



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

July 22, 2016

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

Re: GE Spectra Busway  
ASCE 7-10, 2015 IBC, 2016 CBC and IEEE-693-2005 Seismic and Special Seismic Certification

Mr. Maurer:

Forell/Elsesser 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 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 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 GE Spectra Busway units 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 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

