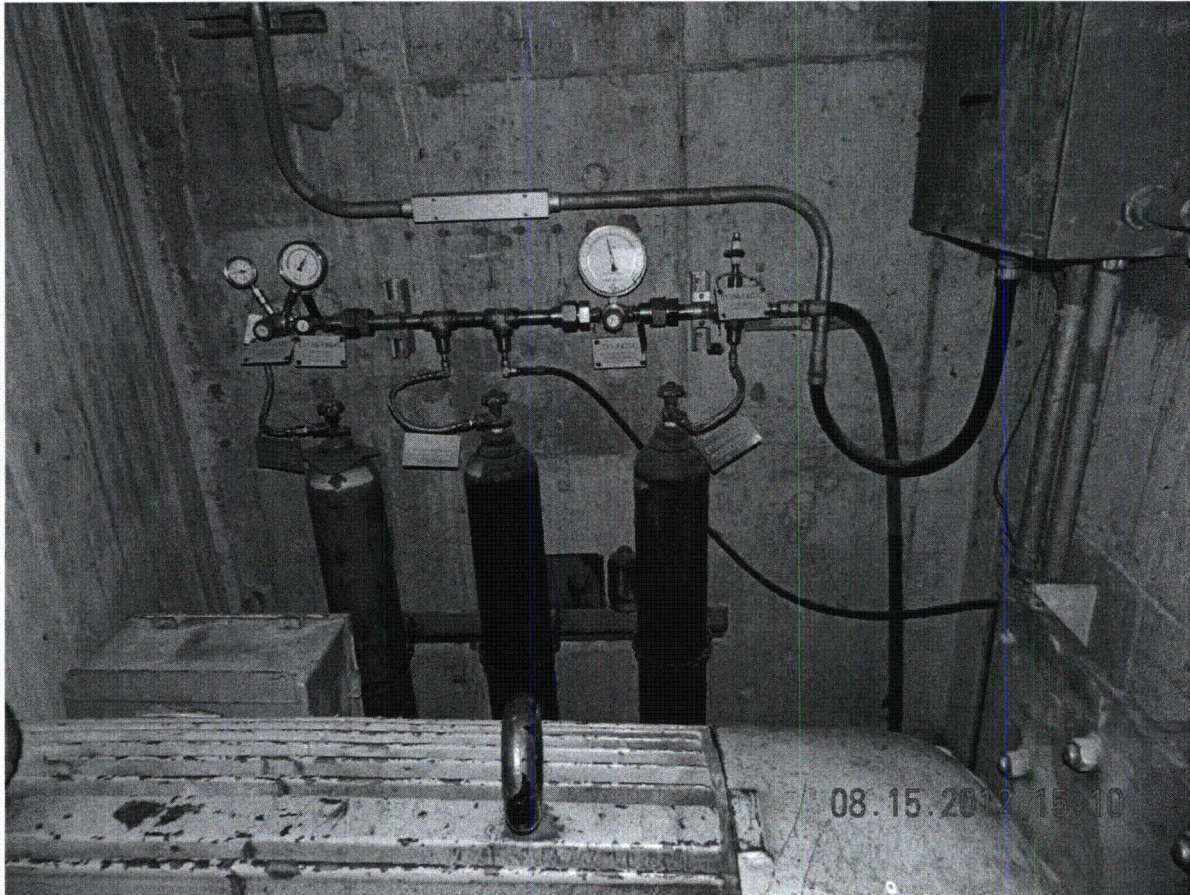
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : *[Signature]* Date: 08/15/12

Area Walk-By Pictures

RHR2-1

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   SRHRCT, Col. B-3  



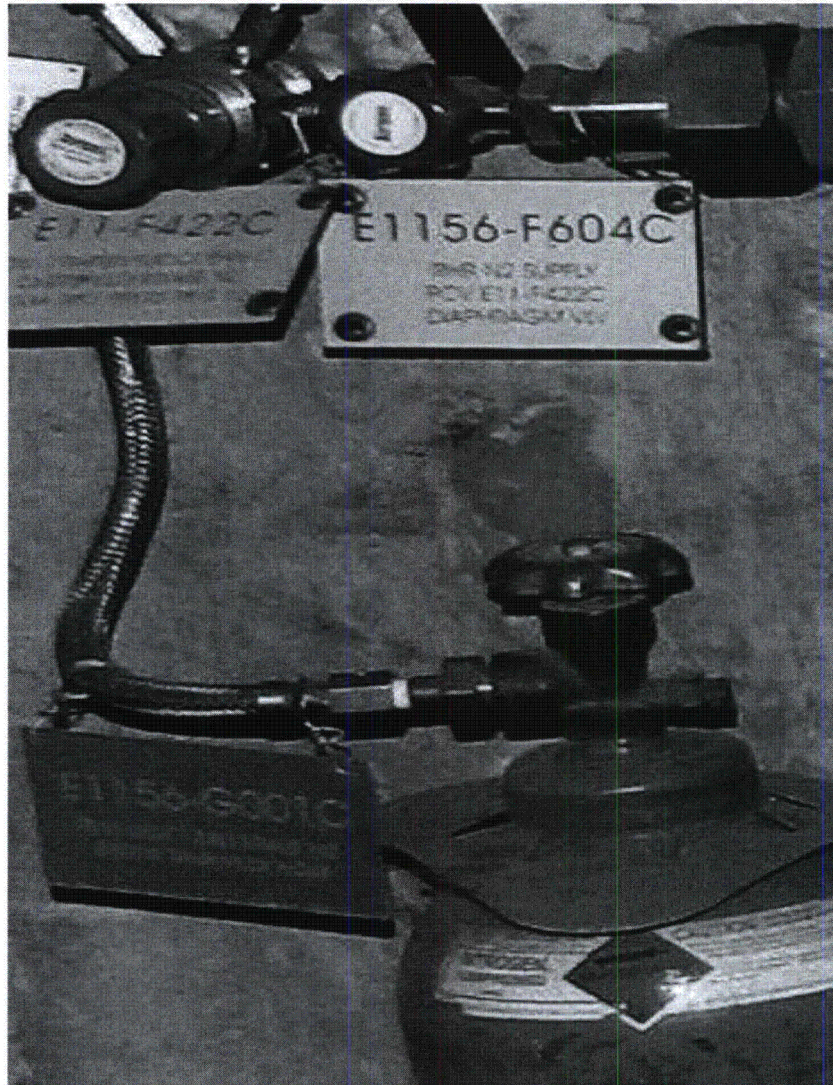
(DSCN 0418)



