



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

**APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0037

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Square D by Schneider Electric

Manufacturer's Technical Representative: Scott Littler

Mailing Address: 6700 Tower Circle, Suite 700, Franklin, TN 37067

Telephone: (615) 267-9407

Email: Scott.Littler@se.com

Product Information

Product Name: HVL (2.4V to 38kV) Metal-Enclosed Load Interrupting Switchgear systems with bus Ampacity ratings from 600A to 2000A (see Certified Product Listing tables).

Product Model Number(s): Varies. See Attachment

Product Category: Switchgear/Switchboards

Product Sub-Category: Switchgear - Medium Voltage

General Description: Distribution and Auxiliary/Meter bay metal enclosed load interrupting switchgear sections packaged in NEMA Type 1 and Type 3R sheet metal framed enclosures. Options and sub-components consist of overtoggle mechanism switches, motor operated and manual operated stored energy mechanism switches, voltage transformers, control power transformers, meters, protective relays, and surge capacitors (see certified major sub-components table).

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Galen Reid

Mailing Address: 36 Southwest Wall Street, Bend, OR 977023425

Telephone: (541) 241-2310

Email: galen@go-pre.com

Title: Principal and Program Manager





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: PRE COMPLIANCE
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 36 SW Wall Street, Bend, OR 97702
Telephone: (415) 635-8461 Email: Andy@go-pre.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)
Contact Person: Jeremy Lange
Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513
Telephone: (972) 247-9657 Email: Jeremy@etldallas.com

Company Name: UNIVERSITY OF CALIFORNIA, BERKELEY (PEER)
Contact Person: Amarnath Kasalanati
Mailing Address: 325 Davis Hall, Berkeley CA 94720-1729
Telephone: (510) 642-3437 Email: peer_center@berkeley.edu

Company Name: UNIVERSITY OF BUFFALO (SEESL)
Contact Person: Mark Pitman
Mailing Address: 212 Ketter Hall, Buffalo NY 14260
Telephone: (716) 645-4377 Email: mpitman@buffalo.edu





**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.19 (SDS = 1.59); 0.90 (SDS = 2.00)

SDS (Design spectral response acceleration at short period, g) = 1.59 (z/h = 1); 2.00 (z/h = 0)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

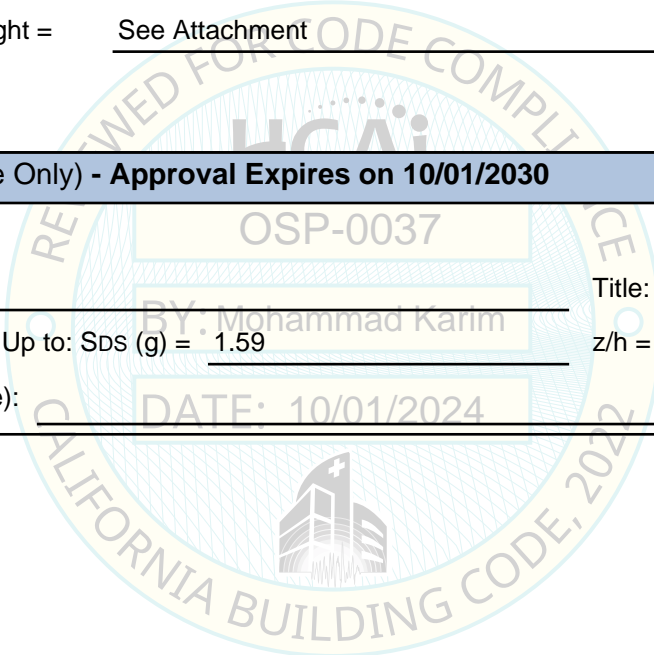
HCAI Approval (For Office Use Only) - Approval Expires on 10/01/2030

Date: 10/1/2024

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.59 z/h = 1

Condition of Approval (if applicable): DATE: 10/01/2024





SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters
 $S_{DS} = 1.59g$ for $z/h=1$
 $S_{DS} = 2.00g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 1a

Mounting Configuration: Base Mounted - Rigid

Construction Summary

NEMA 1 and 3R enclosures constructed of carbon steel framing and sheet. Copper bus.

Options Summary

Bus ampacity ratings from 600A to 2000A. See Tables 2-6 for a complete listing of optional components.

