



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

April 3, 2014

William Maurer  
Design Engineer  
General Electric  
41 Woodford Avenue  
Plainville, CT 06062

Re: GE Spectra Busway  
ASCE 7-10, 2012 IBC, and IEEE-693-2005 Seismic and Special Seismic Certification

Mr. Maurer:

Forell/Elmesser has reviewed shake table test report UB-SEESL-2013-01 prepared by the University at Buffalo and dated January 2013, which summarizes testing for the GE Spectra Busway. 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, 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 structural and functional adequacy of the GE Spectra Busway up to the peak ground seismicity ( $S_{DS}$ ) shown in the table below. Therefore, F/E concludes that the the GE Spectra Busway units are certified for installation in accordance with the seismic provisions of the 2012 IBC for any site with a site-specific  $S_{DS}$  equal to or less than that shown in the Seismic Parameters table below, at any location within a building.

Seismic Parameters				
Configuration	Max. Support Spacing	z/h	$S_{DS}$	IEEE-693 Seismic Level
Horizontal Trapeze-Mounted	10 ft	1.0	1.97	High
Horizontal Under-Mounted	10 ft	1.0	1.11	Moderate
Vertical	12 ft	1.0	1.97	High
	16 ft	1.0	1.11	Moderate

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

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