Area Walk-By Pictures

RHR2-1

Location: Bldg. RHR Floor El. 617'-0" Room, Area SRHRCT, Col. B-3



(DSCN 0418A)

**Area Walk-By Checklist (AWC)**

Assets: R1400S039B, R1600S019A & X41N056D

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Second Floor

**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

*Floor mounted equipment and overhead cable trays and HVAC duct appears to be adequately supported (anchored). See Photos DSC 00321 and DSC 00335*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y  N  U  N/A

*No evidence of degradation such as corrosion, cracks, and missing or loose bolts. See Photo DSC 00338*

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

*Area has HVAC, cable/conduit and multi-tier cable trays. All these commodities are adequately supported. See Photos DSC 00336 and DSC 00343.*

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

*No ceiling tiles. Lighting is well supported (chains plus wire rope) to prevent collapse onto equipment. Initiated CARD # 12-26985 for misaligned light fixture leaning against a cable tray support. See Photos DSC 00335 & 00354. While adverse seismic interaction is potentially possible, it is unlikely. Since the light fixture is relatively light weight, it is much more likely seismic interaction will damage the fixture. If bulbs are knocked out of the fixture and fall, equipment below is protected by enclosed metal cabinets in which it is housed.*

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status: Y  U  
RHR2-2

**Area Walk-By Checklist (AWC)**

Assets: *R1400S039B, R1600S019A & X41N056D*

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Second Floor

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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  
*No sprinkler system or piping 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  
*This area has conduit/cable trays & HVAC, includes detector system*

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  
*Overall area is clean condition*

---

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  
*None identified.*

---

**Comments** (Additional pages may be added as necessary)

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Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: Y N U

RHR2-2

**Area Walk-By Checklist (AWC)**

Assets: *R1400S039B, R1600S019A & X41N056D*

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Second Floor

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*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1: *[Signature]* Date: 8-9-12

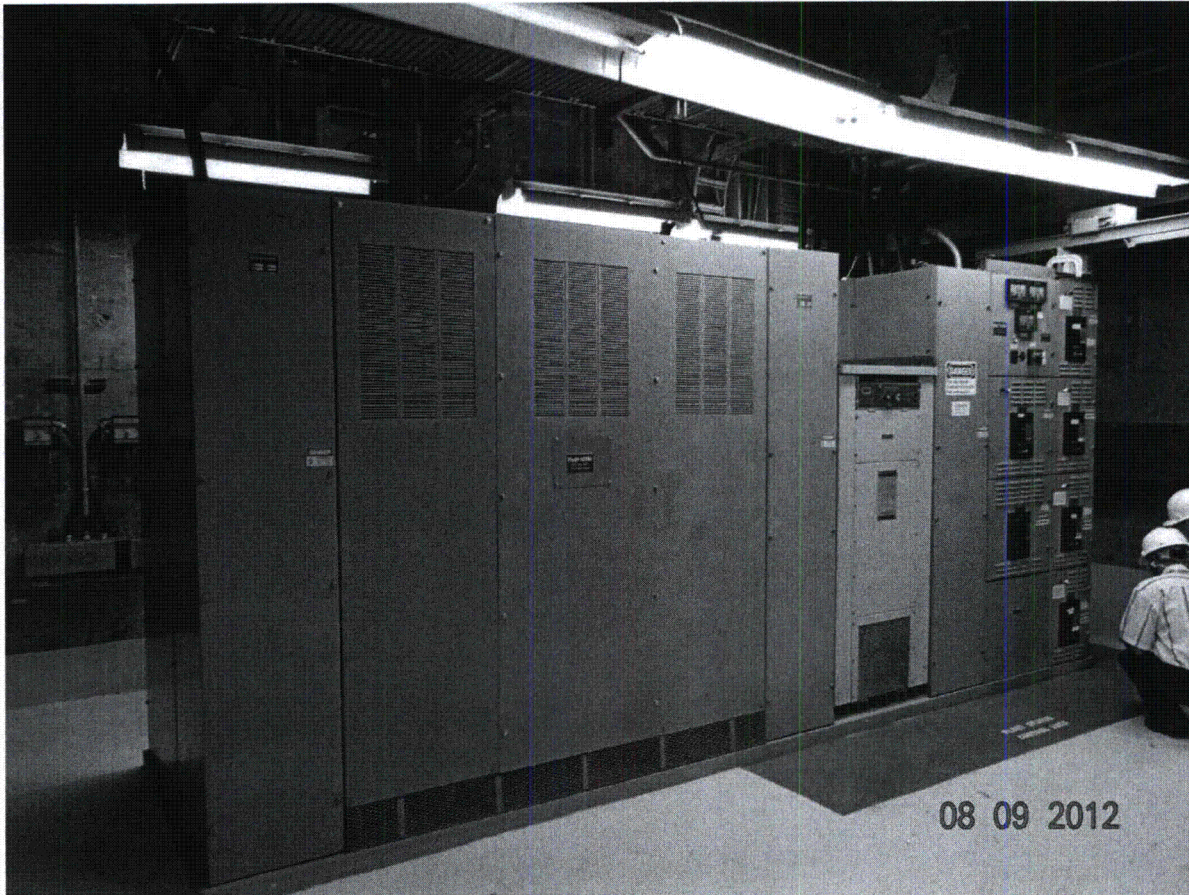
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2: *[Signature]* Date: 08/09/12

