



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0798

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Eaton

Manufacturer's Technical Representative: Chris Bridges

Mailing Address: 2210 Highway 72/221 East, Greenwood, SC 29649

Telephone: (864) 942-6181

Email: Christopherhbridges@eaton.com

Product Information

Product Name: Switchgear/Switchboards

Product Type: Switchgear - Medium Voltage

Product Model Number: MV Switchgear Utility Metering Section

General Description: EUSERC Metering Section incorporated in MV Switchgear

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: None

DATE: 01/17/2024

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

Telephone: (208) 342-5989

Email: tsoppe@wegai.com

Title: President





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

Company Name: W.E. GUNDY & ASSOCIATES INC.

Name: Travis Soppe California License Number: S6115

Mailing Address: P.O. Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3

Other (Please Specify): _____

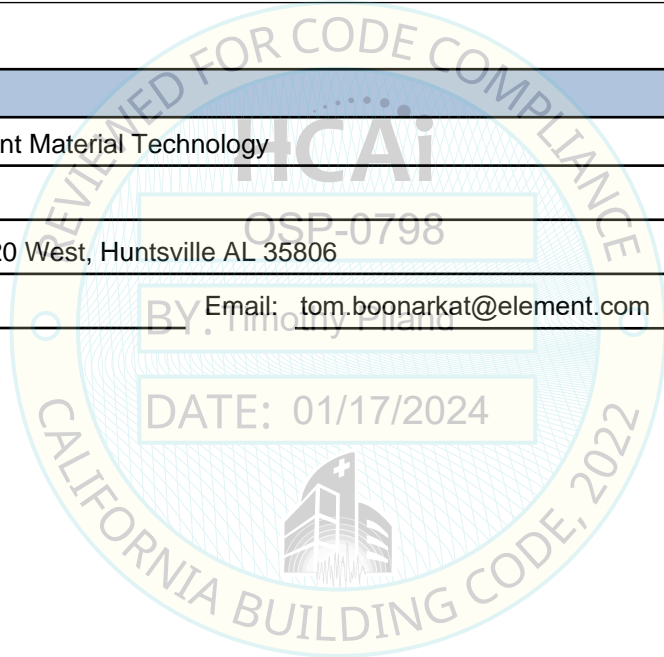
Testing Laboratory

Company Name: NTS dba Element Material Technology

Contact Person: Tom Boonarkat

Mailing Address: 7800 Highway 20 West, Huntsville AL 35806

Telephone: (256) 837-4411 Email: tom.boonarkat@element.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.50

SDS (Design spectral response acceleration at short period, g) = 2.0

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 01/17/2030

Date: 1/17/2024

Name: Timothy Piland Title: Senior Structural Engineer

Special Seismic Certification Valid Up to: SDS (g) = 2.0 z/h = 1

Condition of Approval (if applicable): DATE: 01/17/2024

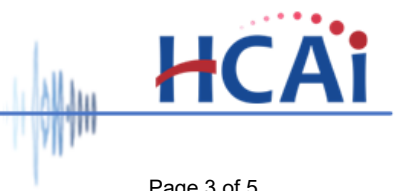
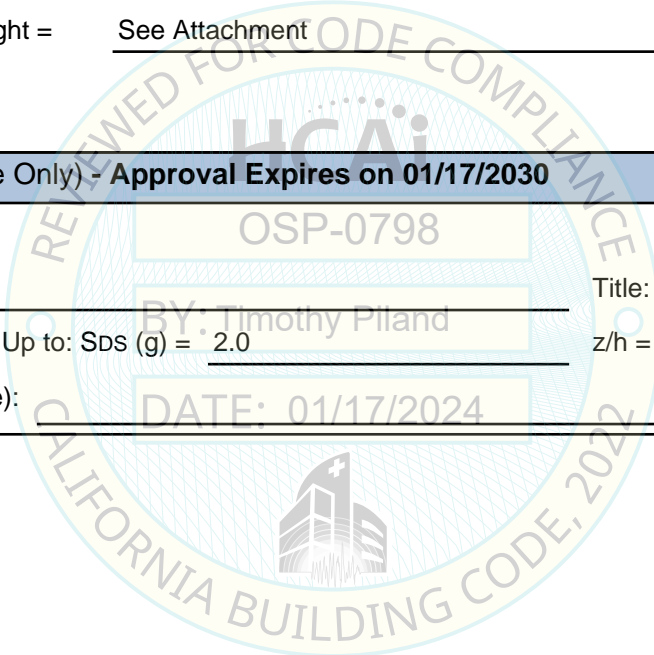


