

NIGERIAN ELECTRICITY MANAGEMENT SERVICES AGENCY (NEMSA)







NEMSA CERTIFICATION SCHEMES
FOR ELECTRICAL INSTALLATION
PERSONNEL IN NIGERIA



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1.0 INTRODUCTION

Nigerian Electricity Management Services Agency (NEMSA) was established by NEMSA ACT 2015 to carry out the functions of Enforcement of Technical Standards and Regulations, Technical Inspection, Testing and Certification of all categories of Electrical Installations, Electricity Meters and Instruments etc. to ensure the efficient production and delivery of safe, reliable and sustainable electricity power supply and guarantee safety of lives and property in the Nigerian Electricity Supply Industry (NESI) and other allied industries.

2.0 BACKGROUND

One of the most important mandates of NEMSA is the processing and issuance of competency certificates to qualified electrical installation personnel and corporate organizations engaged in the practice of electrical installation works along the power value chain and utilization in NESI and other allied industries/workplaces. This is aimed at determining the technical capability and competence of Electrical Installation Personnel and Corporate Organizations involved in construction, installation, operation and maintenance of Power Systems, Electrical Installations and ensuring safety of lives and property in Nigeria.

The key objective of the Certification is to ensure that only skilled, experienced and competent electrical installation personnel and corporate organizations whose technical capability has been duly tested and certified by NEMSA are allowed to carry out electrical installation works along the power value chain and utilization in the country. Other objectives include:

- Ensuring that all electrical materials, equipment and instruments used in NESI and other allied industries/workplaces are of the right quality, standards and specifications.
- Ensuring that power systems, networks and all electrical installations executed by Certified_electrical installation personnel and corporate organizations have been properly planned, designed and executed before use, to deliver safe, reliable and sustainable electricity supply to the consumers nationwide.

3.0. PROCEDURES FOR NEMSA CERTIFICATION

3.1. CERTIFICATION

Certification is the process by which NEMSA determines that a personnel or corporate organization fulfills certification requirements with a view to ensuring that such personnel or corporate organization possesses the requisite skills, competence and experience to undertake electrical installation works or projects, in accordance with specifications, standards and extant regulations in NESI, other Allied Industries and Premises.

3.2. PURPOSE

The purpose of certification of electrical installation personnel and corporate organizations engaged in the execution of electrical installation works includes but not limited to:

- Ensure safety of lives and property in the NESI, other Allied Industries and Premises;
- Promote and increase technical skills and competence of electrical installation personnel and corporate organizations;
- Promote public confidence in the engagement of certified electrical installation personnel and corporate organizations, and for ease of traceability.
- Ensure that certified electrical installation personnel and corporate organizations adhere to Code of Ethics, Standards and Regulations in NESI:
- Commit certified electrical installation personnel and corporate organizations to continued professional development through attending seminars, trainings, conferences and workshops.

3.3 NEMSA CERTIFICATION SCHEMES

NEMSA's Certification Schemes consist of the following:

- i. Electrical Installation Contractors Certification
- ii. Renewable Energy for Electricity Generation Installation Contractors

 Certification
- iii. Metering Installation Personnel Certification
- iv. Electrical Technical Personnel Certification

3.4 APPLICATION PROCEDURES

Applicants wishing to get certified to undertake electrical installation works in Nigeria shall fill the online application form for Individual Certification or for Corporate Certification in which he / she will upload his / her credentials and other relevant documents onto NEMSA's website (www.nemsa.gov.ng). The procedures for the certification of qualified Electrical Installation Personnel and Corporate organizations shall be carried out through oral and written competency tests.

3.4.1 STEPS FOR REGISTRATIONS

- Read and understand this scheme for certification of electrical installation personnel before starting the process of registration for necessary guidance.
 This scheme is available on the NEMSA website (www.nemsa.gov.ng).
- ii. Fill the appropriate application form on the NEMSA website (www.nemsa.gov.ng) and choose any NEMSA Inspectorate Field Office of your choice for your interview / examination center.
- iii. Upon completion of the application form, submit the application form online.
- iv. Pay processing fee of \(\frac{\text{\$\}\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$
- v. Competency exams / interview details will be communicated to applicants via text message and / or email.
- vi. All applicants would be issued a reference number upon submission of their application forms.
- vii. Any applicant who appears at an examination/interview centre without registering under that inspectorate field office will not be interviewed.
- viii. Any applicant willing to change his / her examination / interview centre should do so no later than Seven (7) days prior to the certification examination/interview exercise.
- ix. Any successful applicant who fails to make payment for the competency certificate within Ninety (90) days from the day of notification of result may

- forfeit the certification and will be required to re-apply for another certification process.
- x. All information regarding scheduling of competency examinations / interviews in any of NEMSA Inspectorate Field Offices will be posted on the NEMSA website and also available upon request.
- xi. All applicant must come with original copies of their credentials for sighting and a valid means of identification.
- xii. All applicant must come with two passport photographs which must be of medium size 3.5 x 45mm, plain white, no cap, no glasses and must be clear.
- xiii. All certified individual electrical installation personnel / corporate organizations are required to receive continuous professional training, seminars / workshops to update their technical skills / knowledge and align with current trends / international best practice in the execution of Electrical Installation Works.
- xiv. An Electrical Engineer / Technologist will not be allowed to represent more than one corporate organization for the NEMSA certification.
- xv. An Electrical Engineer / Technologist who has been certified under the individual electrical installation and renewable energy installation certification cannot represent a corporate organization for corporate certification.
- xvi. An Electrical Engineer / Technologist who has been certified under Individual Category A Certification will not be allowed to convert his / her certificate to Corporate Certification and vice versa unless they undergo the full process for a new type of certification and such intention must be brought to the notice of the MD/CEO & CEIF via a letter for approval.

3.4.2 CERTIFICATION TIMELINE

S/NO	DESCRIPTION	DEADLINE	ACTION BY
1	Submission of completed Application form and payment of processing fee.	No later than 7 days prior to each examination exercise	Applicant
2	Notification of examination date	No later than 7 days prior to the examination exercise	Certification Panel
3	Scheduling of examination date	3 weeks prior to examination exercise	Certification Panel
4	Examination period	Quarterly (four times in a year) or Whenever an Inspectorate Field Office has a minimum of 60 registered candidates.	Certification Board
5	Notification of examination result through candidates e-mail address / text message	3 weeks after the conduct of each examination exercise	Certification Panel
6	Payment of Certificate Fee	Within three (3) months after notification of successful applicant.	Certification Panel
7	Issuance of competency Certificate to successful candidates	No later than 4 weeks after payment of certification fees	Certification Panel

3.4.3 CERTIFICATE VALIDITY PERIOD

- (i) The Individual Certification is valid for a period of six (6) years and renewable every year at any NEMSA's Inspectorate Field Office and Headquarter.
- (ii) The Corporate Certification is valid for a period of three years (3) year and **Renewable every year** at any of NEMSA's Inspectorate Field Offices and Headquarters, provided the company's Electrical Engineer / Technologist is still with the company.

3.5 RE-CERTIFICATION

The Individual Certification upon expiry of the six (6) years validity period shall be required to apply for a "Re-Certification".

The Corporate Certification upon expiry of the three (3) years validity period shall be required to apply for a "*Re-Certification*".

