A Correction Method for Seismic Response Acceleration according to Catenary Pole with Damping Device

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Taking the opportunity of the 2011 off the Pacific coast of Tohoku Earthquake occurring, various construction methods for improving the aseismic performance of existing catenary poles have been proposed, because damage such as breakage of catenary poles occurred on railway viaducts. Among them, there is a method of suppressing the response by installing a vibration damping device or the like in the pole. However, the acceleration response spectrum prescribed in current Seismic Design Guidelines for Contact Line Equipment can't be used on this type of pole; It is difficult to evaluate its aseismic performance. Therefore, we proposed a method of changing the aseismic response acceleration according to the damping of catenary pole from the current acceleration response spectrum.