Adoption of Electricity Distribution Infrastructure in Development Projects

Guide Ref. [EDD/ESS/GD-06]

Edition 1.0

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Citation

This guide can be cited as “Adoption of Electricity Distribution Infrastructure in Development Projects”.

Reference Code

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Commencement

This guide will come into operation upon approval by the Electricity Distribution Directorate (EDD). Existing approvals executed under previous requirements are exempt from the additional provisions herein.

Notice

Written notices may be circulated to provide convenient explanations; however, these notes are not part of this guide.

Amendments and Cancellation

This guide is subject to amendments and cancellation at any time.

Special Situations

For special situations not covered by this guide, written advice must be sought from the Electricity Distribution Directorate (EDD).

Deviations

Any intention to deviate from this guide must be justified in writing to the Electricity Distribution Directorate (EDD) for approval or denial. Further action must be withheld until written approval is received.

Violations

In case of any violation of the provisions of this guide, the Electricity Distribution Directorate (EDD) will not be responsible for any delay in connecting the service to the Project.

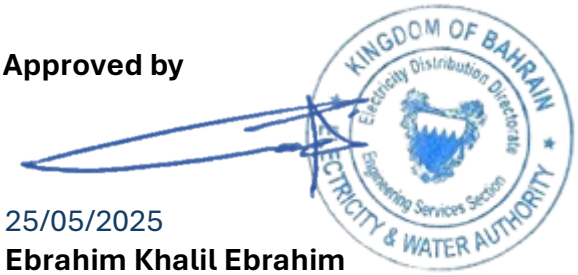
Availability

The latest version of this guide can be found at the Electricity & Water Authority official website https://www.ewa.bh.

Reference

In the event of discrepancy between this guide and other regulations or standards adopted by the Kingdom of Bahrain, the latter shall always take precedence.

Approved by



25/05/2025
Ebrahim Khalil Ebrahim
Director, Electricity Distribution

Need Help with Service Guide?
Scan/Click on the QR code to submit your inquiry or request a meeting for further clarification. Our team will respond within 3 working days.

Preface

The Electricity and Water Authority (EWA) is pleased to present this comprehensive guide for the adoption of electricity distribution infrastructure in development projects. This document is the result of a collaborative effort between various directorates within the Authority, as well as valuable input from the stakeholders. Our goal in creating this guide is to foster a clearer, more efficient, and mutually beneficial process for infrastructure adoption. We recognize the critical role that streamlined procedures play in facilitating the Kingdom's growth and development. This guide represents a significant step towards enhancing communication and ensuring that all parties are aligned in their understanding of the requirements and processes involved. We believe that by working together, we can build a stronger, more resilient electricity infrastructure for the Kingdom of Bahrain. We welcome your feedback as we continuously strive to improve our services and processes.

Published by:

Electricity and Water Authority, Kingdom of Bahrain

Edition 1.0 [2025]

Definitions

Unless the context in this guide otherwise requires, any word, expression and abbreviation shall have the following meaning:

Applicant	An entity authorized, as specified within this guide, to apply for **EDD** approvals, clearances, and permissions, either directly or through designated entities.
Asset Type Attestation	Formal acceptance by the **Engineering Services Section** of the proposed **Equipment** types, attesting to their compliance with **EDD's** applicable standards and specifications.
Approved Source	Manufacturer, or supplier that has successfully completed **EDD Pre-qualification** and type approval process, to supply equipment and material for use in the **Distribution System**.
Approved Type	**Equipment** type approved in writing by the **EDD** for use in its **Distribution System**.
Completion Certificate	A formal document issued by **EDD**, certifying that the **Development Infrastructure** is completed in accordance with contract terms.
Construction Section	Section under **EDD**; responsible for inspecting the execution of site construction works.
Central Planning Office (CPO)	Under Ministry of Works, coordinates the planning and implementation of all public infrastructure projects across the public sector as well as major industries.
Council for Regulating the Practice of Engineering Professions (CRPEP)	License all engineering offices and all engineers in the **kingdom**, according to Law No (51) for 2014 with respect to Regulating the Practice of Engineering Professions.