3.5.1 PROCEDURES/REQUIREMENTS FOR RECERTIFICATION

- Applicant must have undergone relevant training from a recognized training institution or present job completion certificates or inspection certificate(s).
- Applicant must not have any established offence(s) or pending disputes in relation to electrical installation works with NEMSA.
- Applicant must make full payment for a new certificate.

3.6 CERTIFICATION BOARD AND PANEL

The certification process involves a Board and Panel whose membership and functions are detailed below.

3.6.1 CERTIFICATION BOARD

The Certification Board (CB) consists of members drawn from relevant directorates, departments and units of the Agency. The MD/CEO & CEIF is the chairman of the board, while the Head Regulatory, Safety and Certification Unit is the Secretary of the Board.

3.6.1.1 MEMBERSHIP OF THE CERTIFICATION BOARD

The board shall comprise of the following members:

i.	Chief Electrical Inspector of the Federation	hairman
ii.	Executive Director, Technical Services	
iii.	A representative of Legal unit	Member
iv.	Head, Technical Inspectorate Services	Member
٧.	Special Adviser (Technical) to CEIF	Member
vi.	Head, MLSD	Member
vii.	Head, Regulatory, Safety & Certification Unit	Secretary

3.6.1.2 FUNCTIONS OF THE CERTIFICATION BOARD

The Certification Board shall carry out the following functions:

- i. Review and approve the schemes for the certification process;
- ii. Review and approve recommendations made by the Head (RSC) on issues pertaining to the certification scheme;
- iii. Consider for approval recommendations made by Certification Panels (CPs) on the conduct of certification examinations/interviews;
- iv. Consider and make final decisions on recommendations of CPs and dispute resolution panel including petitions, appeals and offences.
- v. Meet monthly for review of certification matters as may deem necessary.

3.6.2 CERTIFICATION PANEL

The Certification Panels (CPs) consists of members drawn from relevant stakeholders or organizations in addition to NEMSA technical staff. The Panel is chaired by the Area Inspecting Engineer (AIE), while an engineering / technical staff of the Inspectorate Field Office (IFO) serves as the secretary of the panel.

3.6.2.1. MEMBERSHIP OF THE CERTIFICATION PANEL (CP)

The members of Certification Panels shall be experienced Electrical engineers / technologists drawn from the following stakeholders:

i.	NEMSA (Area Inspecting Engineer)	Chairman
ii.	Nigerian Society of Engineers (NSE)	Member
iii.	Council for the Regulation of Engineering in Nigeria (COREN)	Member
iv.	Standards Organization of Nigeria (SON)	Member
٧.	Federal Ministry of Works and Housing	Member
vi.	Federal Ministry of Labour and Employment	Member
vii.	Utility Companies (GENCOs/TCN/DISCOs)	Member
viii.	NEMSA (An Officer NMTS)	Member
ix.	Renewable Energy Organization (ECN/REA/REBs)	Member
х.	Certified Electrical Associations (LECAN/ARECON/REAN)	Member
xi.	NEMSA (An Electrical Engineer IFO)	Secretary
xii.	NEMSA Headquarters (An Officer RSC Unit)	Observer

NOTE:

• A quorum of the CP for each scheme shall be formed by four (4) members including the Chairman or anyone delegated to act for him / her in that capacity.

3.6.2.2 FUNCTIONS OF THE CERTIFICATION PANELS

- i. The secretariat receives and scrutinize submitted application forms with credentials and assess / determine suitability of each Applicant;
- The secretariat compiles and shortlist candidates suitable for oral and / or written interview;
- iii. The chairman schedule examination / interview date and invite other panel members and candidates for the exercise;
- iv. The certification panel conduct the certification exam / interview as scheduled;
- v. The certification panel prepares the exam / interview report and the chairman forwards it to the CB for consideration and approval;
- vi. The secretariat notifies candidates of the approved result and request successful candidates to pay for their certificate within three (3) months of notification;
- vii. The secretariat issues processed competency certificates to successful candidates;
- viii. The chairman considers and make appropriate recommendations to the CB on any complaint lodged against any certified corporate organizations/individual electrical installation personnel;
- ix. The secretariat maintains a Register of Certified Electrical Installation personnel within the respective Inspectorate Field Office (IFOs).

3.7 CLASSIFICATION OF CERTIFICATION

The NEMSA certification schemes are classified into individual and corporate certifications as follows:

S/No	Certification	Classification	Further Classification
1	Electrical Installation Contractors	Corporate Individual	 Corporate Individual Category A Category B Category C Category D
2	Renewable Energy for Electricity Generation Installation Contractors	_	 Corporate Individual Category I Category II
3	Electricity Metering Installation Personnel	CorporateIndividual	 Corporate Category 1 Category 2 Individual Category 1 Category 2
4	Electrical Technical	NA	Level 1 – 330 / 132kV systems
	Personnel		Level 2 – 33 / 11kV systems
			Level 3 – 0.400kV / 0.230kV systems
			Each of the Levels is categorized into the following skill sets
			Category A
			✓ Planning, Design & Construction✓ Protection, Control, Metering
			Category B ✓ Operations • Power stations • Electrical Facilities Category C ✓ Installation, Testing, Maintenance • Power Lines • Electrical systems • Industrial systems

3.7.1 INDIVIDUAL CERTIFICATION

Individual certification is for Electrical Engineers / Technologists / Technicians / Craftsmen, who have worked in the power sector and other Allied Industries / Workplaces for at least three (3) years and above and have acquired the skills, experience and expertise to carry out Constructions, Operations and/or Maintenance of Electrical Installation Work/projects.

3.7.2 CORPORATE CERTIFICATION

Corporate Certification is for any registered business or limited liability company whose Chief Executive or other Directors are not Electrical Engineers / Technologists. For such organizations to undertake electrical installation contracting works in Nigeria, they are required to engage the services of an experienced and qualified Electrical Engineer / Technologist who shall be responsible for the execution/supervision of electrical installation works/projects, executed by the company. The certified corporate company's Electrical Engineer / Technologist shall undergo the certification examination/interview to ascertain his / her qualifications, technical skills and competence in the field of electrical installation works.

Under this provision, the corporate certificate to be issued to any successful candidate(s) shall be endorsed only for the company's use.

The Corporate Certification is valid for a period of three (3) years and Renewable **every year** at any of NEMSA's Inspectorate Field Offices and Headquarters, provided the company's Electrical Engineer / Technologist is still with the company.

NOTE:

- When a company's Electrical Engineer / Technologist for Corporate Certification leaves the organization, the Corporate Certification becomes invalid.
- An Electrical Engineer / Technologist representing a company for Corporate
 Certification must show proof that he / she is an employee of the company (either
 with employment letter or valid company ID card).
- Corporate Certificate and Individual Category A Certificates have the same scope of work under Electrical Installation Contractor Certification Scheme.
- Corporate Certificate and Individual Category (I) Certificates have the same scope of work under Renewable Energy for Electricity Generation Certification Scheme.

- To obtain Corporate Certification on Metering Installation Personnel Scheme, the company shall have the following;
 - **Corporate Category (I):** At least five (5) certified individual category (I) and Ten (10) certified individual category (II) Personnel.
 - **Corporate Category (II)**:- At least Ten (10) certified individual category (II) Personnel.