Area Walk-By Pictures

RHR2-2

Location: Bldg. RHR Floor El. 617'-0" Room, Area EDG14, Second Floor



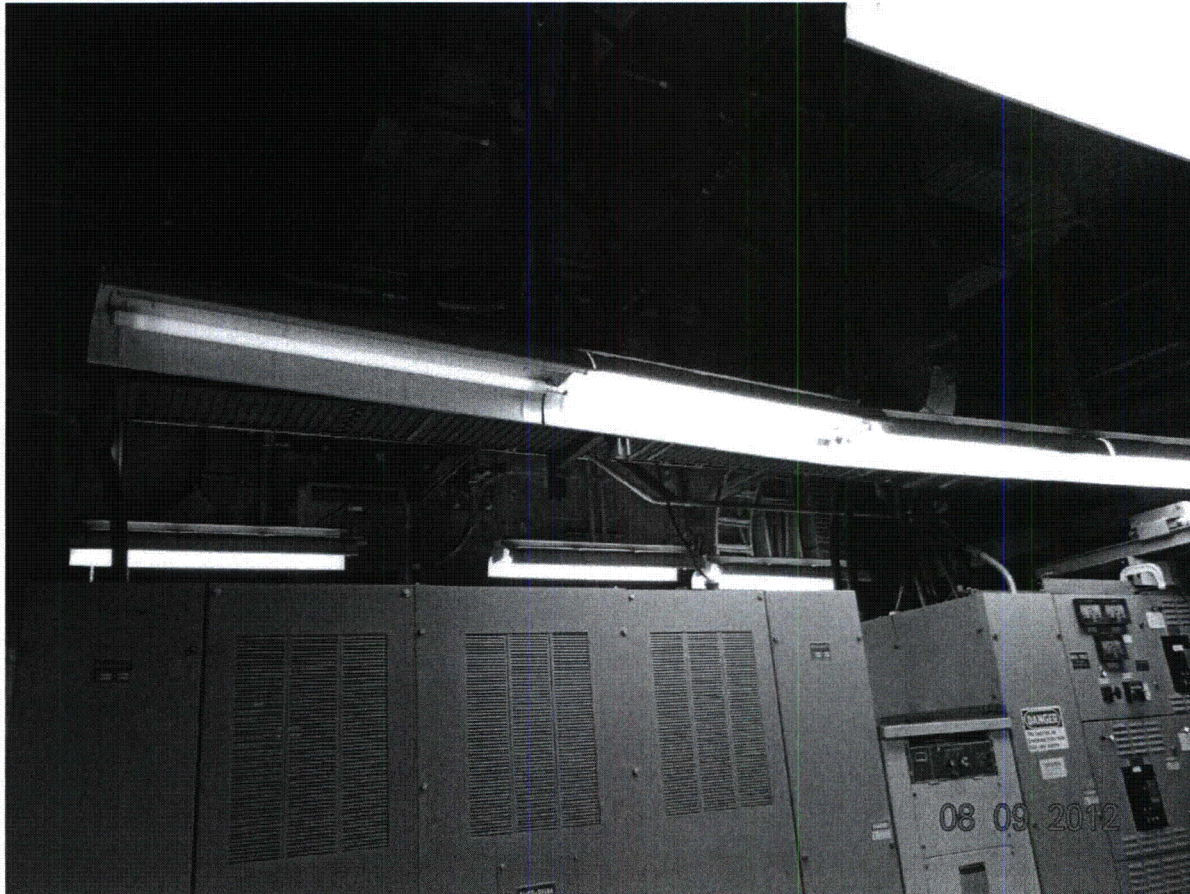
(DSC00321)

Assets # R1400S039A, R1400S039B, R1400S039 (BUS 72ED)

**Area Walk-By Pictures**

**RHR2-2**

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   EDG14, Second Floor  



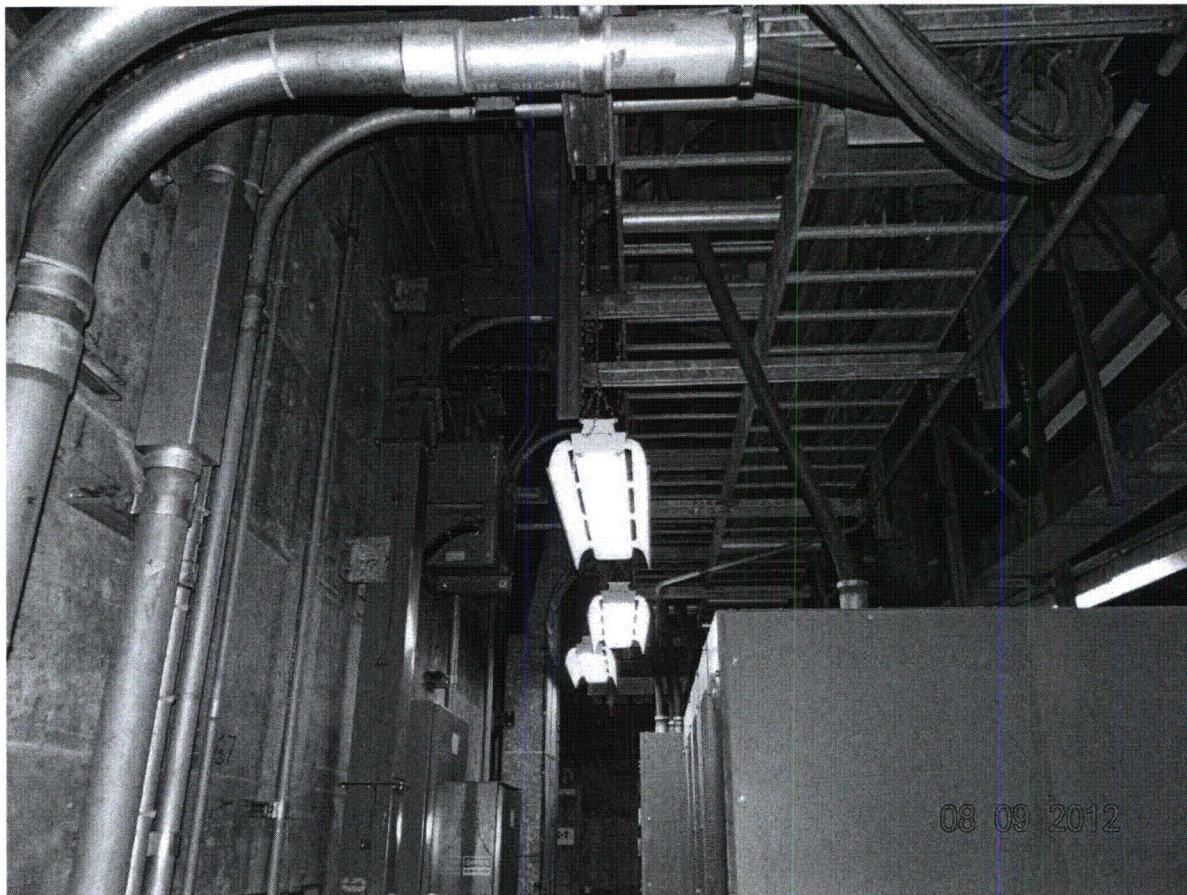
(DSC00335)

