IV. CONCLUSIONS

The conclusion of this study can be stated as follows: The buildings used as a case study, which are the BPBD JATIM Office, KOMINFO JATIM and PT. Alstom Power ESI buildings, are declared secure against earthquake either by using RViSITS application or SNI 1726:2012, except for P. Bank Surabaya, where this building is declared unsafe either by RVS Method or by SNI 1726:2012 where this building is not fulfill all requirements, i.e. drift control in the y-direction which arranged in SNI 1726:2012, but it is safe in the x-direction. The buildings are located in Surabaya and Sidoarjo Cities, where both cities are located in Indonesia's medium earthquake zone, thus based on Indonesian standard it should be used the moderate seismicity form, but according to FEMA 154, the buildings located in high seismic zone. The surveyor should be careful to use this RVS method. The RViSITS application can be used to assess the building subjected to earthquake loading. This result from the application is verified by the numerical analysis, and shows the same outcome.

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