3.8 SCOPE OF WORK FOR ELECTRICAL INSTALLATION CONTRACTORS' CERTIFICATION

3.8.1 INDIVIDUAL CERTIFICATION CATEGORIES:

3.8.1.1 **CATEGORY D**

- i. Installation of Low Voltage (LV) electrical materials and equipment (distribution boards, cut-out fuses etc) and internal wiring of all types in small residential buildings with connected load not exceeding 50kVA.
- ii. Installation and wiring of standby generating plants up to 50kVA capacity along with their ancillary switchgear and change-over switches.
- iii. Installation of street lighting systems.
- iv. Should have a fair knowledge of Wiring Regulations and interpretation of Electrical drawings/circuit diagrams and any other requirements that may be made by the Certification Board.
- v. Should have practical working knowledge of the use of test instruments/equipment such as Avometer, Insulation testers, Earth Megger etc.

3.8.1.2 **CATEGORY C**

All electrical installation works outlined in Category D in addition to the following;

- Installation of Low Voltage distribution network, internal wirings of all types in residential, commercial and industrial buildings with connected load not exceeding 100kVA.
- ii. Installation and wiring of standby generating plants up to 100kVA capacity along with their ancillary switchgear and change-over switches.
- iii. Installation of low-tension overhead lines and underground cables.

- iv. Installation and wiring of electric motors of all capacities along with their control panels and protective devices.
- v. Installation and wiring of fire and smoke detectors, anti-burglary, alarm system, Heating Ventilation and Air-Conditioning (HVAC) Systems, etc.
- vi. Should have a good knowledge of NESIS Regulations (User's Sites Electrical Installation), Interpretations of Electrical drawings/circuit diagrams and other requirements that may be made by the Certification Board (CB).
- vii. Should have Practical working knowledge of the use of test instruments/equipment such as Avometer, Insulation testers, Earth Megger, Clamp-On Ammeter, Voltmeter, Loop impedance tester etc.

3.8.1.3 CATEGORY B

All electrical installation works outlined in Category C in addition to the following;

- Installation of High-tension overhead lines and underground cables not exceeding 11KV systems.
- ii. Installation of 11KV Switchgear, Indoor and Outdoor Substations, RMU, Auto-Reclosure, etc. along with their protective equipment.
- iii. Installation and wiring of standby generating plants up to 2MVA capacity along with their panels, ancillary switchgear and change-over switches.
- iv. Installation of pole and ground mounted distribution transformers of 11KV Networks along with their ancillary switchgears.
- v. Should have thorough knowledge and interpretation of the NESIS Regulation,
 Distribution Code, Metering Code, Health & Safety Code.
- vi. Should be able to read and understand schematic drawings/diagrams, design specifications of LT and HT installation. Distribution Networks and any other special requirements made by the Certification Board (CB).
- vii. Should possess practical working knowledge of all electrical test equipment including DC high voltage pressure test equipment, primary and secondary injection test set, etc.
- viii. Wiring and Installation of buildings with connected loads above 100kVA.

3.8.1.4 CATEGORY A

All installation works outlined in Category B in addition to the following:

- i. Erection and installation of sub/transmission lines of 33kV, 132kV, 330kV with their associated substations and switchgear control panels.
- ii. Laying of 33kV cables, switchgears of all types and associated substations and control panels.
- iii. Installation of Power Stations along with their ancillary equipment and step-up transformer substation.
- iv. Installation of power and distribution transformers above 1000kVA capacity.
- v. Should have thorough workable knowledge of all types of electrical testing equipment including DC high voltage pressure testing equipment, primary and secondary injection test sets, etc.
- vi. Should be able to read and interpret electrical engineering drawings, specifications and other related drawings like survey route map, pole/tower schedule, line profiles, etc.
- vii. Should possess knowledge and interpretation of the NESIS Regulations,
 Distribution Code, Metering Code, Health & Safety Code and any other
 requirements made by the CB.

3.9 QUALIFICATION/REQUIREMENTS FOR INDIVIDUAL CERTIFICATION (ELECTRICAL INSTALLATION CONTRACTORS)

The minimum qualification/requirements of an applicant under any category is as follows:

3.9.1 CATEGORY D

- i. First School Leaving Certificate.
- ii. Federal Trade Test Certificate Grade III, II & I issued by Federal Ministry of Labour and Employment.
- iii. Apprenticeship certificate and/or Vocational Certificate.
- iv. Should have evidence of proven ability and at least three (3) years working experience in electrical installation works outlined in section 3.8.1.1 above.

3.9.2 CATEGORY C

- National Diploma or City and Guilds of London Intermediate from a recognized institution, registration with relevant government approved professional bodies will be an added advantage.
- ii. The candidate shall have evidence of proven ability and at least three (3) years of practical working experience in electrical installation works as outlined in section 3.8.1.2 above.

3.9.3 CATEGORY B

- HND or B.Sc in Electrical/Electronic Engineering from a recognized institution, registration with relevant government approved professional bodies will be an added advantage.
- ii. The candidate shall have evidence of proven ability and at least three (3) years of practical working experience in electrical installation works as outlined in section 3.8.1.3 above.

3.9.4 CATEGORY A

- HND or B.Sc in Electrical/Electronic Engineering from a recognized institution, registration with relevant government approved professional bodies will be an added advantage.
- ii. The candidate shall have evidence of proven ability and at least five (5) years' practical working experience in electrical installation works as outlined in section 3.8.1.4 above.

3.9.5 QUALIFICATION / REQUIREMENT FOR CORPORATE CERTIFICATION (ELECTRICAL INSTALLATION CONTRACTORS)

- i. HND or B.Sc in Electrical / Electronic Engineering from a recognized institution, registration with relevant government approved professional bodies will be an added advantage.
- ii. The candidate shall have evidence of proven ability and at least five (5) years' practical working experience in electrical installation works as outlined in section 3.8.1.4 above.
- iii. Evidence of Registration with the Corporate Affairs Commission (CAC)

3.10 SCOPE OF WORK FOR RENEWABLE ENERGY FOR ELECTRICITY GENERATION INSTALLATION CONTRACTORS

Prospective Renewable Energy for electricity generation Installation Contractors seeking to be certified by NEMSA must prove their experience, skills and expertise to undertake Renewable Energy for electricity generation Installation Works / Projects. NEMSA's Renewable Energy for Electricity Generation Installation Works Certification covers the following:

- Installation of solar PV System (Off/On Grid) i.e. Solar Mini-grids, solar home systems, solar street lighting systems, solar borehole systems, etc.
- Installation of Wind Power System.
- Installation of Hydro Power System.
- Installation of Geothermal Power System.
- Installation of Biomass Power System, etc.

3.10.1 CATEGORIZATION OF RENEWABLE ENERGY FOR ELECTRICITY GENERATION INSTALLATION CONTRACTOR'S CERTIFICATION

The Certification of Renewable Energy Installation Contractors Certification is categorized into Individual and Corporate Certification.

3.10.1.1 INDIVIDUAL CERTIFICATION

This is divided into two (2) categories as highlighted hereunder:

- (i) Category I for Engineers / Technologists
- (ii) Category II for Technicians / Craftsmen

3.10.1.2 CORPORATE CERTIFICATION

The corporate certification is not categorized. It has the same scope of work, educational and professional requirements as the individual category I.

Evidence of Registration with the Corporate Affairs Commission (CAC) is mandatory.

3.10.2 CATEGORIES OF WORK

3.10.2.1 **CATEGORY II**

- i. Installation of Renewable Energy powered street lighting systems.
- ii. Installation of Renewable Energy powered borehole systems.
- iii. Installation of Renewable Energy home systems.
- iv. Installation of Inverter and Battery Storage systems.
- v. Installation of controls and automation systems.
- vi. Installation of electrical protection systems, etc.