Looking Up Over The Cabinets

Area Walk-By Pictures

RHR2-2

Location: Bldg. RHR Floor El. 617'-0" Room, Area EDG14, Second Floor



(DSC00336)

Looking Up Over The Cabinets

Area Walk-By Pictures

RHR2-2

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   EDG14, Second Floor  



(DSC00338)

Asset R1600S019A Overview



Area Walk-By Pictures

RHR2-2

Location: Bldg. RHR Floor El. 617'-0" Room, Area EDG14, Second Floor



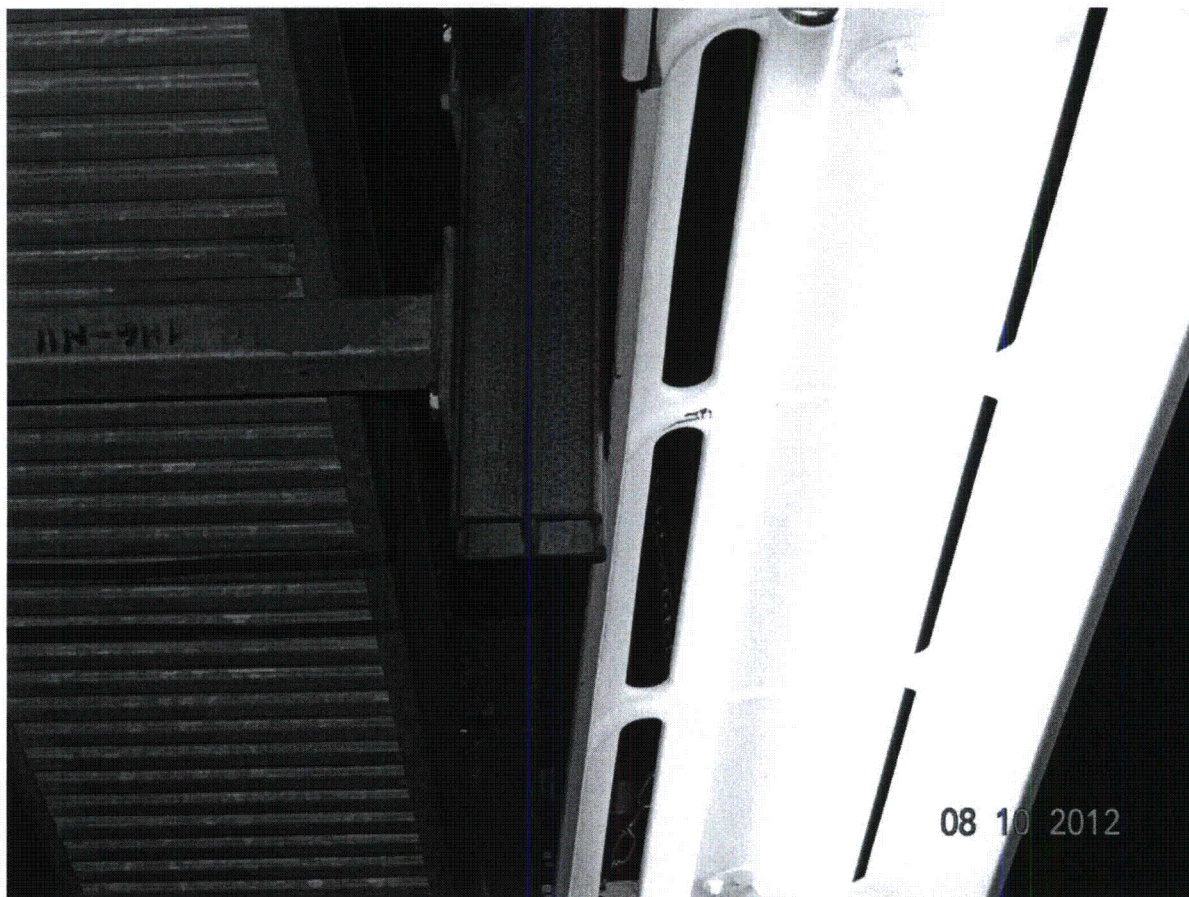
(DSC00343)

Asset R1600S019A Cabletray Etc. Over The Cabinets

Area Walk-By Pictures

RHR2-2

Location: Bldg. RHR Floor El. 617'-0" Room, Area EDG14, Second Floor



(DSC00354)

Looking Up Cabletrays/Conduits

**Area Walk-By Checklist (AWC)**

Assets: X4103C001

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG11, Col. E-6

**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

*Two identical fans are housed in the area. Anchorage of equipment is in good condition.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A

*No degraded conditions in the area.*

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

*HVAC and cable/conduit raceways are adequately supported. This area does not have cable trays (see Photo DSC 01371)*

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

*No ceiling tiles in the area, lights are adequately secured to the wall (see Photos DSC 01371 & 01372)*

<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.

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR2-3

**Area Walk-By Checklist (AWC)**

Assets: X4103C001

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG11, Col. E-6

---

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

*Area does not have any piping that would cause flooding or spray.*

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

*No combustible or flammable materials 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

*Overall area is in good condition.*

---

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)

