



FORELL/ELSESSER ENGINEERS, INC.
Structural Engineers

February 11, 2014

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

Re: GE Low Voltage Switchboards
ASCE 7-10, 2012 IBC, and IEEE-693-2005 Seismic and Special Seismic Certification

Forell/Elmesser has reviewed shake table test reports 2346A rev.1, 10164, 10154, 10155, 8101, 8055, 8480, and 8916 prepared by Clark Testing Laboratory and test report 53022-1 prepared by Wyle Laboratories, which summarizes testing for the GE Low Voltage Switchboards. 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 Low Voltage Switchboards up to the peak ground seismicity (S_{DS}) in the table below. Therefore, F/E concludes that the test data demonstrates that the GE Low Voltage Switchboards 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 & Jiffy, Integrated, GenTower, Evolution, & Commercial Metering Switchboards					
Width	Depth	Height	Weight	$S_{DS}(g)$	IEEE-693 Seismic Level
15"-60"	15"-60"	90"-93"	1,852 lbs max.	2.50	High
			1,853-4,463 lbs	1.56	High
PowerBreak II, AV3 & AKD10/20 Switchboards					
Width	Depth	Height	Weight	$S_{DS}(g)$	IEEE-693 Seismic Level
15"-50"	50"-80"	90"-92"	2,129 lbs max.	1.67	High
			2,130-2,435 lbs	1.46	High
			2,436-5,260 lbs	1.33	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. Maximum depth does not include NEMA-3R extensions
4. Maximum height does not include 34"-high top feeder or 12"-high drip roof
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

