CODE OF PRACTICE

1. **SLS 1522: 2016** Sri Lanka Standard Code of Practice for Grid Connected Photovoltaic Power Systems - Requirements for System Documentation, Installation, Testing & Commissioning

POWER CONVERTERS

2. **SLS 1543** Sri Lanka Standard Specification for Safety of Power Converters for use in Photovoltaic Power Systems –

   Part 1:2016 General Requirements **(IEC 62109-1:2010)**

   Part 2:2016 Particular Requirements for Inverters **(IEC 62109-2:2011)**

3. **SLS 1547:2016** Sri Lanka Standard Specification for Photovoltaic (PV) Systems – Characteristics of the Utility Interface **(IEC 61727:2004)**.

SWITCHGEAR AND CONTROLGEAR

4. **SLS 1554** - Sri Lanka Standard Specification for Low-Voltage Switchgear and Controlgear

   Part 1: 2017 General Rules **(IEC 60947-1:2014)**

   Part 2: 2017 Circuit-Breakers **(IEC 60947-2:2016)**

   Part 3: 2017 Switches, Disconnectors, Switch-Disconnectors and Fuse-Combination Units **(IEC 60947-3:2015).**

DC CABLE

5. **SLS 1542:2016** Sri Lanka Standard Specification for Electric Cable for Photovoltaic Systems **(EN 50618:2014)**

PHOTOVOLTAIC (PV) MODULES

6. **SLS 1553** Sri Lanka Standard Specification for Photovoltaic(PV) Module Safety Qualification –

   Part 1: 2017 Requirements for Construction **(IEC 61730-1:2016)**

   Part 2: 2017 Requirements for Testing **(IEC 61730-2:2016)**

7. **SLS 1544** Sri Lanka Standard Specification for Terrestrial Photovoltaic (PV) Modules – Design qualification and type approval –

   Part 1:2016 Test Requirements **(IEC 61215-1:2016)**

   Part 1-1:2016 Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules **(IEC 61215-1-1:2016)**

   Part 2:2016 Test Procedures **(IEC 61215-2:2016)**

8. **SLS 1546:2016** Sri Lanka Standard Specification for Photovoltaic Systems – Power Conditioners – Procedure for Measuring Efficiency **(IEC 61683:1999)**

PERFORMANCE TESTING AND ENERGY RATING

9. **SLS 1545** Sri Lanka Standard Specification for Photovoltaic (PV) Module Performance Testing and Energy Rating –

   Part 1:2016 Irradiance and Temperature Performance Measurements and Power Rating **(IEC 61853-1:2011)**

   Part 2: 2017 Spectral Responsivity, Incidence Angle and Module Operating Temperature Measurements **(IEC 61853-1:2017)**

10. **SLS 1637: 2019** Sri Lanka Standards Specification for Connectors for DC-application in photovoltaic systems – Safety requirements and tests

11. **SLS IEC 62548: 2018 -** Sri Lanka Standard Specification for Photovoltaic (PV) Arrays – Design Requirements **(IEC 62548: 2016)**

12. **SLS IEC 62446:2017** - Sri Lanka Standard Specification for Photovoltaic (PV) Systems – Requirements For Testing, Documentation And Maintenance – **Part 1: 2017** Grid Connected Systems – Documentation, Commissioning Tests And Inspection **(IEC 62446-1:2016).**

13. **SLS IEC 60364: 2018 -** Sri Lanka Standard Specification for Low Voltage Electrical Installation - **Part 6: 2018** verification **(IEC 60364-6: 2016)**

14. **SLS 1472 SRI LANKA STANDARD FOR PROTECTION AGAINST LIGHTNING**

    a) **PART 1: 2013 // IEC 62305 - 1: 2010 – GENERAL PRINCIPLES**
    This part of IEC 62305 provides general principles to be followed for protection of structures against lightning, including their installations and contents, as well as persons.

b) **PART 2: 2013 // IEC 62305 - 4: 2010 – RISK MANAGEMENT**
This part of IEC 62305 is applicable to risk assessment for a structure due to lightning flashes to earth. Its purpose is to provide a procedure for the evaluation of such a risk.

c) PART 3 // IEC 62305 - 4: 2010 – PHYSICAL DAMAGE TO STRUCTURES AND LIFE HAZARD
This part of IEC 62305 provides the requirements for protection of a structure against physical damage by means of a lightning protection system (LPS), and for protection against injury to living beings due to touch and step voltages in the vicinity of an LPS

d) PART 4 // IEC 62305 - 4: 2010 – ELECTRICAL AND ELECTRONIC SYSTEMS WITHIN STRUCTURES
This part of IEC 62305 provides information for the design, installation, inspection, maintenance and testing of electrical and electronic system protection (SPM) to reduce the risk of permanent failures due to lightning electromagnetic impulse (LEMP) within a structure. This standard does not cover protection against electromagnetic interference due to lightning, which may cause malfunctioning of internal systems.

