

# PC62.55

---

**Submitter Email:** [amartin\\_36@yahoo.com](mailto:amartin_36@yahoo.com)

**Type of Project:** New IEEE Standard

**PAR Request Date:** 27-May-2015

**PAR Approval Date:** 03-Sep-2015

**PAR Expiration Date:** 31-Dec-2019

**Status:** PAR for a New IEEE Standard

---

**1.1 Project Number:** PC62.55

**1.2 Type of Document:** Guide

**1.3 Life Cycle:** Trial Use

---

**2.1 Title:** Guide for Surge Protection of DC Power Feeds to Remote Radio Heads (RRH)

---

**3.1 Working Group:** 3.6.7 LV Data, Communications and Signaling Circuit Surge Protective Devices WG (PE/SPDLV/LV3.6.7)

**Contact Information for Working Group Chair**

**Name:** Albert Martin

**Email Address:** [amartin\\_36@yahoo.com](mailto:amartin_36@yahoo.com)

**Phone:** 510-339-2859

**Contact Information for Working Group Vice-Chair**

None

---

**3.2 Sponsoring Society and Committee:** IEEE Power and Energy Society/Surge Protective Devices/Low Voltage (PE/SPDLV)

**Contact Information for Sponsor Chair**

**Name:** Ronald Hotchkiss

**Email Address:** [ronhotchkiss@ieee.org](mailto:ronhotchkiss@ieee.org)

**Phone:** 352-799-6986

**Contact Information for Standards Representative**

**Name:** Raymond Hill

**Email Address:** [raymond.hill@neetrac.gatech.edu](mailto:raymond.hill@neetrac.gatech.edu)

**Phone:** 404-675-1881

---

**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 12/2018

**4.3 Projected Completion Date for Submittal to RevCom:** 08/2019

---

**5.1 Approximate number of people expected to be actively involved in the development of this project:** 12

**5.2 Scope:** This Guide covers the application of surge protective devices used to protect the DC power feeds of Remote Radio Heads (RRH) and power supplies of fiber optic cable systems feeding the antenna systems.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** No

**5.4 Purpose:** This document will not include a purpose clause.

**5.5 Need for the Project:** Antennas used to be fed by coaxial cables from radio equipment at the base of the installation. To reduce transmission losses and mechanical loading on the tower, remote radio heads (RRH) are placed at the top of the installation next to the antenna. Fiber optic cables carrying the signal information are run up to the RRH equipment, where the light signals are converted into RF power to drive the antennas. The RRH is powered by a low voltage line, typically 48 V DC, run up to the equipment from a power supply at the base of the tower. This power feed needs to be protected from surges due to lightning strikes to the tower, and this project will provide guidance for the application of surge protective devices to provide this protection. .

**5.6 Stakeholders for the Standard:** Wireless service providers, equipment manufacturers (surge equipment, power supplies), tower owners, system engineers

---

**Intellectual Property**

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** No

---

**7.1 Are there other standards or projects with a similar scope?:** No

**7.2 Joint Development**

**Is it the intent to develop this document jointly with another organization?:** No

---

**8.1 Additional Explanatory Notes (Item Number and Explanation):** None