Proposal for Energy-Saving Driving Method of Freight Trains Using Constant-Speed Operation

Tomoyuki OGAWA

This paper presents driving methods for energy-saving of freight trains. First, we discuss a driving strategy that conserves energy considering running resistance and motor efficiency. Secondary, we confirm energy consumption and driving maneuverability, conducting running tests on several energy-saving driving methods. We also establish an energy simulation method by reproducing running tests. Finally, we verify the proposed driving method for energy-saving conducting energy simulation. This paper proposes a driving method using a constant-speed operation, which is expected to reduce energy consumption in terms of running resistance and motor efficiency.