Table 1	EATON SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS	 WEGAI <small>W.E. GUNDY & ASSOCIATES, INC.</small> <small>STRUCTURAL & EARTHQUAKE ENGINEERING</small>
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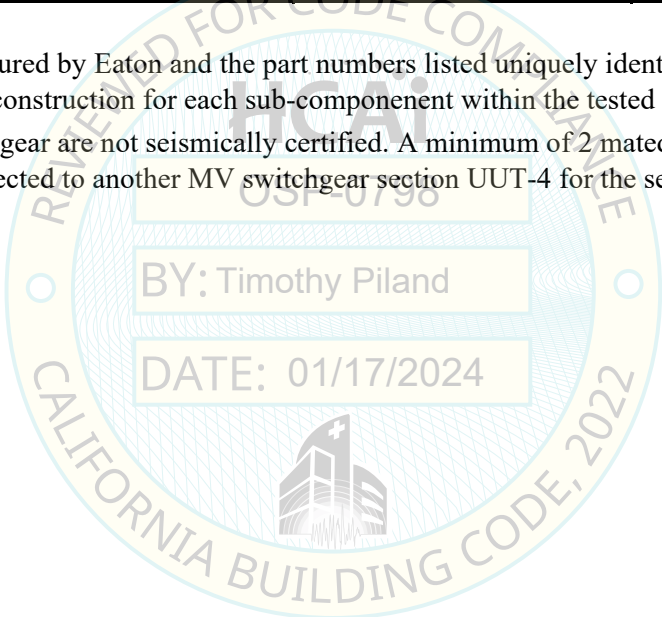
System: MV Switchgear EUSERC Metering Section	Manufacturer: Eaton
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System Component ¹	Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT
		Width	Depth	Height			
15kV EUSERC METERING SECTION	G23G0ND-1	60.0	73.2	95.5	2485	floor	UUT-3

Notes:

¹ All components are manufactured by Eaton and the part numbers listed uniquely identify type of component, manufacturer, and material of construction for each sub-component within the tested unit.

² Standalone sections of switchgear are not seismically certified. A minimum of 2 mated sections is required for seismic certification. UUT-3 was connected to another MV switchgear section UUT-4 for the seismic test.



REVIEWED FOR CODE COMPLIANCE

BY: Timothy Piland

DATE: 01/17/2024

CALIFORNIA BUILDING CODE, 2022

SEISMIC CERTIFICATION LIMITS								
System Component	Code	S _{DS} (g)	z / h	I _P	a _P	R _P	Ω ₀	F _P / W _P
15kV EUSERC METERING	CBC 2022	2.0	1.0	1.50	2.5	6.0	2.0	1.50

UUT-3

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rigid floor mount with 8 - 1/2" grade 5 bolts torqued at 75ft-lbs.



Manufacturer: Eaton **Test Location:** Element Materials Technology - AL

Component: 15kV EUSERC Metering Section **Test Date:** December 2023

Serial Number: G23G0ND-1 **Report Number:** PR178528-TR-23

UUT Function: Electric utility service equipment for metering aligned for MV switchgear applications.

UUT Description: 15kV Switchgear section in NEMA 3R enclosure housing an Eaton VT disconnect switch 1D78058G10, ABB Bar Current Transformers KIR-11, Eaton CLPT Fuses, and ABB Voltage Transformers VOZ-11B.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
2,485	60"	73.2"	95.5"	7.9	4.0	> 33

Note that the UUT was tested mated to a standard 36" wide Eaton MV switchgear section weighing 1,239lbs.

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.34	0.54

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.