15. SLS 1473 SRI LANKA STANDARD FOR LOW VOLTAGE SURGE PROTECTIVE DEVICES

a) **PART 1: 2013// IEC 61643 - 11: 2011 – SURGE PROTECTIVE DEVICES CONNECTED TO LOW-VOLTAGE POWER SYSTEMS - REQUIREMENTS AND TEST METHODS**
This part of IEC 61643 is applicable to devices for surge protection against indirect and direct effects of lightning or other transient overvoltages.

b) PART 2: 2015 // IEC 61643 - 12: 2008 – SURGE PROTECTIVE DEVICES CONNECTED TO LOW-VOLTAGE POWER DISTRIBUTION SYSTEMS - SELECTION AND APPLICATION PRINCIPLES
This part of IEC 61643 describes the principles for selection, operation, location and coordination of SPDs to be connected to 50 Hz to 60 Hz a.c. and to d.c. power circuits and equipment rated up to 1 000 V r.m.s. or 1 500 V d.c.

c) PART 3: 2015 // IEC 61643 - 21: 2009 – SURGE PROTECTIVE DEVICES CONNECTED TO TELECOMMUNICATIONS AND SIGNALLING NETWORKS – PERFORMANCE REQUIREMENTS AND TESTING METHODS
This International Standard is applicable to devices for surge protection of telecommunications and signalling networks against indirect and direct effects of lightning or other transient overvoltages.

d) PART 4: 2015 // IEC 61643 - 22: 2004 – SURGE PROTECTIVE DEVICES CONNECTED TO TELECOMMUNICATIONS AND SIGNALLING NETWORKS –SELECTION AND APPLICATION PRINCIPLES
This part of IEC 61643 describes the principles for the selection, operation, location and coordination of SPDs connected to telecommunication and signalling networks with nominal system voltages up to 1 000 V r.m.s. a.c. and 1 500 V d.c.

e) **PART 5: 2019 // IEC 61643-31: 2018 REQUIREMENTS AND TEST METHODS FOR SPDS FOR PHOTOVOLTAIC INSTALLATIONS**

This part of IEC 61643 is applicable to Surge Protective Devices (SPDs), intended for surge protection against indirect and direct effects of lightning or other transient overvoltages. These devices are designed to be connected to the DC side of photovoltaic installations rated up to 1 500 V DC.

f) **PART 6: 2019 // IEC 61643-32 SURGE PROTECTIVE DEVICES CONNECTED TO THE D.C. SIDE OF PHOTOVOLTAIC INSTALLATIONS – SELECTION AND APPLICATION PRINCIPLES.**

This part of IEC 61643 describes the principles for selection, installation and coordination of SPDs intended for use in Photovoltaic (PV) systems up to 1 500 V DC and for the AC side of the PV system rated up to 1 000 V rms 50/60 Hz.

16. SLS 1496 SRI LANKA STANDARD FOR LIGHTNING PROTECTION SYSTEM COMPONENTS

a. PART 1: 2015 // IEC 62561 - 1: 2012 – REQUIREMENTS FOR CONNECTION COMPONENTS

b. PART 2: 2015 // IEC 62561 - 2: 2012 – REQUIREMENTS FOR CONDUCTORS AND EARTH ELECTRODES

c. PART 3: 2015 // IEC 62561 - 3: 2012 – REQUIREMENTS FOR ISOLATING SPARK GAPS (ISG)

d. PART 4: 2015 // IEC 62561 - 4: 2010 – REQUIREMENTS FOR CONDUCTOR FASTENERS

e. PART 5: 2015 // IEC 62561 - 5: 2011 – REQUIREMENTS FOR EARTH ELECTRODE INSPECTION HOUSINGS AND EARTH ELECTRODE SEALS

f. PART 6: 2015 // IEC 62561 - 6: 2011 – REQUIREMENTS FOR LIGHTNING STRIKE COUNTERS

g. PART 7: 2015 // IEC 62561 - 7: 2011 – REQUIREMENTS FOR EARTHING ENHANCING COMPOUNDS