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT	
		D	W	H				
HVL Distribution and Auxiliary/Meter Bay (Standalone)	38W	46.5	38	90	1400		Interp.	
		66.5	38	114	1484		7	
		54.5	38	90	1505		Interp.	
		60	38	97.5	2200		Interp.	
	48W	54.5	48	90	2000		Interp.	
		60	48	97.5	2200		Interp.	
		80	48	97.5	2400		Interp.	
		80	48	114	2600		Interp.	
		86	48	121	2650		Interp.	
		86	48	127	2696		8	
	60W	54.5	60	90	2500		Interp.	
		60	60	97.5	2800		Interp.	
		80	60	120	3000		Interp.	
		86	60	127	3500		Interp.	
			122	60	127	5150		9



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters
 $S_{DS} = 1.59g$ for $z/h=1$
 $S_{DS} = 2.00g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 1b Mounting Configuration: Base Mounted - Rigid

Construction Summary

NEMA 1 and 3R enclosures constructed of carbon steel framing and sheet. Copper bus.

Options Summary

Bus ampacity ratings from 600A to 2000A. See Tables 2-6 for a complete listing of optional components.

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT	
		D	W	H				
HVL Distribution and Auxiliary/Meter Bay (Bayed Together)	38W	46.5	38	90	1400		Interp.	
		54.5	38	90	1505	4a: 1505 lbs.; 4b: 1470 lbs.	4a,4b	
		60	38	97.5	2200		Interp.	
	48W	54.5	48	90	2000		Interp.	
		60	48	97.5	2200		Interp.	
		80	48	97.5	2400		Interp.	
		80	48	114	2600		Interp.	
		86	48	121	2650		Interp.	
		86	48	127	2700		Interp.	
		109	48	109	3554	5a is 36W Masterclad section	5b	
	60W	54.5	60	90	2500		Interp.	
		60	60	97.5	2800		Interp.	
		80	60	120	3000		Interp.	
		86	60	127	3500		Interp.	
		122	60	127	5150		9	
	80W	80	80	97.5	3000		Interp.	



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters

$S_{DS} = 1.59g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.00g$ for $z/h=0$

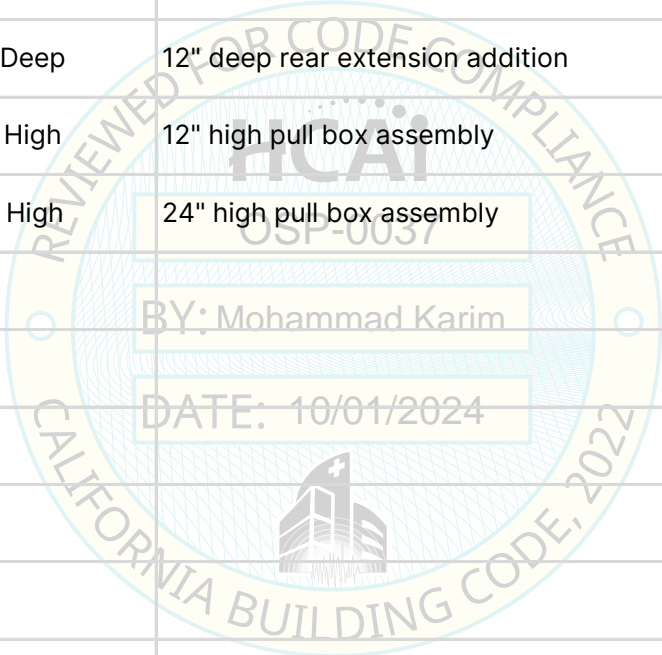
Building Codes

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TABLE 2

Table Description: Enclosure Extensions

Component (Manufacturer)	Model	Description	Notes	UUT
Rear Extension (Schneider Electric)	8" Deep	8" deep rear extension addition		Extrap.
	12" Deep	12" deep rear extension addition		7
Pull Box (Schneider Electric)	12" High	12" high pull box assembly		Extrap.
	24" High	24" high pull box assembly		7



Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters
 $S_{DS} = 1.59g$ for $z/h=1$
 $S_{DS} = 2.00g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 3 **Table Description: Load Interrupter Switch**

