



FORELL/ELSESSER ENGINEERS, INC.
Structural Engineers

March 26, 2014

Sirjan Xhurxhi
Design Engineer
General Electric
41 Woodford Avenue
Plainville, CT 06062

Re: GE Motor Control Center
ASCE 7-10, 2012 IBC, and IEEE-693-2005 Seismic and Special Seismic Certification

Forell/Elmesser has reviewed shake table test report 8639, and 3380 prepared by Clark Dynamic Test Laboratory dated December 2008 and February 2014 respectively, as well as shake table test report number 52870-1 prepared at Wyle Laboratories dated December 15, 2005, which summarizes testing for the GE Motor Control Centers. The testing was performed according to both the requirements of ICC-ES AC156 and IEEE-693-2005 and demonstrated that the equipment satisfied testing requirements for $I_p=1.5$, Site Class D, $a_p=2.5$, $R_p=6.0$, and $Z/h = 1.0$. In accordance with ASCE 7-10, which contains the seismic provisions of the 2012 International Building Code [IBC], AC156 is an acceptable test procedure for determining the seismic certification of equipment. ASCE 7-10, Section 13.2.1.2.b allows for testing alone to be used to satisfy all IBC seismic design requirements for electrical equipment.

Using AC156 procedures, F/E determined that the test results demonstrate the adequacy of the GE Motor Control Centers up to the peak ground seismicity (S_{DS}) in the table below. Therefore, F/E concludes that the test data demonstrates that the GE Motor Control Centers are certified for installation in accordance with the seismic provisions of the 2012 IBC for any site with a site-specific S_{DS} equal or less than the attached S_{DS} table and at any location within a building.

Spectra Series 8000 & Evolution 9000 Low Voltage Motor Control Center						
Ampacity	Width	Depth	Height	Weight	$S_{DS}(g)$	IEEE-693 Seismic Level
600A - 2500A	20" - 36"	13"-42.5"	90" - 112"	823 lbs max.	2.45	High
600A - 2500A	20" - 36"	13"-42.5"	90" - 112"	1,836 lbs max.	1.79	High

Notes:

1. Enclosures are indoor (NEMA-1) or outdoor (NEMA-3R) enclosures
2. Dimensions are for individual sections. Sections may be installed alone or bayed together.
3. Height includes the top hat or NEMA 3R drip roof.
4. Depth includes NEMA 3R rear extension.
5. All enclosures are rigid floor mounted

Should you any questions or need further information please do not hesitate to contact us.

Thank you.

Sincerely,

FORELL/ELSESSER ENGINEERS, INC.

Marco Scanu, SE #4454
Principal

