

IEEE Guide for Rail Transit Traction Power Systems Modeling

IEEE Vehicular Technology Society

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Rail Transportation Standards Committee

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IEEE Guide for Rail Transit Traction Power Systems Modeling

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Abstract: A description of the data, techniques, and procedures typically used in modeling and analysis of traction power systems is provided in this guide.

Keywords: analysis, IEEE 1653.3, modeling, traction power

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Introduction

This introduction is not part of IEEE Std 1653.3-2012, IEEE Guide for Rail Transit Traction Power Systems Modeling.

During development and updating of various IEEE standards and recommended practices related to rail transit traction power, the Rail Transportation Standards Committee of the Vehicular Technology Society recognized a need for a published document to describe the process of traction power system modeling. This guide provides an introduction to the terminology and methodology of rail transit traction power systems modeling.

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1. Overview

1.1 Scope

This guide provides a description of the data, techniques, and procedures used in modeling and analysis of rail transit traction power systems.

1.2 Purpose

This guide provides methods and terminology for rail transit traction power system modeling.

1.2.1 Applicability

This guide is intended for application by engineers involved in the design and specification of new traction power systems, and the technical evaluation of existing traction power systems in response to re-definition of operating parameters (e.g., increase in service).