---

*None.*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status:  Y  N  U

RHR2-3

**Area Walk-By Checklist (AWC)**

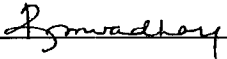
Assets: X4103C001

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area' EDG11, Col. E-6

---

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1:  Date: 8/14/12

*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2:  Date: 08/14/12

**Area Walk-By Pictures**

**RHR2-3**

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   EDG-11, Col. E-6  

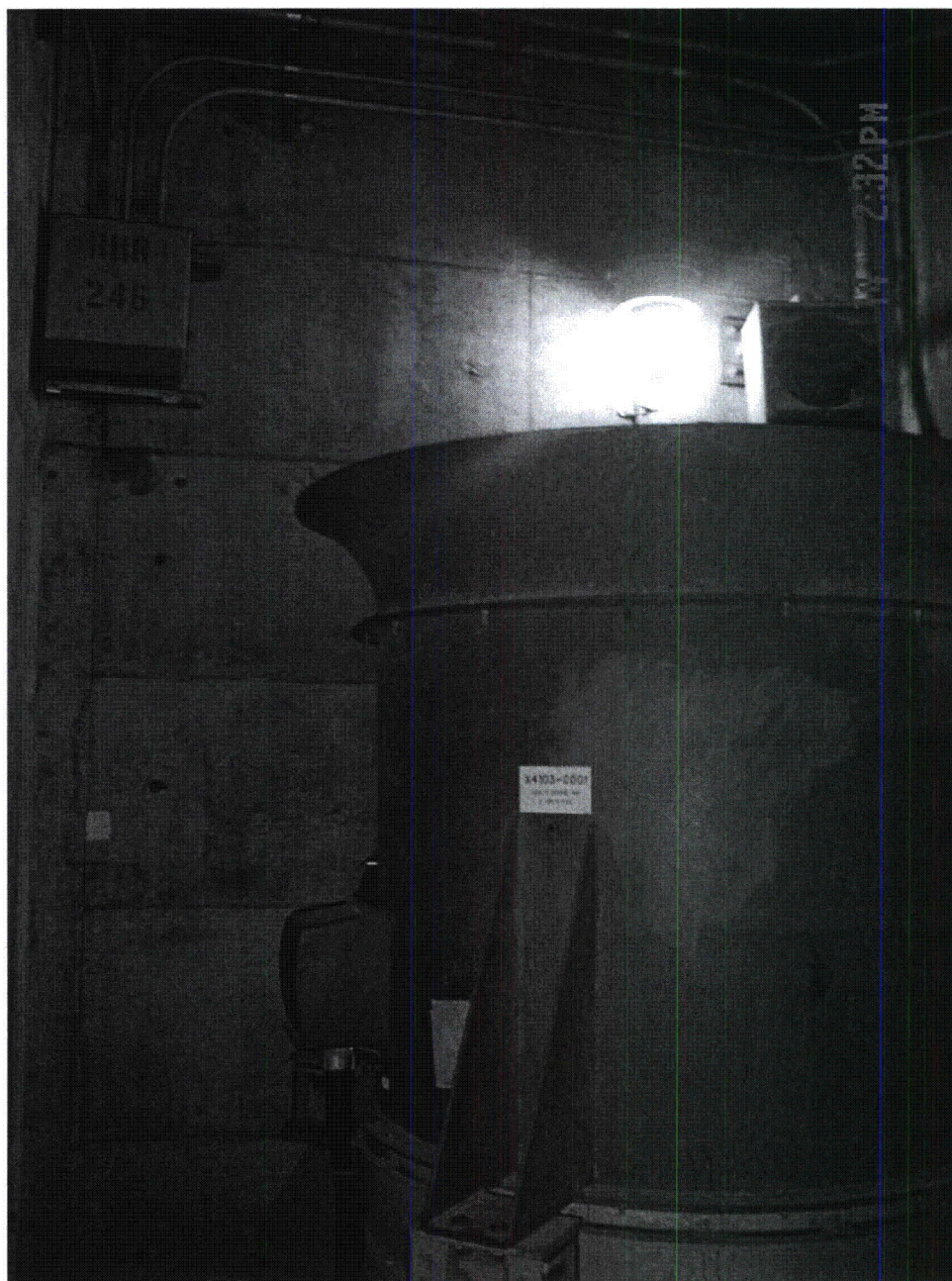


(DSC01371)

**Area Walk-By Pictures**

**RHR2-3**

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   EDG-11, Col. E-6  



(DSC01372)

**Area Walk-By Checklist (AWC)**

Assets: X4103C007

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Col. E-7

**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
- Two identical fans are housed in the area, Fans X4103C007 and X4103C008. Anchorage of equipment is in good condition.*

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  Y  N  U  N/A
- No degraded conditions in the area.*

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
- HVAC cable/conduit raceways are adequately supported. This area does not have cable trays.*

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
- No ceiling tiles in the area. Lights are adequately secured to the wall. See Photo DSC00362.*

<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, c.g., on the order of about 35 feet from the SWEL item.



Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 2 of 3  
Status:  Y  N  U

RHR2-4

**Area Walk-By Checklist (AWC)**

Assets: X4103C007

---

Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Col. E-7

---

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

*Area does not house any piping that would cause flooding or spray.*

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

*None identified.*

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

*Existing scaffolding in area is properly installed.*

---

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 adverse conditions were identified.*

---

**Comments** (Additional pages may be added as necessary)

---

*None.*

Fermi 2 Seismic Walkdown Guideline  
Area Walk-By-Checklist

NJPR-12-0043

Sheet 3 of 3  
Status: (Y) N U

RHR2-4

**Area Walk-By Checklist (AWC)**

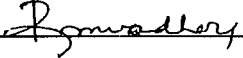
Assets: X4103C007

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Location: Bldg. RHR Floor El. 617'-0" Room, Area<sup>1</sup> EDG14, Col. E-7

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*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 :  Date: 8/10/12