3.10.2.2 CATEGORY I

All installation works outlined in Category II in addition to the following:

- i. Design, construction and installation of Renewable Energy Systems (Off/On-Grid, & Mini Grid).
- ii. Design, construction and installation of hybrid systems.
- iii. Design and installation of electrical protection systems.
- iv. Design and installation of control and automation systems

3.10.3 COMPETENCY SKILLS REQUIREMENTS

Applicants for Renewable Energy for electricity generation Installation Works Certification should have sufficient technical skills and experience in the execution of the following installation and maintenance works:

- Design and install renewable energy systems in line with extant regulations and international best practices.
- Interpret design documents of renewable energy projects.
- Ability to construct the supporting structures.
- Knowledge of Solar PV, Wind turbine, and Hydro systems.
- Knowledge of Inverter and Battery Storage Systems.
- Knowledge of electrical protection systems.
- Knowledge of controls and automation systems.
- Knowledge of standalone/Hybrid Systems.
- Troubleshooting and maintenance of renewable energy systems.

3.10.4 QUALIFICATIONS/REQUIREMENTS

3.10.4.1 **CATEGORY I**

- (i) Minimum of B.Eng / B.Sc / HND / Full City & Guild of London in Electrical / Electronic Engineering, Mechanical Engineering, Chemical Engineering, Civil Engineering, Physics / Physics Electronics, Instrumentation etc.
- (ii) Evidence of registration with relevant professional bodies will be an added advantage.
- (iii) The candidate shall have evidence of proven ability and at least five (5) years of practical working experience on renewable energy installation works.
- (iv) Evidence of participation in the execution of renewable energy projects which should cut across Energy Management, Energy Audit, Energy Efficiency, Solar PV configuration and Installation, Solar Hybrid Installations, Mini-Grid Installation, Battery Storage Design, System Controllers, Inverter Installations, Instrumentation etc.
- (v) Completion of any of the under-listed training courses on Renewable Energy systems from a recognized training institute:
 - a) Solar Mini-Grid Design and Installation.
 - b) Solar PV System Design and Installation.
 - c) Small Hydropower Design and Installation.
 - d) Wind turbine Design and Installation.
 - e) Energy Management & Audit.
 - f) Power Backup Design and Installation.

3.10.4.2 **CATEGORY II**

- (i) Minimum of WAEC / NABTEB.
- (ii) The candidate shall have evidence of proven ability and at least three (3) years of practical working experience on renewable energy installation works/projects.
- (iii) Evidence of participation in the execution of renewable energy projects which should cut across Energy Management, Energy Audit, Energy Efficiency, Solar PV configuration and Installation, Solar Hybrid Installations, Mini-Grid

- Installation, Battery Storage Design, System Controllers, Inverter Installations, Instrumentation etc.
- (iv) Completion of any of the under-listed training courses on Renewable Energy systems from a recognized training institute:
 - (a) Solar Mini-Grid Design and Installation.
 - (b) Solar PV System Design and Installation.
 - (c) Small Hydropower Design and Installation.
 - (d) Wind turbine Design and Installation.
 - (e) Energy Management & Audit.
 - (f) Power Backup Design and Installation, etc.

3.11 ELECTRICITY METERING INSTALLATION PERSONNEL CERTIFICATION

NEMSA Electricity Metering Installation Personnel certification is classified into Individual and Corporate Certification.

3.11.1 INDIVIDUAL CERTIFICATION

Individual certification is for Engineers / Technologists / Technicians (Electrical, Mechatronics, Instrumentation, and other relevant engineering fields) who have worked in the power sector and / or Allied industries for at least three (3) years and acquired skills, experience, and expertise in Electricity Metering Installation Works / Projects.

The individual Electricity Metering Installation Personnel certification is categorized into two categories as follows:

- (i) Category One (1) For Engineers/Technologists
- (ii) Category Two (2) For Technicians/Artisans

Prospective applicants may apply for certification under any of the above stated category depending on their qualifications and years of practical field experience in the Nigerian Electricity Supply Industry and other Allied industries.

3.11.2 CORPORATE CERTIFICATION

Corporate Certification is for registered businesses or limited liability companies. They are required under the law to engage the services of certified electricity metering installation personnel as highlighted hereunder.

The Corporate Certification is classified into Category One (1) and Category Two (2) with the following requirements:

(i) Corporate Certification [Category One (1)]:

• The Company must have at least Five (5) certified category 1 Electricity Metering Installation personnel and Ten (10) certified category 2 Electricity Metering Installation personnel in its workforce.

(ii) Corporate Certification [Category Two (2)]:

• The Company must have at least Ten (10) certified category 2 Electricity Metering Installation personnel in its workforce.

The corporate certification category one (1) and Individual certification category one (1) have the same scope of work while the corporate certification category two (2) and Individual certification category two (2) have the same scope of work.

NOTE: A company's Corporate Certification cannot be renewed unless the required number of certified category 1 & 2 electricity metering personnel is maintained amongst other requirements.

3.11.3 QUALIFICATION / REQUIREMENTS

The minimum qualifications / requirements of an applicant under any category are as follows:

3.11.3.1 CATEGORY TWO (2)

 Applicants shall have a minimum of Secondary School Education certificate / Federal Trade Test Certificate Grade III, II & I issued by Federal Ministry of Labour and Employment.

- ii. A training certificate on electricity metering installation from a recognized Metering Training Institute.
- iii. Shall have at least 3 years evidence of proven field experience in the installation of single and three-phase meters at 400 Volts level.
- iv. Shall have knowledge of standard internal wiring system of residential, commercial, and industrial premises.
- v. Shall have knowledge of standard earthing system.
- vi. Shall have knowledge of Nigeria Metering Code Version 02, Nigerian Smart Metering Regulations, International Electro-technical Commission, NESIS Regulations, Health and Safety Codes and other extant regulations.
- vii. Shall have understanding of the use of relevant basic electrical and metering test instruments.
- viii. Shall be able to read and interpret electricity metering circuit drawings.
- ix. Shall be able to carry out load analysis of buildings to accurately determine the type of electricity meter to be installed.
- x. Shall be familiar with single-phase and three-phase meter terminal configurations:
 - a) Single-phase electricity meter terminal configuration of P-N-N-P as stipulated in the Nigerian Metering Code.
 - b) Three-Phase electricity meter terminal configuration of R1R2, Y1Y2, B1B2, N1N2 as stipulated in the Nigerian Metering Code.
 - xi. Shall be conversant with electricity metering anti-tamper challenges and measures.
- xii. Shall be knowledgeable on the insulation resistance testing and cable colour codes identification for the installation of electricity meters.
- xiii. Shall be conversant with the importance of NEMSA sealing of electricity meter and due date certified test label as stipulated in the Nigeria Metering Code Version 02.

xiv. Shall have proper knowledge of safety requirements in metering installation.

3.11.3.2 **CATEGORY ONE (1)**

- i. Applicants shall have a minimum qualification of Higher National Diploma
 / BSc in Electrical / Electronics / Instrumentation Engineering and registration with relevant government approved professional bodies will be an added advantage.
- ii. Must meet all the requirements listed in 3.11.3.1 above in addition to at least five (5) years field experience in electricity metering installation works on 33/11kV Maximum Demand (MD) Meters and 330/132kV Grid Electricity Metering Installation Works.