Distribution Control Center (DCC)	Unit under **Maintenance and Operations Section**; plans and executes plant outages and commissioning requests.
Defect Clearing Certificate	A formal document issued by the **Developer Site Supervisor**, certifying that the notified under-warranty defects are satisfactorily cleared by the contractor or supplier.
Developer	The owner of the property or any representative authorized in writing to act on their behalf, whether natural or legal, who benefits from the infrastructure services.
Developer Site Supervisor	A firm licensed by **CRPEP** to practice engineering in the electrical field, approved by **EDD** and appointed by the **Developer** to supervise site construction works of **Development Infrastructure**.
Development Project	Investment and real estate development projects undertaken by both the public and private sectors.
Development Infrastructure	The electricity distribution infrastructure within a **Development Project**, developed at **Developer** expense, and adopted by the **Authority** in compliance with applicable regulations and standards.
Distribution HV Customer	Any distribution customer, including prospective customers, whose premise is supplied at 11kV via **EDD's Distribution System** or **ETD's** 11kV switchgear.
Distribution System	The 11kV and lower voltage distribution system owned by the **EDD**, including public street lighting network.
Electricity Distribution Directorate (EDD)	Directorate under **EWA**; responsible for the development, operation, and maintenance of the **Distribution System**.

EDD Pre-qualification	The process by which suppliers and contractors are assessed to provide equipment and services, in accordance with Decision No. (1) of 2020, Concerning the Prequalification of Suppliers and Contractors.
Endorsements	Outstanding items not affecting the safe and reliably energization of the **Plant**.
Endorsement Cancellation Certificate	A formal document issued by the **Developer Site Supervisor**, certifying the completion of all **Endorsements** listed in the **Take-over Certificate** and the commencement of the maintenance warranty for those items.
End of Maintenance Period Certificate	A formal document issued by the **Developer Site Supervisor**, certifying the successful completion of the warranty as per contract terms, and signifying the end of the maintenance period.
Engineering Office	A firm licensed by **CRPEP** to practice engineering in the electrical field, approved by **EDD** and appointed by the **Developer** to prepare engineering designs for **Development Infrastructure**.
Engineering Services Section	Section under **EDD**, ensures compliance of adopted assets with applicable standards and specifications.
Equipment	Intended for use in the **Development Infrastructure** that is eligible for asset adoption compliance, as classified in the List of Applicable Equipment Appendix C.
Electricity Transmission Directorate (ETD)	Directorate under **EWA**; responsible for the operation, and maintenance of the Electricity Transmission System.
EWA/Authority	Electricity and Water Authority, Kingdom of Bahrain.
Kingdom	The Kingdom of Bahrain.

Maintenance and Operations Section	Section under **EDD**; responsible for planning and execution of **Plant** outages and commissioning.
Memorandum of Understanding (MoU)	Defines the rights, obligations, and responsibilities of the **Authority** and the **Developer** with respect to providing electricity service connection to the **Development Project**.
MTC Contractor	A contractor prequalified by the **Authority** under a Measured Term Contract (MTC) and appointed by the **Developer** to construct the **Development Infrastructure**.
Network Design Approval	Formal acceptance by the **Planning Section** of the proposed network design, verifying its compliance with applicable standards and guidelines.
Electricity Planning & Projects Directorate (EPPD)	A directorate under the **Authority**; responsible for overseeing the development of the Electricity Transmission System.
Planning Permission	The first stage of infrastructure implementation permits, required to secure approval for utility corridor designs from relevant **Service Entities**.
Planning Section	Section under **EDD**; ensures compliance of proposed engineering designs with applicable standards and guidelines.
Plant	High Voltage (6.35/11kV) section of the constructed **Development Infrastructure,** following **Safety Clearance Certificate issuance**.
Pre-Commissioning Notification	A formal document issued by the **Developer Site Supervisor** and **Construction Section**, declaring a **Plant's** successful completion of pre-commissioning and its readiness for commissioning.

