

 **GUIDELINE ON
ELECTRICAL
SAFETY
MANAGEMENT
PLAN &
PROGRAMME**

**SEMINAR MEMPERTINGKATKAN KESELAMATAN
ELEKTRIK SECARA BERKESAN**

-HOTEL PROMENADE, TAWAU SABAH-

17 JULAI 2018

-IFFAH HANNAH MULUK-

**JABATAN KAWALSELIA KESELAMATAN ELEKTRIK
SURUHANJAYA TENAGA**



SCOPE

1

INTRODUCTION



2

OBJECTIVES



3

**SAFETY MANAGEMENT
PROGRAMME**



4

CLOSING



PART 1:

INTRODUCTION

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FACTS & STATISTICS

CAUSES

Improper installation & maintenance

32%

Failure to practice safety work procedures

30.5%

FACTS & STATISTICS

LOCATION

Non-domestic electrical installations

26%

Residential premises

15.7%

NON-DOMESTIC
ELECTRICAL
INSTALLATION
SAFETY CODE



GUIDELINE ON
ELECTRICAL
SAFETY
MANAGEMENT
PLAN AND PROGRAMME



INTRO 1:

**Safety
Management
System (SMS) is
a framework:**

- ✓ **PROCESS**
- ✓ **PROCEDURE**



INTRO 2:

**Developed in line
with requirement
under**

**Section
33A & 33B,
ESA 1990**

Note: ESA - Electricity Supply Act



LAWS OF MALAYSIA

Act A1501

ELECTRICITY SUPPLY (AMENDMENT) ACT 2015



**Section 33A & 33B,
ESA 1990?**

Subsection 33A.(1), ESA 1990

CHECK BACK CONTENT !!!: A licensee who operates and maintains any electricity supply infrastructure

SHALL COMPLY with

- 1. any regulations made under this Act**
- 2. electrical infrastructure safety code**

or in the absence of such regulations or code, with standards and prudent industry practices as may be determined by the Commission.

Subsection 33A.(2), ESA 1990

CHECK BACK CONTENT !!!: A licensee SHALL PREPARE a SMP dealing with matters as may be prescribed in the electrical infrastructure safety code or in the absence of such code, with standards and prudent utility practices as may be determined by the Commission.

Subsection 33B.(1), ESA 1990

A CHECK BACK CONTENT !!!:

- 1. A non-domestic electrical installation owner or operator registered under this Act**
- 2. A licensee for retail**
- 3. A licensee for a private installation**

SHALL COMPLY with the

- 1. non-domestic electrical installation safety code**
- 2. safety management programme (SMP)**

or in the absence of such code or programme, with standards and prudent industry practices as may be determined by the Commission.”

Subsection 33B.(2), ESA 1990

- 1. CHECK BACK CONTENT !!!: A non-domestic electrical installation owner or operator registered under this Act**
- 2. A licensee for retail**
- 3. A licensee for a private installation**

SHALL PREPARE a SMP within such time as may be directed by the Commission

PART 2: **OBJECTIVES**

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OBJECTIVES



1

GUIDE

**Preparation
of SMP as
required
under ESA
1990**



2

**ADDRESS
ALL
ELEMENTS**

**SMP cover
all elements**



3

**SYSTEMATIC
SUITABLE &
STRUCTURED**

**For the
control of
electrical
risk**



4

**ASSESS
PERFORMANCE
& COMPLIANCE**

**In respect to
electrical
SMP**

PART 3:

SAFETY MANAGEMENT PLAN / PROGRAMME

(OPERATION – NONDOMESTIC ELECTRICAL INSTALLATION SAFETY CODE)

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ELEMENTS OF SMP



- Should incorporate essential management elements of an effective safety management system.**
- May vary in details.**

AUDIT CHECKLIST



BE USED AS A

- **GUIDE**
- **BENCHMARK**

ELEMENT 1: POLICY, PLAN AND PROGRAMME

1.1 Electrical Safety Policy & Programme:

- The installation has a written policy, plan/programme to ensure electrical safety.
- The policy, signed by the top management.
- The objectives, responsibilities and arrangements.

1.2 Documentation:

- Maintained and readily accessible.
- Contain information on electrical safety.