Component (Manufacturer)	Model	Description	Notes	UUT
Load Interrupter Switches - OTM or SEM (Schneider Electric)	44*	4.76 kV, 600A; 250 lbs.		Extrap.
	44*	4.76 kV, 1200A; 250 lbs.		Extrap.
	44040-803-50	15 kV, 600A; 250 lbs.	UUT: SEM	4
	44036-325-50	15 kV, 600A; 250 lbs.	UUT: OTM	7
	44036-340-50	15 kV, 1200A; 250 lbs.	UUT: OTM	4
	44*	17 kV, 600A; 250 lbs.		Interp.
	44039-966-50	25.8 kV, 600A; 300 lbs.	UUT: OTM	8
	44*	25.8 kV, 1200A; 300 lbs.		Interp.
	44*	27 kV, 600A; 300 lbs.		Interp.
	44*	29 kV, 600A; 300 lbs.		Interp.
	44*	29 kV, 1200A; 300 lbs.		Interp.
	44*	38 kV, 600A; 350 lbs.		Interp.
	44041-183-50	38 kV, 600A; 350 lbs.	UUT: OTM	9

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters

$S_{DS} = 1.59g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.00g$ for $z/h=0$

Building Codes

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TABLE 4 Table Description: Voltage Transformers

Component (Manufacturer)	Model	Description	Notes	UUT
Voltage Transformer (ITI/GE)	PTG42SD03823FFB	2400V/120V; Cu Windings; 34 lbs.		1
	PT*	3000V/120V; Cu Windings; 34 lbs.		Interp.
	PT*	4200V/120V; Cu Windings; 34 lbs.		Interp.
	PT*	7200V/120V; Cu Windings; 85 lbs.		Interp.
	PT*	8400V/120V; Cu Windings; 85 lbs.		Interp.
	PT*	12000V/120V; Cu Windings; 85 lbs.		Interp.
	PTG52SD02293FFG	12470V/120V; Cu Windings; 85 lbs.		5
	PT*	13200V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	13800V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	16500V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	20780V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	22860V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	23000V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	24940V/120V; Cu Windings; 125 lbs.		Interp.
	PT*	26400V/120V; Cu Windings; 125 lbs.		Interp.
	PTG61125SD03591	27000V/120V; Cu Windings; 125 lbs.		2
	Voltage Transformers (Amran)	V9*	2400V/120V; Cu Windings; 35 lbs.	
V9-422FFGC2-01		4200V/120V; Cu Windings; 35 lbs.		10
V9*		4200V/120V; Cu Windings; 35 lbs.		Interp.
V9*		4800V/120V; Cu Windings; 35 lbs.		Interp.
V21*		4200V/120V; Cu Windings; 90 lbs.		Interp.
V21*		4800V/120V; Cu Windings; 90 lbs.		Interp.
V21*		6600V/110V; Cu Windings; 90 lbs.		Interp.
V21*		7200V/120V; Cu Windings; 90 lbs.		Interp.
V21*		8400V/120V; Cu Windings; 90 lbs.		Interp.
V21.1-2-123FF		12000V/120V; Cu Windings; 90 lbs.		10
V21*		12000V/120V; Cu Windings; 90 lbs.		Interp.
V21*		12470V/120V; Cu Windings; 90 lbs.		Interp.
V21*		13200V/120V; Cu Windings; 90 lbs.		Interp.
V21*		13800V/120V; Cu Windings; 90 lbs.		Interp.
V21*		14400V/120V; Cu Windings; 90 lbs.		Interp.
V22*		10200V/120V; Cu Windings; 125 lbs.		Interp.
V22*		12000V/120V; Cu Windings; 125 lbs.		Interp.
V22*	13200V/120V; Cu Windings; 125 lbs.		Interp.	



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters

$S_{DS} = 1.59g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.00g$ for $z/h=0$

