

## **Study of Zero-sequence Harmonic Resonance in MAGLEV Feeding Circuit**

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A feeding circuit for a superconducting magnetic levitation train system (MAGLEV) consists of feeder cables and armature coils which show characteristics of a distributed-parameter line. Electric power to drive trains is fed by inverters whose output voltage contains a large amount of harmonics. As a result, a harmonic resonance may occur in the feeding circuit. This paper reports measurement results of harmonic-resonance characteristics of the feeder cables, especially for zero-sequence harmonics. This paper also compares the measurement results with computer simulation results.