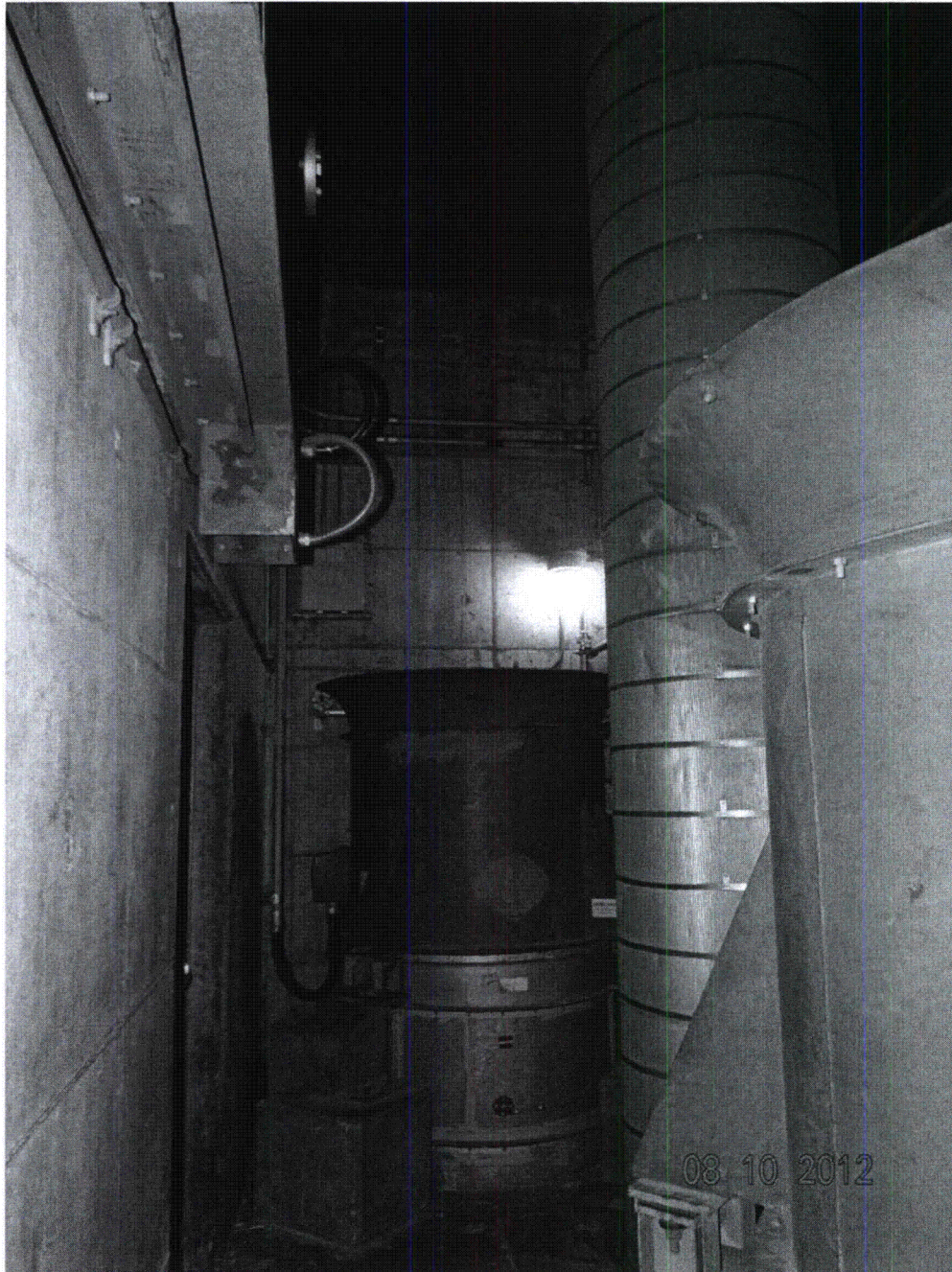
*Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 :  Date: 08/10/12

**Area Walk-By Pictures**

**RHR2-4**

Location: Bldg.   RHR   Floor El.   617'-0"   Room, Area   EDG14, Col. E-7  



(DSC00362)

# Appendix E

## Plan for Future Seismic Walkdown of Inaccessible Equipment

As shown in the SWEL for Fermi 2 in Appendix B, 13 assets have been deferred until refueling outage 16. Table E-1 summarizes the reasons each asset is inaccessible during normal plant operation.

The 13 assets will be inspected no later than during Fermi 2's next refueling outage, RF16, currently scheduled for the first quarter of 2014. Results of these inspections will be submitted within 90 days of the outage completion.

Table E-1: Inaccessible Assets for RF-16 Walkdown

PIS Number	Component Description	Building	Floor	Grid	Elevation	Anchor configuration verification req'd	Remarks
B2103F022A	NB MSL "A" INBD PC ISO AOV	DW	1	2DEG	588'00"	N	Located in Drywell
B2103F022D	NB MSL "D" INBD PC ISO AOV	DW	1	358DEG	588'00"	N	Located in Drywell
B2103F028C	NB MSL "C" OTBD PC ISO AOV	RB	1	F-12	589'06"	N	Located in RB Steam Tunnel
B21F013J	NB DIV1 SRV B2104F013J SOV	DW	1	314DEG	612'09"	N	Located in Drywell
B21F028D	NB MAIN STEAM ISO FOR RPV STEAM LINE TO TURBINE V17-2008 SOV	RB	1	F-12	589'06"	N	Located in RB Steam Tunnel
B21N116B	NB MSL "B" LEAK DETECT DIV1-RTD	TB	2M	J-12	638'02"	N	Located in TB Steam Tunnel
E4150F002	HPCI TURBINE STEAM SUPPLY INBOARD CONTAINMENT ISO MOV	DW	1	0DEG	586'06"	N	Located in Drywell
G3352F001	RWCU INBOARD CNTM ISO MOV	DW	1	229DEG	602'10"	N	Located in Drywell
R1400S001C	SWGR 4160V METALCLAD SWITCHGEAR BUS NO. 64C	AB	2	G-10	613'08"	Y	Bus needs to be de-energized
R1400S001E	SWGR 4160V METALCLAD SWITCHGEAR BUS NO. 65E DIV 2 (RHR B, CS, WCRD)	AB	3	H-10	643'06"	Y	Bus needs to be de-energized
R1400S002C	SWGR 4160V METALCLAD SWITCHGEAR DIESEL GENERATOR BUS NO. 13EC DIV2 (RHRSWB EDG13)	RHR	2	F-9	617'00"	Y	Bus needs to be de-energized
R1400S023	SWGR 480V INDOOR UNIT SUBSTATION BUS NO. 72C (DIV 1)	AB	2	G-10	613'06"	Y	Bus needs to be de-energized
R1400S038	SWGR 480V INDOOR UNIT SUBSTATION BUS NO 72EC	RHR	2	F-8	617'00"	Y	Bus needs to be de-energized
13	TOTAL						

# **Appendix F**

## **Peer Review Report**

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The Peer Review Team consists of two individuals whose qualifications are listed in Section 3 of this report. The lead reviewer has been at Fermi for twenty two years. Previously, he completed the SQUG Walkdown Screening and Seismic Evaluation Training Course, as well as the EPRI Seismic IPE Add-On Training Course.

The Peer Review Team covered areas outlined in Section 6 of EPRI Technical Report 1025286.

The team was involved in the review of SWEL 1 and SWEL 2. The Peer Review ensured the lists covered various systems in the plant, all five safety functions listed in Section 3 of EPRI Technical Report 1025286, all twenty one equipment types (except motor generators since they are classified as Non-Q), a variety of environments (drywell walkdowns will be performed during the next refueling outage), risk significance, major modifications since IPEEE, and revisions to the SWELs. The Peer Review team was instrumental in determining the need to add equipment in the drywell to SWEL1. Refer to checklist Figure F-1 below.