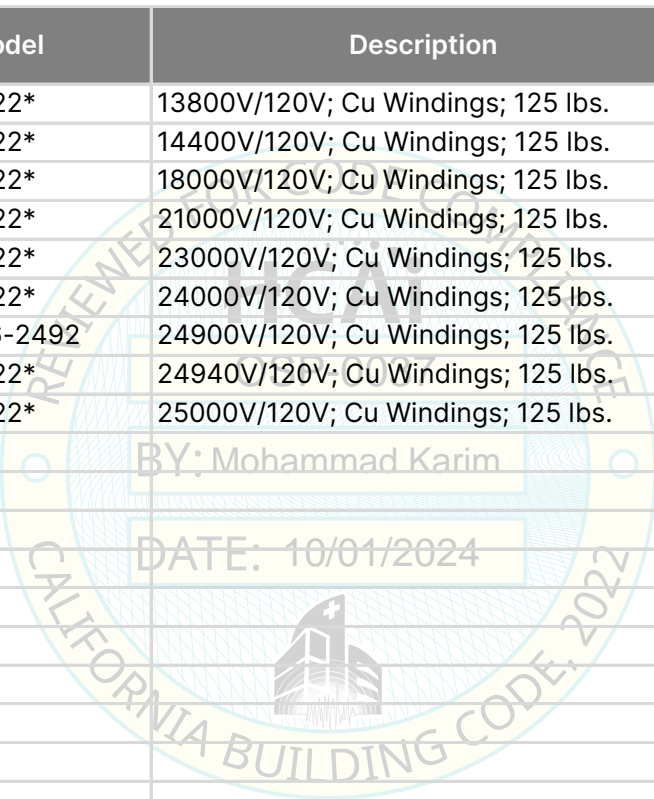
Building Codes

CBC 2022

TABLE 4

Table Description: Voltage Transformers

Component (Manufacturer)	Model	Description	Notes	UUT
Voltage Transformers (Amran)	V22*	13800V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	14400V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	18000V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	21000V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	23000V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	24000V/120V; Cu Windings; 125 lbs.		Interp.
	V22.6-2492	24900V/120V; Cu Windings; 125 lbs.		10
	V22*	24940V/120V; Cu Windings; 125 lbs.		Interp.
	V22*	25000V/120V; Cu Windings; 125 lbs.		Interp.
		BY: Mohammad Karim		
		DATE: 10/01/2024		





SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters
 $S_{DS} = 1.59g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.00g$ for $z/h=0$

Building Codes
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TABLE 5 Table Description: Control Power Transformers

Component (Manufacturer)	Model	Description	Notes	UUT
Control Power Transformers (ITI/GE)	CPTS3605242A	5kVA, 2400V/120V; Cu Windings; 165 lbs.		2
	CPTS36054161A	5kVA, 4160V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS3605482A	5kVA, 4800V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS5955722A	5kVA, 7200V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS5955123A	5kVA, 12000V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS59551242A	5kVA, 12470V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS59551322A	5kVA, 13200V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS36010242A	10kVA, 2400V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS360104161A	10kVA, 4160V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS36010482A	10kVA, 4800V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS59510722A	10kVA, 7200V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS59510123A	10kVA, 12000V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS595101242A	10kVA, 12470V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS595101322A	10kVA, 13200V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS36015242A	15kVA, 2400V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS360154161A	15kVA, 4160V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS36015482A	15kVA, 4800V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS59515722A	15kVA, 7200V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS59515123A	15kVA, 12000V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS595151242A	15kVA, 12470V/120V; Cu Windings; 290 lbs.		5
CPTS595151322A	15kVA, 13200V/120V; Cu Windings; 290 lbs.		Interp.	
CPTS36025242A	25kVA, 2400V/120V; Cu Windings; 411 lbs.		Interp.	
CPTS360254161A	25kVA, 4160V/120V; Cu Windings; 411 lbs.		2	
CPTS36025482A	25kVA, 4800V/120V; Cu Windings; 411 lbs.		Interp.	

Pre No. CC241404-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: HVL

Seismic Parameters

$S_{DS} = 1.59g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.00g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 6

Table Description: Electrical Components

Component (Manufacturer)	Model	Description	Notes	UUT
Surge Arresters (GE)	9L20FX003XHS	3kV; 2.9 lbs.		1
	9L*	6-12kV; 3.3 - 4.3 lbs.		Interp.
	9L20FX015XHS	15kV; 5.6 lbs.		5
		18-21kV; 5.6 - 6.2 lbs.		Interp.
	9L20FX024XHS	24kV; 8.3 lbs.		2
High Frequency Transient Surge Suppressors (Simotech)	9L*	27kV; 8.7 lbs.		Interp.
	M*	3.3-7.2kV; 35.3 lbs.		Interp.
	M3-4.16kV	4.16kV; 35.3 lbs.		4
	M*	11-13.8kV; 41.9 lbs.		Interp.
	M3-12.5kV	12.5kV; 41.9 lbs.		4
	M*	22kV; 44 lbs.		Interp.