NOTE: Certified electricity metering installation personnel should ensure that electricity meters without NEMSA crimp seal and due date certified test label are not installed for use in Nigeria.

3.11.4 SCOPE OF WORK FOR ELECTRICITY METERING INSTALLATION PERSONNEL

3.11.4.1 CATEGORY TWO (2)

Carry out installation of single and three phase Low Voltage Metering installation works up to and including 400 Volts electrical systems.

3.11.4.2 CATEGORY ONE (1)

Carry out the installation of Maximum Demand (MD) Meters on 33 / 11kV networks and grid meters on 330 / 132kV networks in addition to Installation of electricity Meters as outlined in 3.11.4.1 above.

4.0 CERTIFICATION OF ELECTRICAL TECHNICAL PERSONNEL

This certification is for all Technical employees in the Nigerian Electricity Supply Industry, other allied industries and workplaces engaged in the installation, operation and maintenance of power systems and electrical installations.

4.1 CLASSIFICATION OF CERTIFICATION

Certification of Electrical Technical Personnel is grouped into three levels in line with the national system operating voltages. Each level is further subdivided into three categories in line with areas of specialization, skill sets, relevant years of experience and requisite educational qualifications as detailed below:

4.1.1 CERTIFICATION LEVELS

Level 1 – Extra High Voltage & High Voltage (330 / 132kV) systems

Level 2 – Medium Voltage (33 / 11kV) systems

Level 3 – Low Voltage (0.400kV) systems

4.1.2 CERTIFICATION SKILL SET

The skill set categories for this certification under the three certification levels includes but not limited to:

4.1.2.1 CATEGORY A

- ✓ Planning, Design & Construction
- ✓ Protection, Control, Metering

4.1.2.2 **CATEGORY B**

- ✓ Operations
 - Power stations
 - Electrical Facilities

4.1.2.3 CATEGORY C

- ✓ Installation, Testing, Maintenance
 - Power Lines
 - Electrical systems
 - Industrial systems

4.2.0 SCOPE OF CERTIFICATION

Prospective Electrical Personnel may apply for certification under any level and category depending on their area of specialization, qualifications, and years of practical field experience.

4.2.1 CATEGORY A

This certification is for Electrical Technical Personnel who have acquired a Bachelor's Degree or Higher National Diploma in Electrical Engineering or its equivalent and have worked in the power sector or allied industries and other workplaces for at least five (5) years.

4.2.1.1 PLANNING, DESIGN & CONSTRUCTION

- i. Carry out site visitation activities for proposed project designs and modifications.
- ii. Analyse operational data like load, breakdowns and growth, and initiate expansion or remedial projects where necessary.
- iii. Analyse load and forecast demands and determine network needs from statistical projections.
- iv. Develop network expansion needs, construction specifications, bills of materials and other supporting documentations.
- v. Prepare design diagrams and documents for electrical power and industrial systems.
- vi. Prepare drawings, specifications and evaluation of power and control systems.
- vii. Carry out comprehensive electrical system study including short circuit, relay coordination and arc flash analysis.
- viii. Selection of process control, power distribution and instrumentation system components.
- ix. Supervise the installation / construction of electrical systems.
- Maintain all network information and data.

4.2.1.2 PROTECTION, CONTROL & METERING

- Coordinate, calibrate and set protection relays, review metering and relay diagrams and determine the required protective schemes for electrical installations.
- ii. Troubleshoot and repair relay and control equipment in electrical systems e.g. protective relays, instrument transformers, meters, recording instruments, controls (breakers, regulators, capacitors, etc.)

- iii. Perform impedance, short circuit, and relay settings calculations using relevant relay management software.
- iv. Coordinate pre-commissioning and periodic tests of power equipment and materials.

4.2.2 CERTIFICATION REQUIREMENTS FOR CATEGORY A

The minimum qualification and requirements of an applicant under this category are as follows:

- i. Bachelor's Degree / Higher National Diploma in Electrical / Electronics / Instrumentation Engineering from an accredited Institution.
- ii. Registration with relevant professional bodies will be an added advantage.
- iii. Should have knowledge of all types of electrical testing equipment.
- iv. Should be able to read and interpret electrical circuit drawings and other related drawings.
- v. Should have knowledge and interpretation of industry regulations such as NESIS Regulation 2015, Health and Safety Code, etc.
- vi. Shall have the evidence of proven ability and at least five (5) years of practical field experience in his / her area of skill specialization.

4.2.3 CATEGORY B

This Certification is for Electrical Personnel who have acquired a minimum of National Diploma in Electrical / Electronics / Instrumentation Engineering and have worked in the power sector or allied industries / other workplaces for at least three (3) years.

4.2.3.1 OPERATIONS

Power Stations

- Carry out high and medium voltage load management operations such as switching operations of switchgears and other protective devices in the substation control rooms and outdoor switchyards.
- ii. Operation and maintenance of power generating plants along with their ancillary switchgears and other accessories.
- iii. Operation and maintenance of low voltage switches.

Electrical Facilities

- Carry out routine inspections and testing of electrical installations and equipment.
- ii. Carry out troubleshooting and maintenance repairs on defective electrical installations and equipment.
- iii. Ensure that industry regulations are adhered to within the facility.

4.2.4 CERTIFICATION REQUIREMENTS FOR CATEGORY B

The minimum qualification/requirements of an applicant under this category are as follows:

- i Minimum of National Diploma (ND) in Electrical / Electronic / Instrumentation Engineering Certificate from accredited Institution.
- ii Should have good knowledge of Nigerian Electricity Supply and Installation Standards (NESIS) Regulation 2015, Distribution Code and Health and Safety Code.
- iii Should have good interpretation of electrical circuit diagrams.
- iv Should have practical knowledge of the use of testing instrument/equipment such as Insulation testers, Earth Resistance Tester, Voltmeter etc.
- v The candidate shall have the evidence of proven ability and at least three (3) years of practical field experience in his / her area of skill specialization.

4.2.5 CATEGORY C

This Certification is for Electrical personnel who have acquired a minimum of Secondary School or Technical College Certificate with relevant training certificates and have worked in the power sector or allied industries / other workplaces for at least three (3) years.

They are personally held responsible for any installation, operations and maintenance work carried out by them but are under the supervision of Category A Electrical Technical Personnel.

- (i) Installation and maintenance of overhead and underground power lines and cables.
- (ii) Make and repair joints in overhead and underground power lines.
- (iii) Prepare cable terminations for electrical equipment, overhead and underground power lines.

POWER SYSTEMS

- (i) Installation and maintenance of transformers and its associated switchgears and other accessories.
- (ii) Setting and calibration of protection relays and other protective devices.
- (iii) Maintenance of substation equipment such as transformers, Ring Main Units (RMU), etc.
- (iv) Installation, operation and maintenance of electrical installations in residential, commercial and industrial buildings.
- (iv) Carry out pre-commissioning tests.
- (v) Carry out basic troubleshooting operations on electrical systems and equipment.

INDUSTRIAL SYSTEMS

- (i) Installation, operation and maintenance of electric motors, pumps, compressors, and dryers along with their control panels and protective devices.
- (ii) Installation and maintenance of battery banks and chargers, HVAC systems, DC panels, reactors, capacitor banks, electric furnace, heaters, ovens, boilers, conveyor belts etc.
- (iii) Installation and wiring of isolated standby generating plants along with their ancillary switchgears and change-over switches.