The Peer Review Team reviewed 28% of Walkdowns checklists (25) and Walk-By checklists (14), listed in Table F-1. The team also reviewed design verifications. Reviews were performed "real-time" during the Walkdown and Walk-By process and included reviews of draft SWCs. The team lead provided coaching on an as-needed basis, to the SWEs in the early stages, and was involved in resolution of NRC identified issues. This resulted in improved performance by the SWEs. The team reviewed all design related CARDS, and provided comments and assistance to the CARD initiator, and to the Shift Manager for determination of impact. The activities of the Peer Review team contributed to the improved quality of the Walkdown packages.

There was no need for licensing basis evaluations. The conditions identified in the CARDS did not challenge the licensing basis.

The Peer Review Team reviewed the final Submittal Report to ensure that it meets the objectives of the 10CFR50.54(f) Letter. The Peer Review Team concludes that the guidelines and requirements in EPRI Technical Report 1025286, endorsed by the NRC, were closely followed and met.

Table F-1: Peer Review Summary of the 25 SWCs Review and Corresponding 14 AWCs

PIS Number	Component Description	Bldg.	Fl.	Walkdown	PSE Peer Review	50% Anchor Verif. (Y/N)	AWC Reference
				Comp. Date	Comp. Date		
C4104F004A	SLC EXPLOSIVE (SQUIB) VLV	RB	2	8/8/12	8/21/12	N	RB2-1
E4101C001C	HPCI TURB DRIVEN OIL PUMP	RB	SB	8/7/12	8/17/12	N	RBSB-3
E4150F001	HPCI TURB STM SPLY ISO MOV	RB	SB	8/7/12	8/17/12	N	RBSB-3
E4150F004	HPCI BOOSTER PUMP SUCT FROM CST ISO MOV	RB	SB	8/7/12	8/17/12	N	RBSB-3
H11P870	CRTL & AUX RM PNL (MR ONLY) MISC DC RELAY PANEL DIV2 INST RACK	AB	2	8/7/12	10/8/12	Y	AB2-1
H11P898B	CRTL & AUX RM PNL (MR ONLY) AUTO DIGITAL LOAD SEQ CAB DIV2 INST RACK	AB	2	8/7/12	10/8/12	Y	AB2-1
H11P915	CRTL & AUX RM PNL (MR ONLY) PC MON EQUIP & MISC RELAY DIV2 INST RACK	AB	2	8/7/12	10/8/12	Y	AB2-1
H21P081	LOC PNL/RACK (MR ONLY) LOCAL PNL AND RACKS DIV2 ECCS TRIP UNIT INST RACK	AB	4	9/6/12	10/22/12	Y	AB4-2
H21P083	LOC PNL/RACK (MR ONLY) ECCS TRIP UNIT CAB DIV2 INST RACK	AB	4	9/6/12	10/22/12	Y	AB4-2
H21P085	LOC PNL/RACK (MR ONLY) RPS TRIP UNIT CAB A2 DIV2 INST RACK	AB	4	8/31/12	10/22/12	Y	AB4-2
H21P087	LOCAL PNL AND RACKS RPS TRIP UNIT CAB B2 DIV2 INST RACK	AB	4	9/6/12	10/22/12	Y	AB4-2
H21P100	LOC PNL/RACK (MR ONLY) REMOTE RX SHUTDOWN PANEL DIV1 INST RACK	AB	2	8/14/12	10/08/12	Y	AB2-2

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PIS Number	Component Description	Bldg.	Fl.	Walkdown	PSE Peer Review	50% Anchor Verif. (Y/N)	AWC Reference
				Comp. Date	Comp. Date		
H21P420	LOC PNL/RACK (MR ONLY) HPCI DIV2 TURB AND PILOT VLV INST RACK	RB	SB	8/7/12	8/17/12	Y	RBSB-3
H21P628	LOC PNL/RACK (MR ONLY) DSD MCC 72B-2A LOCAL CTRL PANEL LOCAL PNL & RACKS	AB	2	8/14/12 10/8/12	10/22/12	Y	AB2-2
P4400C001A	EMERGENCY EQUIPMENT COOLING WATER DIV1 PUMP	RB	2	8/16/12	9/18/12	Y	RB2-6
P4500C002B	EMERGENCY EQUIPMENT SERVICE WATER NORTH PUMP	RHR	1	8/9/12	8/22/12	Y	RHR1-2
R1400S039B	SWGR DIV2 480V ESS BUS 72ED V REG	RHR	2	8/10/12	9/18/12	Y	RHR2-2
R3000A011	EDG 11 W STARTING AIR RECEIVER	RHR	1	8/17/12	9/18/12	Y	RHR1-3
R3000D002	EDG 12 STARTING AIR COMPRESSOR	RHR	1	8/17/12	9/18/12	Y	RHR1-4
R3000F023D	EDG 14 ACS 3-WAY TEMP CTRL VLV	RHR	1	8/9/12	8/21/12	N	RHR1-5
R3001S001	EDG 11 4160V	RHR	1	8/23/12	9/17/12	Y	RHR1-8
R31K005	VITAL PWR DIST 120 VAC DIV2 2KVA INVERTER	AB	2	8/6/12	9/17/12	Y	AB2-1
R3200S016	DC 260V DC MCC (2PB-1)	AB	3	8/9/12	9/17/12	Y	AB3-2
R3200S062	DC SWGR ROOM 130V DIST CABINET 2PA2-14	AB	2	8/14/12 10/8/12	8/21/12	Y	AB2-2
T4100B009	CCHVAC NORTH DIV1 AIR CONDITIONER CHILLER	AB	5	8/20/12	10/15/12	Y	AB5-1

Figure F-1: Peer Review Checklist for SWEL

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? Y  N

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. Reactor Reactivity Control ✓</li> <li>2. Reactor Coolant Pressure Control ✓</li> <li>3. Reactor Coolant Inventory Control ✓</li> <li>4. Decay Heat Removal ✓</li> <li>5. Containment Function ✓</li> </ul> | <p>All Safety functions demonstrated and adequately represented in selection matrix, Ops consulted to confirm.</p> |
|--|--|

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

a. Various types of systems? Y  N

RHR, CS, HPCI, RCIC, RWCU, EECW, RBCCW, CA, EDG, CCHVAC, RBHVAC, SGTS, PC, RHRHVAC, SLC...

b. Major new and replacement equipment? Y  N

SWEL Selection team demonstrated that CECO was used to find all EDPs and EREs since 1996 (IPEEE) were screened for SWEL selection

c. Various types of equipment? Y  N

All equipment types listed in App. B of the EPRI Technical Report are represented except for #13, Motor Generators. Motor Generators at Fermi 2 are classified as Non-Q.

d. Various environments? Y  N

Hot, Cold, Indoor, Outdoor, Wet, Dry, Mild, Harsh environments selected. Harsh environments in Drywell to be done during Refueling Outage 16. Peer Reviewers stressed that equipment in the Drywell needed to be included as it is a uniquely harsh environment that cannot be replicated in other areas of the plant during normal operations.



