



ATIS-0600318.2021

**Electrical Protection Applied to Telecommunications
Network Plant at Entrances to Customer Structures or
Buildings**

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ATIS-0600318.2021, *Electrical Protection Applied to Telecommunications Network Plant at Entrances to Customer Structures or Buildings*

Is an American National Standard developed by the **Network Electrical Protection (NEP)** Subcommittee under the **ATIS Sustainability in Telecom: Energy and Protection (STEP)** Committee.

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American National Standard for Telecommunications

**Electrical Protection Applied to Telecommunications
Network Plant at Entrances to Customer Structures or
Buildings**

Alliance for Telecommunications Industry Solutions

Approved July 30, 2021

American National Standards Institute, Inc.

Abstract

This standard establishes minimum electrical protection requirements intended to mitigate the disruptive and damaging effects of lightning and ac power faults at telecommunications network entrances to customer structures or buildings.

Disturbances from lightning and ac power line faults may be disruptive to telecommunications service and may also result in damage to the telecommunications plant and equipment. Telecommunications network plant is often exposed to such disturbances due to its physical location and frequent joint-use or joint right-of-way installations with power utility facilities and may carry a portion of these disturbances to the network appearance at a customer structure or building. Telecommunications service providers employ electrical protection equipment and bonding and grounding techniques at the network appearance to reduce the effects of such disturbances.

Foreword

The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with the American National Standards Institute's (ANSI) requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between providers, customers, and manufacturers. The Sustainability in Telecom: Energy and Protection (STEP) Committee – formerly the Network Interface, Power, and Protection Committee (NIPP) – engages industry expertise to develop standards and technical reports for telecommunications equipment and environments in the areas of energy efficiency, environmental impacts, power, and protection. The work products of STEP enable vendors, operators, and their customers to deploy and operate reliable, environmentally sustainable, energy efficient communications technologies. STEP is committed to proactive engagement with national, regional, and international standards development organizations and forums that share its scope of work.

ANSI guidelines specify two categories of requirements: mandatory and recommendation. The mandatory requirements are designated by the word shall and recommendations by the word should. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, STEP, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time it approved this document, STEP, which is responsible for the development of this Standard, had the following leadership:

J. Fuller, STEP Chair and NEP Vice-Chair (AT&T)

E. Gallo, STEP Vice-Chair (Ericsson)

D. Ashton, NEP Chair (Lumen)

The Network Electrical Protection (NEP) Subcommittee was responsible for the development of this document.

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