ELEMENT 2: ORGANISING

DANGER

2.1 Responsibility:

- Assigns duties responsibility for electrical safety management to line management.

2.2 Competence:

- Adequate training and information on electrical safety.
- The company complies with ESA 1990 & ER 1994.

2.3 Communication:

- Disseminate information on electrical risks and control measures.
- Warning signs are used.
- Arrangements suggestions and complaints.



ELEMENT 3: PLANNING AND IMPLEMENTATION



3.1 Planning and Implementation:

The installation's electrical SMP supports:

- Compliance with ESA 1990, ER 1994, codes and guidelines.
- Implementation of all elements of the electrical safety management system.
- Continual improvement.

ELEMENT 4: RISK CONTROL MEASURES



4.1 Identification, Evaluation and Control of Risks:

- Elimination
- Substitution
- Engineering controls
- Administrative controls
- PPE

4.2 Permit-To-Work System:

A written Permit-To-Work (PTW) system must be made available.

4.3 Emergency Preparedness:

A written emergency preparedness plan/programme for the installation is available and made known to employees and regularly rehearsed.

ELEMENT 5: PERFORMANCE EVALUATION

5.1 Investigation of Electrical-related Accidents and Incidents:

- Carried out by competent persons, with the appropriate participation of management and workers.

5.2 Performance Monitoring and Review:

- A system for installation's management to regularly monitor electrical safety performance is established.
- Records and statistics of electrical accidents.

PERFORMANCE



EXCELLENT

GOOD

AVERAGE

POOR

ELEMENT 6: ACTION FOR IMPROVEMENT

6.1 Preventive and Corrective Action:

- Arrangements for preventive and corrective actions are established and updated.

6.2 Continual Improvement:

Take into account the results of:

- Risk assessments
- Performance measurements investigations
- Audits
- Changes in ESA 1990 & ER 1994
- Benchmarked with other similar organisations



PART 4: **CLOSING**

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SO WHAT'S
NEXT?



IMPROVE

ST CONDUCT AUDIT





IMPORTANT!

ELECTRICITY SUPPLY (AMENDMENT) ACT 2015

Code by Commission

SECTION 50E, ESA 1990

RM200K & / < 2 YEARS / BOTH



IMPORTANT!

ELECTRICITY SUPPLY (AMENDMENT) ACT 2015

Fails to prepare the SMP

SECTION 33

RM100K &/ < 2 YEARS / BOTH

ELECTRICITY SUPPLY ACT 1990

[Act 447]

NON-DOMESTIC ELECTRICAL INSTALLATION SAFETY CODE

KOD/ST/No.4/2016

IN exercise of the power conferred by Section 50A of the Electricity Supply Act 1990 [Act 447], the Energy Commission, with the approval of the Minister makes the following Code:

Citation and Commencement

1. This Code may be cited as the "Non-Domestic Electrical Installation Safety Code".
2. The Non-Domestic Electrical Installation Safety Code will be issued by the Commission, based on the approval by the Commission on 20th October 2016 and the Minister on 24th December 2016 and shall be enforced and effect from the date of registration.

Application of the Code

3. This Code shall be applicable to all non-domestic installations of consumers and installation of licensees for retail and licensees of private installation where electricity is supplied to, except installations as stated in part 1.2.4 of the Code.

Interpretation

4. The term and expression used shall, unless defined in the Code or the context otherwise requires, have the same meaning as in the Act or Regulations made under it.

Notice by the Commission

6. The Energy Commission may issue written notices from time to time in relation to the Code.

Amendment and Variation

7. The Energy Commission under Section 50b of Electricity Supply (Amendment) Act 2015, may at any time review, amend, modify, vary or revoke this Code or any part thereof, under the following circumstances:

- i) to effect changes in the electricity supply industry;
- ii) where it is expedient to address safety aspect of electrical installation in respect to design, construction, inspection and testing, operation and maintenance;
- iii) as recommended by the Non-Domestic Electrical Installation Safety Code Committee and approved by the Energy Commission; or
- iv) any other justifiable reasons as the Energy Commission deems necessary.

Dated : 17 MAY 2017



Suruhanjaya Tenaga
Energy Commission

DATUK IR. AHMAD FAUZI BIN HASAN
Chief Executive Officer
for Energy Commission

THANK YOU

Question?

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BEFORE



AFTER