Figure F-1: Peer Review Checklist for SWEL

Peer Review Checklist for SWEL

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e. Equipment enhanced based on the findings of the IPBEE (or equivalent) program?  Y  N  
See Question 2(b)

f. Were risk insights considered in the development of SWEL 1?  Y  N  
SWEL Selection team used MWC 13 to identify risk significant equipment. (Peer Reviewers wanted to know how risk was considered in the SWEL development process)

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3. For SWEL 2:

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?  Y  N

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?  Y  N  
There are no penetrations below 10 feet above the top of fuel assemblies in the Spent Fuel Pool, therefore there are no rapid drain-down items for the SWEL 2 list. Two items were removed from the SWEL 2 list. These items were removed because they are inaccessible due to being underwater, and are near the top of water level, and not a rapid drain-down concern.

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4. Provide any other comments related to the peer review of the SWELs.  
SWEL list was revised during walkdowns for several reasons. Five were replaced because a fire protection coating did not allow for visual confirmation of the anchorage in cabinets. Four were replaced because the anchorage was not visible. One panel was replaced due to it being energized during normal operation and Refueling Outage 16 and not being available for inspection. All of these items were replaced with similar equipment items, and the variety of equipment for the SWEL list was not impacted.

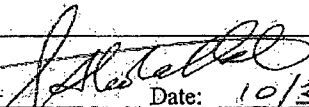
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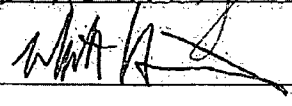
5. Have all peer review comments been adequately addressed in the final SWEL?  Y  N

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Figure F-1: Peer Review Checklist for SWEL

Peer Review Checklist for SWEL

Peer Reviewer #1: GEORGE ABDALLAH  Date: 10/31/12

Peer Reviewer #2: Whitney Hemingway  Date: 10/31/12

# Attachment 1

NRC's Revised Position – Provided to Inspection Branch on September 18, 2012

Q. Do cabinets have to be opened during the walkdowns?

A. Generally yes, for the Seismic Walkdowns. However, opening cabinets is not required for the Area Walk-Bys.

In the 50.54(f) letter, the Commission requested licensees to perform seismic walkdowns in order to identify and address plant specific degraded, non-conforming, or unanalyzed conditions and verify strategies, monitoring, and maintenance programs such that the nuclear power plant can respond to external events. In addition, the walkdown is intended to verify the current plant configuration is in accordance with the current licensing basis.

As described in the Seismic Walkdown Guidance on pages 4-2 and 4-3, the anchorage of the equipment on the SWEL that secures it to the building structure should be visually inspected for evidence of potentially adverse seismic conditions.

In addition, it is expected that all electrical cabinets on the SWEL that can be reasonably opened without undue safety or operational hazard will be opened during the walkdown, whether or not it is necessary to look inside to check the anchorages. These include cabinets that have doors or panels with latches or thumbscrews, and cabinets that do not require extensive disassembly to open. Cabinets on the SWEL with undue safety or operational hazards can be considered inaccessible and opening of the cabinet can be deferred in accordance with the 50.54(f) letter. For those cabinets that are not to be opened, and will not be placed on the inaccessible list for later inspection (e.g., extensive disassembly is required), licensees should document the justification for not opening the cabinet on the walkdown check sheet. The justification should include a discussion of how the goals of inspection for this SWEL item are still being met without opening the cabinets.

The visual inspection that should be made while viewing the interior of the cabinet through the door opening should include the following checks:

1. Visually check whether there is evidence that internal components are not adequately secured to the cabinet,
2. Check whether fasteners that secure adjacent cabinets together are in place, if such fasteners are needed to prevent potentially adverse seismic interaction between the cabinets, and
3. Look for "Other Adverse Seismic Conditions," as described on page 4-4 of the Seismic Walkdown Guidance.

Of course, if the anchorage that secures a cabinet to the building structure is located inside the cabinet, then the inspection of this anchorage should also be performed while the cabinet door is open.

When a cabinet door is opened, the inspection of internal components, cabinet anchorages, and "Other Adverse Seismic Conditions" should be limited to identifying only those conditions that can be observed without breaking the plane of the cabinet door, other than as minimally required to inspect anchorages. It is not necessary to move cables, to disassemble the cabinet by removing panels that are held in place by fasteners, or take other similar steps in an attempt to ensure that every internal component is adequately secured to the cabinet. Rather, it is sufficient to simply do a visual check for potentially adverse seismic conditions.

It is not the intent of the internal cabinet inspection described above to require circuits to be interrupted or disconnected to gain access to the interior portions of the cabinet. For example, it is not necessary to rack out breakers in switchgear, disengage buckets in motor control centers, or remove circuit breakers in load center panels to perform these cabinet interior inspections.

Some examples of conditions that may be observed inside cabinets include missing or loose bolts (either to the floor or to adjacent equipment), nuts with insufficient thread engagement or missing/inappropriate washers, loose or missing fasteners between internal components and the cabinets, and loose bolts in the cabinet that could fall and hit relays during an earthquake. Other examples listed on page 4-4 of the Seismic Walkdown Guidance include degraded conditions, large or heavy components mounted on a cabinet that are not part of the original configuration, and cabinet doors or panels that are not latched or fastened.

Of course, it was not the intent of the walkdown to interfere with plant operation or challenge personnel safety, so energized cabinets that could cause a plant trip or endanger personnel if the doors are opened can be considered to be inaccessible, and added to the list of SWEL items to be walked down at a later time. In addition, for area walk-bys, cabinet doors do not need to be opened; however, the cabinet should be visually inspected for anchorage, seismic interaction, and other external adverse seismic conditions.

Licensees that have already completed their seismic walkdowns in response to the NRC 50.54(f) letter and that have not opened cabinet doors consistent with the expectations of the NRC should add these SWEL items to their list of items to be walked down at a later time. Consistent with the Seismic Walkdown Guidance, these items should be identified in the submittal report along with a plan for walking down these items in the future.