4.2.6 CERTIFICATION REQUIREMENTS FOR CATEGORY C

The minimum qualification/requirements of an applicant under this category are as follows:

- (i) Secondary School or Technical College Certificate with relevant training certificates in any of the skillsets outlined in the 4.2.5 above. Trade Test certificate in Electrical Installation Works (Class I, II & III) will be an added advantage.
- (ii) Should have good knowledge of Nigerian Electricity Supply and Installation Standards (NESIS) Regulation 2015, Health and Safety Code, etc.
- (iii) Should have good interpretation of electrical circuit diagrams.
- (iv) Should have practical knowledge of the use of testing equipment such as Insulation testers, Earth Resistance Tester, Voltmeter, etc.
- (v) Shall have the evidence of proven ability and at least three (3) years of practical field experience in his / her area of skill specialization.

5.0 REQUIREMENTS FOR FOREIGN NATIONALS

- (i) Shall be COREN registered and a copy of the COREN certificate be uploaded/attached to the application form in addition to other relevant documents as it relates to the certification category during the application process for Personnel working in Nigeria.
- (ii) Shall attach a copy of the data page of the international passport.
- (iii) Shall submit all necessary documents including items (i) & (ii) to the Inspectorate Field Office before the scheduled date of the examinations/interviews.

6.0 CONDITIONS FOR UPGRADING TO HIGHER CERTIFICATION CATEGORY

Any certified electrical installation personnel wishing to upgrade from a lower category to a higher category shall satisfy the following conditions:

- (i) Shall have the requisite qualifications and experience for the higher category;
- (ii) Shall have evidence of proven ability on past electrical installation works executed in the lower category;

- (iii) Shall have spent at least three (3) years in the original category issued to him / her;
- (iv) Shall showcase at least five (5) electrical installation works executed by him / her in the lower category to NEMSA electrical inspectors for assessment;
- (v) Shall not have been suspended within the three years in the original category;
- (vi) Shall show documents / evidence of electrical installation works he / she has undertaken.

7.0 CONTINUOUS EDUCATION (CAPACITY BUILDING) FOR CERTIFIED ELECTRICAL INSTALLATION PERSONNEL

Individual Certified Electrical Installation Personnel are required to participate in any related electrical installation conferences, seminars, workshops, or training at least two (2) times in every six (6) years of a validity period of the certification and at least once in every three (3) years of validity period of corporate certification. Certificates obtained from such program will be used as part of requirements for re-certification.

8.0 FEES PAYABLE FOR THE CERTIFICATION AND RENEWAL

The certification and annual renewal fees for each category shall be as stated hereunder:

CERTIFICATION OF ELECTRICAL INSTALLATIONS CONTRACTORS				
S/N	ACTIVITY DESCRIPTION	CERTIFICATION FEE (₦)	ANNUAL RENEWAL FEE (₩)	
	ELECTRICAL INSTALLATION CONTRACTORS' CERTIFICATION			
1	Corporate	100,000.00	50,000.00	
2	Category A	50,000.00	25,000.00	
3	Category B	35,000.00	12,000.00	
4	Category C	15,000.00	5,000.00	
5	Category D	10,000.00	4,000.00	
	ELECTRICAL TE	CHNICAL PERSONNEL CE	RTIFICATION	
1	Category A	50,000.00	25,000.00	
2	Category B	35,000.00	15,000.00	
3	Category C	20,000.00	7,500.00	
RE	NEWABLE ENERGY FO	OR ELECTRICITY GENERA	ATION CONTRACTORS	
1	Corporate	100,000.00	50,000.00	
2	Category I	50,000.00	25,000.00	
3	Category II	35,000.00	12,000.00	
	ELECTRICITY MET	TERING INSTALLATION P	PRACTITIONERS	
CORPORATE CERTIFICATION				
1	Category 1	300,000.00	150,000.00	
2	Category 2	200,000.00	100,000.00	
INDIVIDUAL CERTIFICATION FEES				
1	Category 1	50,000.00	25,000.00	
2	Category 2	30,000.00	10,000.00	

NOTE:

- The fees shown in 8.0 above are subject to review without prior notice.
- Certified electrical personnel shall renew their competency Certificates within Ninety days (90) days of expiration.
- Failure to renew within Ninety days (90) of expiration shall attract an additional 50% of the Renewal Fee.

- All payments shall be made in the form of a bank deposit into the Treasury Single Account (TSA).
- Account Details are shown below:

ACCOUNT NAME/NUMBER:

TSA CBN/NIGERIAN ELECTRICITY MANAGEMENT SERVICES AGENCY via REMITA

8.1 STAMP AND SEAL

Successful applicants (electrical installation contractors) shall be issued a competency certificate and a Seal or a Stamp according to the categories as indicated in the table below:

S/No	Category	Seal / Stamp		
ELEC	ELECTRICAL INSTALLATION CONTRACTORS			
1	Corporate	Seal		
2	А	Seal		
3	В	Seal		
4	С	Stamp		
5	D	Stamp		

9.0 EXEMPTION FROM CERTIFICATION EXAM/INTERVIEW (WRITTEN & ORAL)

Engineers / Technologists who have worked and retired from then NEPA / defunct PHCN / DISCOs / TCN / NEMSA / REA / EISD / STATE REBs etc. and has met the following requirements are exempted from attending certification examination / interviews:

- Possess a minimum of Bachelor's degree/HND or their equivalent in Electrical Engineering from a recognized institution.
- Have worked in a technical capacity and retired at Principal Manager (grade level
 14 and above) or equivalent level from the above stated organizations.
- Have genuine evidence of engagement / disengagement letter from the previous employer.
- Shall be COREN registered

 Present evidence of at least ten (10) electrical installation projects in which he / she participated in their execution/maintenance during the period of service with the previous organization.

NOTE: This category of applicants may apply directly to the Chief Electrical Inspector of the Federation or through the Chairmen of the Certification Panels with all relevant requirements stated above.

10.0 ENFORCEMENT

- NEMSA shall enforce all standards and regulations, provisions of the scheme in accordance with NEMSA Act, 2015.
- Only electrical installations executed by certified corporate organizations / individual electrical installation personnel in the Nigerian Electricity Supply Industry and other allied industries/ workplaces will be put into use, upon satisfactory inspection, test and certification of such installations by NEMSA's Electrical Inspectors.
- All correspondence emanating from certified corporate organizations / individual electrical installation personnel shall bear the stamp/seal.
- Upon completion of any electrical installation work/project, certified corporate
 organizations / individual electrical installation personnel shall have the following
 markings engraved on a nameplate that would be displayed at a visible and
 accessible location on customers' premises or a substation with a view of identifying
 the electrical installation personnel, should the need arise.
 - (i) Certified Electrical Personnel name
 - (ii) Company's Name
 - (iii) Certificate Number
 - (iv) Certificate Category
 - (v) Date of Issue
 - (vi) Date Last Renewed
 - (vii) Date of completion of the Installation
 - (viii) Contact Address, Email and Telephone Number
- Certified corporate organizations / individual electrical installation personnel shall keep signed copies of the following documents in customers' premises after electrical installation work.

