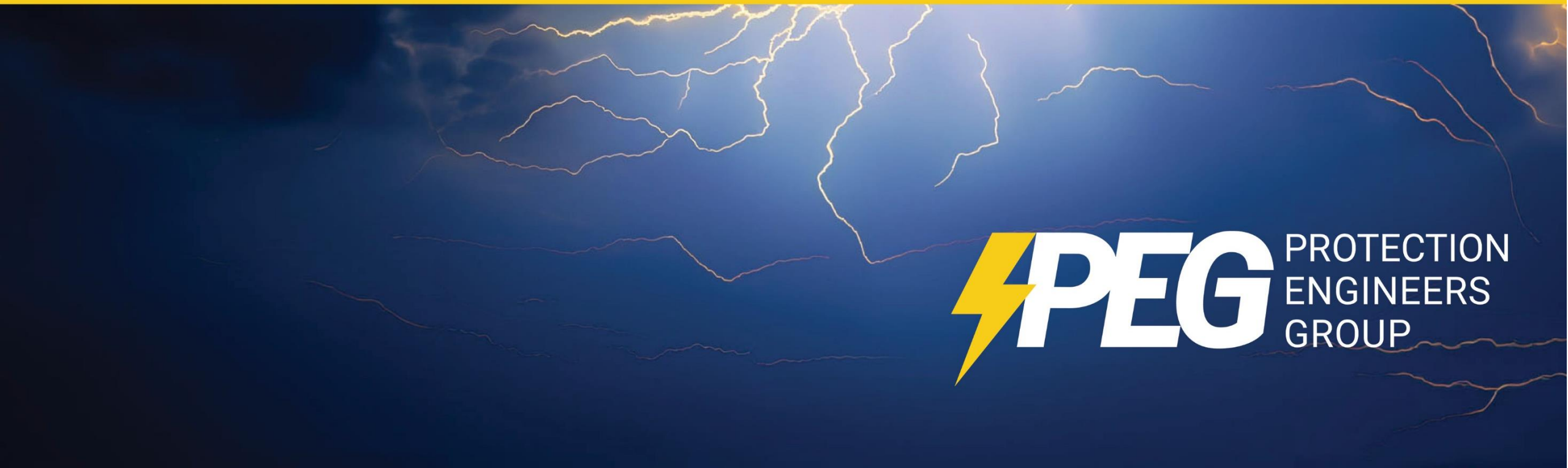
ATIS

STEP NEP



ATIS – STEP- NEP overview

Jim Pelegris – SENKO Advanced Components

PEG Advisory Board member and Secretary

PEG PROTECTION ENGINEERS GROUP

Who is ATIS ?

As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global ICT companies to advance the industry's business priorities.

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Who is ATIS continued…

atis
OVERVIEW 2025

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STEP: Sustainability in Telecom, Energy and Protection committee

STEP helps produce information and communications technologies' environmental impact as well as operators' energy costs and addresses industry power and protection issues by delivering industry-developed solutions. STEP deliverables are enabling vendors, operators and their customers to deploy and operate more reliable, environmentally sustainable, and energy efficient communications technologies.

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Network Electrical Protection (NEP)

- **Mission:** STEP NEP develops system-level Standards and Technical Reports relating to the electrical protection of telecommunications networks.
- **Scope:** The scope of STEP NEP includes, but is not limited to, system-level electrical protection of telecommunications networks, including wireline, optical and wireless networks. Electrical stresses may include system-level electrostatic discharge (ESD) criteria for central office equipment, lightning and ac power influences, electromagnetic interference (EMI), and electro-magnetic pulse (EMP). Electrical protection methods may include equipotential bonding, grounding, and the application of electrical protection devices. Network facilities covered include telecommunications central offices, switching centers and similar type facilities, outside plant such as aerial, buried and underground wire and cable, and network plant at entrances to customer structures or buildings.
- **Chair**
  Ernie Gallo, NEBScore
- **Vice Chair**
  Lynn Cobb, AT&T

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ATIS STEP/NEP Task Group 0214
Fault Managed Power System (FMPS) - Electrical Protection Criteria.

Effort: Create a proposed baseline for a comprehensive standard outlining electrical protection requirements for Class 4 Fault Managed Power Systems (FMPS), ensuring robust protection against electrical surges and mitigating their impact on connected equipment and networks. This standard should ensure the transmission of power and data are not compromised up to a specified limit .

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ATIS STEP/NEP Task Group 0214
Fault Managed Power System (FMPS) - Electrical Protection Criteria, cont.….

*The scope of the standard covers surge protective devices (SPD) for outside plant (OSP) deployments of fault-managed power systems (FMPS) rated up to 400 Vdc used in the public right of way (RoW). The SPDs considered in the standard shall be installed in accordance to NESC or NEC (NFPA-70) guidance, as applicable.
*Deployments over 400 Vdc are outside of ATIS/Telecoms scope and applications.
*Additional information for Class 4 can be found at ATIS-0600040 Fault Managed Power Distribution Technologies – Human Contact Fault Analysis.
*Bonding and grounding should be in accordance with the National Electric Code (NEC).

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Task Force Team members

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Luke Getto: Voltserver

Bob Voss: Panduit

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Tom Valentine: Reeme

Jason Mies: Raycap

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Next steps in the standard development

Planning to have an in-person meeting to run surge testing on a compete Class 4 FMPS system (Transmitter- Receiver- Class 4 FMPS cables and Surge Protection modules) to observe and document performance under Surges, recovery etc.

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Thank you !!!

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