



**FORELL/ELSESSER ENGINEERS, INC.**  
Structural Engineers

July 21, 2016

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

Re: GE Low Voltage Switchboards  
ASCE 7-10, 2015 IBC, 2016 CBC 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 2015 International Building Code [IBC] and 2016 California Building Code [CBC], 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 IBC and CBC seismic qualification 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 2015 IBC and 2016 CBC 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.

<b>Spectra &amp; Jiffy, Integrated, GenTower, Evolution, &amp; Commercial Metering Switchboards</b>					
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
<b>PowerBreak II, AV3 &amp; AKD10/20 Switchboards</b>					
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