- (i) NEMSA Electrical Installation Inspection Certificate;
- (ii) Periodic statutory Inspection Report by NEMSA inspectors.
- (iii) Single line diagram of the wired installation or facility "As Wired Electrical Drawing".
- Such reports and drawings shall be made available to NEMSA Officials on request for inspection, monitoring, investigation and/or enforcement purposes.
- A copy of the "As Wired Electrical Drawing" shall be updated any time the installation is amended or upgraded.
- Periodically, NEMSA shall obtain data of new service connections from distribution utilities and perform random checks on the wiring of the new customers for compliance. If any wiring falls short of safety requirements, the certified electrical installation personnel who endorsed the wiring installation shall be sanctioned. Any distribution utility that connects any premises which has not been certified by NEMSA Field Inspectors shall be sanctioned.
- Only Certified Electrical Technical Personnel shall be allowed to operate, maintain, install / construct electrical installation works / systems in Nigeria.

11.0 DISCIPLINARY MEASURES

If there is a report of misconduct on any certified electrical installation personnel, he / she shall be required to give a written explanation to the Certification Board. Where such certified electrical personnel is unable to produce sufficient justification for the alleged misconduct, the CB shall reserve the right to revoke his / her certificate or take any other necessary action.

11.1 SUSPENSION OF CERTIFICATION

- Any certified electrical personnel who permit an apprentice or his employee to execute any electrical installation work without supervision by him / her shall have his/her Certificate suspended for a period of 6 months.
- ii. Any certified electrical personnel who execute any electrical installation work outside the specified scope of his / her certificate category when discovered shall have his / her certificate suspended for a period of not less than one (1) year.

11.2 WITHDRAWAL OF CERTIFICATION

- i. Where a written complaint / allegation has been made against a certified electrical installation personnel for incompetence or misconduct, he / she shall be required to give a written explanation to the Certification Board. Where such certified electrical installation personnel is unable to produce sufficient justification for the alleged misconduct, the Board shall reserve the right to revoke the Certificate or take any other necessary action.
- ii. Any certified electrical installation personnel that have been suspended twice and found guilty of another offense may have his / her Certificate withdrawn.

NOTE: Notice of Suspension or Withdrawal of a Certificate will be posted on NEMSA Website and/or National Dailies to Protect the Public from engaging such persons.

12.0 REPLACEMENT OF LOST CERTIFICATE

Any certified electrical installation personnel who lose his/her Certificate shall write an application addressed to the MD/CEO & Chief Electrical Inspector of the Federation supported by a sworn affidavit, a photocopy of the lost Certificate, a Police report, two recent passport photographs and payment receipt for a new certificate.

12.1 RENEWAL OF CERTIFICATE

Individual Certificates can be renewed in any of NEMSA Inspectorate Field Offices while renewal of Corporate Certification requires the following process:

- Application letter addressed to the MD/CEO & CEIF submitted at Headquarters or through any NEMSA Inspectorate Field Office with the following documents attached:
 - i. the original copy of the expired corporate certificate;
 - ii. at least three (3) Inspection Certificates issued by NEMSA Inspectorate Field Office and/or Job completion certificates issued for the electrical installation projects/works executed by the company during the period of Certification;
 - iii. Two (2) recent passport photographs (white background, no cap, no sunglasses);
 - iv. Receipt of payment of N50,000.00 (Fifty thousand Naira) renewal fee.

13.0 APPEAL

13.1 DISPUTE RESOLUTION PANEL

The Dispute resolution panel shall be responsible for the resolution of all matters and issues related to appeal of results and recommendations of the CP on the performance of any candidate in the written/oral interviews and the decision of the panel shall be final.

The Dispute Resolution Panel will consist of the following members:

i.	General Manager Legal unit	Chairman
ii.	A representative from Legal unit	Secretary
iii.	A representative from TIS	Member
iv.	A representative from MLSD	Member
٧.	A representative of NSE/COREN	Member

13.2 DISPUTE RESOLUTION PROCEDURE

In the event of a dispute pertaining to the performance of an applicant at the competency examinations, the applicant shall forward a formal appeal / complaint to the MD/CEO & CEIF. The appeal / complaint shall be detailed with all necessary evidence pertaining to the dispute attached.

14.0 TERMS AND CONDITIONS AND CODE OF CONDUCT FOR NEMSA CERTIFIED ELECTRICAL INSTALLATION PERSONNEL

All certified electrical installation personnel are expected to adhere strictly to the following terms and conditions:

- Carry out electrical installation works in accordance with laid down procedures, specifications, technical standards and regulatory requirements and ensuring safety;
- ii. Personally supervise electricity projects / electrical installation works undertaken by him/her;
- iii. Renew their certificate within ninety (90) days after its expiration. Failure to do so will result in penalty fees to be calculated based on how long the certified electrical installation personnel / corporate organization has defaulted;

- iv. Any person who engages in the execution of electrical installation work without a NEMSA issued Competency Certificate shall be prosecuted in the Court of law;
- v. Any Certified Electrical Installation Personnel who demonstrate gross negligence in executing electrical installation that results in injury, loss of lives and / or damage to property shall have his / her Certificate withdrawn and he / she may be prosecuted in the court of law;
- vi. Any applicant who gives false information to obtain a certificate, if found after the issuance of the certificate shall have his / her Certificate withdrawn and he / she may be prosecuted in the court of law;
- vii. Any certified Electrical Installation Personnel / Corporate Organization who is involved in hawking and touting of his/her certificate to certify work not done by him / her will have his / her certificate revoked / withdrawn and he / she may be prosecuted in the court of law.

Please Note: These terms and conditions are subject to change any time.

15.0 NEMSA INSPECTORATE FIELD OFFICES NATIONWIDE (EXAMINATION / INTERVIEW CENTRES)

0 /	-	APITIVALION / IN			F 14 '1	D
S/N	Zonal Office Location	Location/ Address	States/ Covered	Head (IFO)	E-Mail	Phone No.
1.	Abeokut a	Federal Secretariat, P.M.B, 2078, Abeokuta, Ogun, State	Ogun State	Engr. Abubakar Momoh	abubakar.momoh@nemsa.gov.ng	08055235210
2.	Abuja	No. 12 Ezekiel P. Okoya Crescent, 611 Road Off Auwal Anwar Street, Gwarimpa, Abuja, FCT.	FCT & Niger State	Engr. Eja Alobo	eja.alobo@nemsa.gov.ng	07035866004
3.	Akure	Federal Secretariat, P.M.B, 702, Akure, Ondo State	Ondo & Ekiti State	Engr. Adura Tundun	adura.tuntun@nemsa.gov.ng	08064430414 09052389121
4.	Bauchi	Rm 85 & 86, 4 th Floor, Federal Secretariat Complex, Bauchi, Bauchi State	Bauchi & Gombe State	Engr. Edward Micah Maku	micah.edward@nemsa.gov.ng	08034644000
5.	Benin	Federal Secretariat Complex, Opposite Aduwawa Quarters, P.M.B, 1319, Benin City, Edo State	Edo & Delta State	Engr. Jimoh A. Quadry	jimoh.quadry@nemsa.gov.ng	08033519956
6.	Enugu	33 Abakaliki Road, GRA, Enugu, Enugu State	Anambra, Enugu & Ebonyi State	Engr. Nelson Obiukwu	osita.obiukwu@nemsa.gov.ng	08059687499 07031317412
7.	Ibadan	Ministry of Energy Building, Beside NITEL Hqs, Inside Oyo State Secretariat, Agodi P.M.B 5028, Ibadan, Oyo State	Oyo & Osun State	Engr. Sakariyau Bamidele	sakariyau.bamidele@nemsa.gov.ng	07032276293
8.	Ilorin	Sir Kashim Ibrahim Road, Behind Governors House, P.M.B, 1580, Ilorin Kwara State	Kwara & Kogi State	Fayose Bamidele Olusola	olusola.fayose@nemsa.gov.ng	08033683492
9.	Jos	Club Road, P.M.B, 2099, Jos, Plateau State	Plateau, Benue, & Nassaraw a State	Kalu Ochu Ikpo	kalu.ikpo@nemsa.gov.ng	08037442084
10.	Kaduna	6, Yakubu Gowon Way, Hospital Road, P.M.B, 2119, Kaduna, Kaduna State.	Kaduna State	Baba David Danlami	david.baba@nemsa.gov.ng	08065399466