UUT	Model	Test Report	Test Laboratory	S _{DS}	z/h	I _p
1	1-15 kV, NEMA 3R, Non Walk-in Masterclad Switchgear	SEESL-2014-11 Rev 4 (UUT1)	Structural and Earthquake Engineering and Simulation Laboratory (SEESL)	1.92 2.11	1 0	1.5
2	27-38 kV, NEMA 3R, Non Walk-in Masterclad Switchgear	SEESL-2014-11 Rev 4 (UUT2)	Structural and Earthquake Engineering and Simulation Laboratory (SEESL)	1.88 2.00	1 0	1.5
3	2.4-17.5 kV, NEMA 3R, HVL/cc Load Current Interrupter Switchgear	SEESL-2014-11 Rev 4 (UUT3)	Structural and Earthquake Engineering and Simulation Laboratory (SEESL)	1.86 2.10	1 0	1.5
4	1-15 kV, NEMA 1, HVL Load Interrupter Switchgear	SEESL-2014-11 Rev 4 (UUT4)	Structural and Earthquake Engineering and Simulation Laboratory (SEESL)	1.88 2.10	1 0	1.5
5	5-15 kV, NEMA 3R, Non Walk-in Masterclad / HVL Switchgear	PEER-STI/2014-04R Rev01 (UUT1)	Pacific Earthquake Engineering Research Center (PEER)	1.88 2.70	1 0	1.5
6	NOT USED					
7	15 kV, NEMA 1, HVL Load interrupter Switchgear	ETL: 15602 (UUT1)	Environmental Testing Laboratory (ETL)	2.00 2.50	1 0	1.5
8	27 kV, NEMA 3R, HVL Load interrupter Switchgear	ETL: 15602 (UUT2)	Environmental Testing Laboratory (ETL)	1.65 2.50	1 0	1.5
9	27 kV, NEMA 3R, HVL PG&E Meter Bay	ETL: 15602 (UUT5)	Environmental Testing Laboratory (ETL)	1.59 2.54	1 0	1.5
10	15 kV Main & Feeder Masterclad Switchgear	TR241399-01-R1 (UUT2)	Environmental Testing Laboratory (ETL)	1.86 2.98	1 0	1.5

Notes:

SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 1

Test Report# SEESL-2014-11 Rev 4
(UUT1)

Manufacturer: Square D by Schneider Electric
Model Line: Masterclad
Model Number: FO# 34089617-006
Serial Number: N/A

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.92	1	1.5	3.07	2.30	1.41	0.57
2.11	0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
109	36	109	4240

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
13.9	7.5	22.0

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
NEMA Type 3R outdoor, non walk-in enclosure constructed of carbon steel

UUT Mounting Details:



Unit was rigid base mounted using (4) 1/2" Grade 8 bolts with Belleville conical spring washers torqued to 107 ft.-lbs.
 Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model #
1200A Copper Main Bus	N/A
Relay	SEL-300G
Relay	SEL-849
Relay	GE 239
Relay	S42
Power Meter	S7750A0C0B6C1A0A
Voltage Transformer	PTG3160242FGC1
Voltage Transformer	PTG42SD03823FFB
Circuit Breaker	VR-05025-12
Surge Arrester	9L20FXX003XHS

UUT 2

Test Report# SEESL-2014-11 Rev 4
(UUT2)

Manufacturer: Square D by Schneider Electric
Model Line: Masterclad
Model Number: FO# 34089617-001
Serial Number: N/A

Highest Passed Test Level						
S_{DS}	z/h	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}
1.88	1	1.5	3.01	2.26	1.34	0.54
2.00	0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
127	72	109	9690

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
10.3	5.1	16.0

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
NEMA Type 3R outdoor, non walk-in enclosure
constructed of carbon steel

UUT Mounting Details:



List of Included Subcomponents

Description	Model #
2000A Copper Main Bus	N/A
Relay	GE C60
Relay	7805D
Power Meter	870
Circuit Breaker	VR-27040-20
Surge Arrester	9L20FXX024XHS
Control Power Transformer	CPTS3605242A
Control Power Transformer	CPTS360254161A
Fuse	9F60DNJ007
Circuit Breaker	JDL26250C
Voltage Transformer	PT611255D03591

Unit was rigid base mounted using (6) 1/2" Grade 8 bolts with Belleville conical spring washers torqued to 107 ft.-lbs.
 Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 3

Test Report# SEESL-2014-11 Rev 4
(UUT3)

Manufacturer: Square D by Schneider Electric
Model Line: HVL/cc
Model Number: FO# 34206074-001
Serial Number: N/A

Highest Passed Test Level						
S_{DS}	z/h	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}
1.86	1	1.5	2.98	2.23	1.41	0.57
2.10	0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
57.25	44.25	99.75	1870