11.	Kano	Federal Secretariat, P.M.B, 3477, Kano, Kano State	Kano, Jigawa & Katsina State	Engr. Muktar M. Abbas	abbas.muktar@nemsa.gov.ng	08034644000
12.	Lagos – Eko Area	Glass House, Block D FMW&H Premises, TBS, Moloney Sreet, Lagos State.	Lagos State (Eko)	Engr. Salami Afeez Oladokun	salami.oladokun@nemsa.gov.ng	07068881040
13.	Lagos – Ikeja Area	NMTS (Oshodi) Alasia Bus Stop, Agege Motor Road, Near YTK Petrol Station.	Lagos State (Ikeja)	Mr. Oyinlade Adewale	adewale.oyinlade@nemsa.gov.ng	08034417901
14.	Maidugu ri	3, Lake Chad Nurs. Near Lake Chad, P.M.B, 1032 Maiduguri, Borno State	Borno & Yobe State	Mr. James Bata Sani	james.sani@nemsa.gov.ng	08099640301
15.	Owerri	Behind FERMA, Federal Secretariat Complex, Owerri, P/H Road, Owerri, Imo State	Imo & Abia State	Engr. Gerald Ene	gerald.ene@nemsa.gov.ng	08161330625
16.	Port Harcourt	21 NPA Road, Port Harcourt, Rivers State	Rivers & Bayelsa State	Engr. Mrs. Jamila Yusuf	jamila.yusuf@nemsa.gov.ng	08035750837
17.	Sokoto	EIS Building Complex, Near Kangiwa Square P.M.B, 2291, Sokoto, Sokoto State	Sokoto, Kebbi & Zamfara State.	Baba Machina M.	baba.machina@nemsa.gov.ng	08034480787
18.	Uyo	Federal Secretariat Complex, Abak Road, Uyo, Akwa-Ibom State	Akwa Ibom & Cross River State	Engr. Abdulrahm an I. Igetsi	abdulrahman.igetis@nemsa.gov.ng	08030695738 07059914366
19.	Yola	29a, Mubi Road, P.M.B 2094, Yola – Adamawa State	Taraba & Adamawa State	Ntuen Ekpontuen Anthony	anthony.ntuen@nemsa.gov.ng	08037039351

15.1 NEMSA CORPORATE HEADQUARTERS

No. 4 Dar es-Salaam Crescent

Off Dar es-Salaam Street

Off Aminu Kano Crescent

Wuse II, Abuja.

E-mail: info@nemsa.gov.ng: Website: www.nemsa.gov.ng

Tel: +234 (0) 7068681566

BIBLIOGRAPHY

- 1. The NEMSA Act 2015
- 2. Nigeria Metering Code Version 02, 2014.
- 3. Nigerian Electricity Smart Metering Regulations 2015
- 4. Nigerian Electricity Supply Industry Standard (NESIS) 2015.
- 5. CAP 106
- 6. Nigerian Industrial Standard (NIS)/International Electrotechnical Commission (IEC).
- 7. The Nigeria Electricity Health and Safety Code, 2014.
- 8. Nigerian Electricity Smart Metering Regulations, 2015.
- 9. Grid Code -Version 03
- 10. Distribution Code for the Nigeria Electricity Distribution System Version 02
- 11. The Mini-Grid Regulations, 2016.
- 12. The Electrical Installation Regulations S.I.5 and Electricity Supply Regulations S.I.6 1996.
- 13. Technical guidelines for Inspection of Concrete Pole Manufacturers.
- 14. Technical guidelines for Inspection of Factories, Commercial and Hazardous locations.
- 15. Guideline and Procedures for Certification of Electrical Installation Contractors in Nigeria
- **16.** Guidelines and Procedures for Certification of Electricity Metering Installation Personnel in Nigeria
- 17. Nigerian Electrical Installation and Construction Guidelines Manual for the Distribution Sub Sector. Produced and published on *11th February 2020* (Volume 1,2,3,4 & 5).
- 18. The Guidelines for Electrical Inspectorate Services and Enforcement Procedures in Nigeria.
- 19. Guidelines for Inspection of Solar Mini-grids in Nigeria.
- 20. Meter Asset Provide and National Mass Metering Regulations
- 21. Market Rules 2014

ACRONYM

AC Alternating Current.

AIE Area Inspecting Engineer.

ARECON Association of Rural Electrification Contractors of Nigeria.

B1B2 Blue 1 Blue 2.

B.Eng Bachelor of Engineering.

B.Sc Bachelor of Science.

CAC Corporate Affairs Commission.

CEO Chief Executive Officer.

CEIF Chief Electrical Inspector of the Federation.

COREN Council for the Regulation of Engineering in Nigeria.

CS Certification Scheme

DC Direct Current.

DISCOs Distribution Companies.

ECN Energy Commission of Nigeria.

EHV Extreme High Voltage.

EISD Electrical Inspectorate Services Department.

GM General Manager.

GENCOs Generation Companies.

HND Higher National Diploma.

HV High Voltage

HVAC Heat Ventilation and Air Conditioning.

IFO Inspectorate Field Office.

KVA Kilovolts Ampere.

KW Kilowatt.

LECAN License Electrical Contractors Association of Nigeria.

LV Low Voltage.

MLSD Metering & Laboratory Services Department.

MD Managing Director.

M_X**D** Maximum Demand.

N1N2 Neutral Input, Neutral Output.

NABTEB National Business & Technical Board.

NEMSA Nigerian Electricity Management Services Agency.

NESI Nigeria Electricity Supply Industry.

NESIS Nigerian Electricity Supply Industry Standard.

NMTS National Meter Test Station.

NSE Nigerian Society of Engineers.

P-N-N-P Positive – Neutral – Neutral – Positive.

PV Photovoltaic

R1R2 Red 1 Red 2.

REA Rural Electrification Agency.

REAN Renewable Energy Association of Nigeria.

RSC Regulatory Safety & Certification.

SON Standard Organization of Nigeria.

TCN Transmission Company of Nigeria.

TIS Technical Inspectorate Services.

TSA Treasury Single Account.

Y1Y2 Yellow 1 Yellow 2.

APPENDIX I: Amendment (Log) History – Certification Scheme

Amendment (Log) History - Certification Scheme

Section	New Issue No	Issue Date	Description of Change	Authorization
Bibliography	02	January 2023	The list of the books referred to while producing the certification scheme.	Reju.
	9.			

APPROVAL STATUS

Prepared by: **Date Signature** HOD January 2023
Date Reviewed by **Signature** Fanuary 2023 **ISO COORDINATOR** Approved/ Authorized by **Date Signature** Jan-2023 MD/CEO & CEIF **Revision Status: 01** Date of Issue: **JANUARY 2023** Issue Number: 02 **Document Number: NEMSA/CS/02/2023**