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
15.2	10.3	>33.3

Building Codes

CBC 2022

Test Criteria

ICC-ES AC156

Construction/Option Summary

NEMA Type 3R outdoor, non walk-in enclosure constructed of carbon steel

UUT Mounting Details:

List of Included Subcomponents



Description	Model #
1200A Copper Main Bus	N/A
Fuse	175GDMSJD10E
Fuse	175GXMSJD100E
Switch	44044-241-51

Unit was rigid base mounted using (4) 1/2" Grade 5 studs with Belleville conical spring washers and nuts torqued to 75 ft.-lbs.
 Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 4

Test Report# SEESL-2014-11 Rev 4 (UUT4)

Manufacturer: Square D by Schneider Electric
Model Line: HVL
Model Number: FO# 34206074-002
Serial Number: N/A

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.88	1		3.01	2.26	1.41	0.57
2.10	0	1.5				

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
54.5	76	90	2975

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
15.5	8.9	>33.3

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
NEMA Type 1 enclosure constructed of carbon steel

UUT Mounting Details:

List of Included Subcomponents



Description	Model #
2000A Copper Main Bus	N/A
Switch	44036-340-50
Switch	44040-803-50
Surge Suppressor	M3-12.5kV
Surge Suppressor	M3-4.16kV
Fuse	155GXQSJD200E
Fuse	423D815A47
Surge Arrester	9L20FXX018XHS
Relay	T87
Motor Operator	44038-650-50

Unit was rigid base mounted using (6) 3/8" Grade 8 bolts with Belleville conical spring washers torqued to 44 ft.-lbs.
Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 5

Test Report# PEER-STI/2014-04R
Rev01 (UUT1)

Manufacturer: Square D by Schneider Electric
Model Line: HVL/36W Masterclad
Model Number: FO# 17-30209756-002
Serial Number: N/A

Highest Passed Test Level

S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.88	1	1.5	3.01	2.26	1.41	0.57
2.70	0					

Dimensions/Weights

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
109	76	90	2975

Lowest Natural Frequency (Hz)

Front-Back	Side-Side	Vertical
7.0	5.1	17.8

Building Codes

CBC 2022

Test Criteria

ICC-ES AC156

Construction/Option Summary

NEMA Type 3R outdoor, non walk-in enclosure constructed of carbon steel

UUT Mounting Details:



List of Included Subcomponents

Description	Model #
2000A Copper Main Bus	N/A
Circuit Breaker	VR-15050-20
Surge Arrester	9L20FXX015XHS
Control Power Transformer	CPTS595151242A
Voltage Transformer	PTG52SD02293FFG
Relay	S24
Power Meter	S7330A0B0B0E0A0
Switch	44039-398-52

Unit was rigid base mounted using (6) 0.12" by 12" long tie down filet welds, (3) in front and (3) in back. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 7

Test Report# ETL: 15602
(UUT1)

Manufacturer: Square D by Schneider Electric
Model Line: HVL
Model Number: 42191916-004
Serial Number: N/A

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.00	1					
2.50	0	1.5	3.20	2.40	1.67	0.67

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
66.5	38	114	1483.5

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
9.8	3.84	9.64

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
NEMA Type 1 enclosure constructed of carbon steel

UUT Mounting Details:



Unit was rigid base mounted using (4) 3/8" Grade 5 bolts torqued to 40 ft.-lbs.
 Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model #
Rear Extension	12" Deep
Pullbox	24" High
Load Interrupter Switch	44036-325-50

UUT 9

Test Report# ETL: 15602 (UUT5)

Manufacturer: Square D by Schneider Electric
Model Line: HVL
Model Number: 42191916-001
Serial Number: N/A

Table with columns: S_DS, z/h, I_p, A_flx-h, A_rig-h, A_flx-v, A_rig-v. Values: 1.59, 1, 1.5, 2.54, 1.91, 1.69, 0.68

Table with columns: Depth (in), Width (in), Height (in), Weight (lbs.). Values: 123, 60, 127, 5150

Table with columns: Front-Back, Side-Side, Vertical. Values: 5.6, 3.0, 5.65

Building Codes: CBC 2022

Test Criteria: ICC-ES AC156

Construction/Option Summary: NEMA Type 3R, non walk-in enclosure constructed of carbon steel

UUT Mounting Details:

List of Included Subcomponents



Table with columns: Description, Model #. Row 1: Load Interrupter Switch, 44041-183-50

Unit was rigid base mounted using (6) 3/4" Grade 5 bolts with Belleville washers torqued to 150 ft.-lbs. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