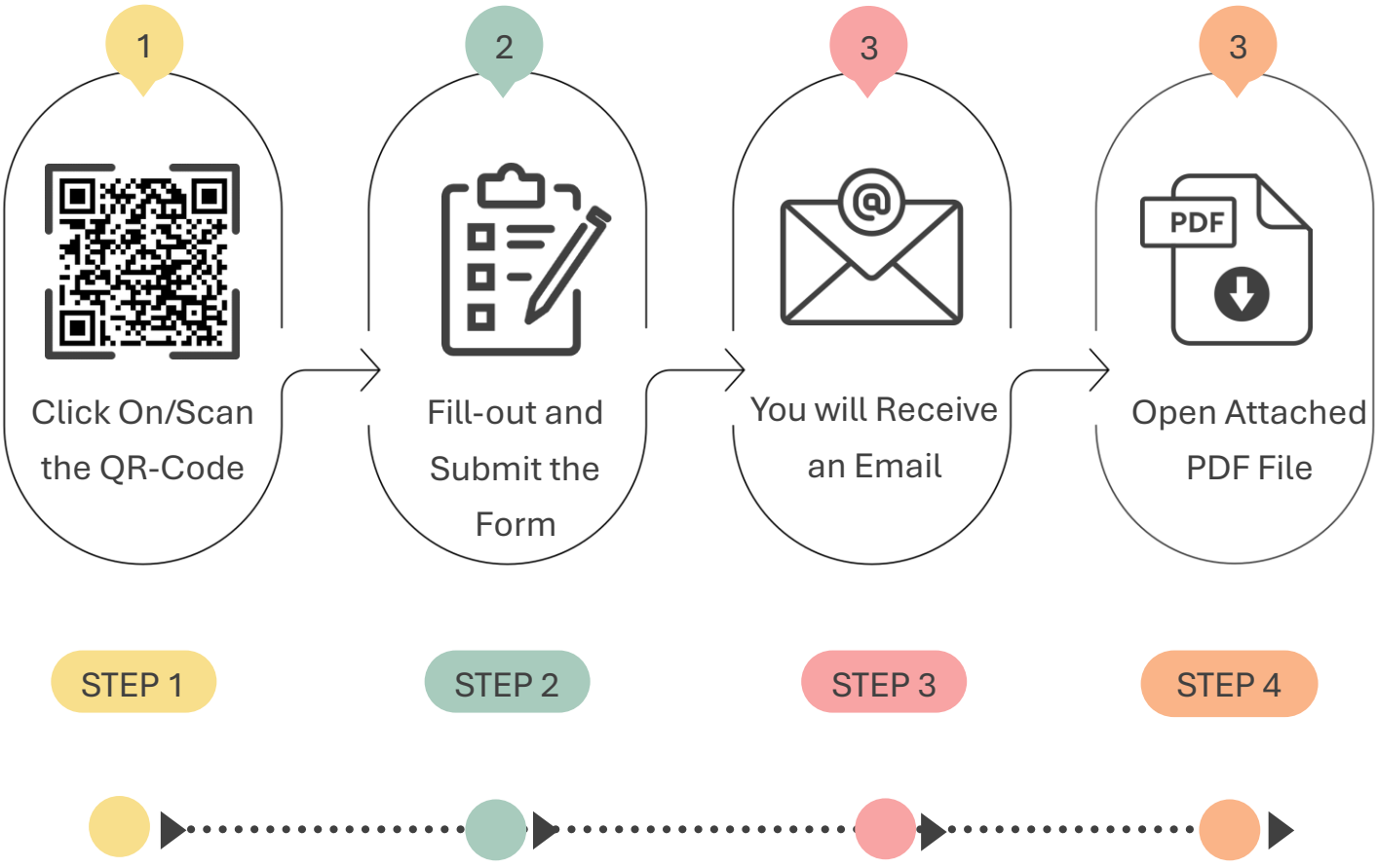
Safety Clearance Certificate	A formal document issued by the **Developer Site Supervisor,** certifying that from specific date and time that a **Plant** is subject to the **Authority's** Safety Rules (SOP S001).
Safety Document	Formal document issued by the **Authority** authorized personnel to declare a safe **Plant** for work or testing, specifying limits, nature, precautions, and other particulars.
Service Entities	Governmental or semi-governmental entities responsible for providing essential utility and infrastructure services within the **Kingdom**.
Site Delivery Clerance	Formal acceptance by the **Engineering Services Section** of the delivered **Equipment**, verifying adherence to the granted **Asset Type Attestation** and confirming its new and sound condition.
Take Over Certificate	A formal document issued by the **Developer Site Supervisor**, certifying the successful completion of work according to the contract terms, and signifying the start of the maintenance period.
Urban Planning & Development Authority (UPDA)	Under Ministry of Housing, oversees comprehensive land planning to achieve sustainable urban development for the Kingdom of Bahrain.
Wayleave	The second stage of infrastructure implementation permits, necessary to obtain clearance for site excavation activities.

LAUNCH OF E-CHANNEL TO ACCESS UP-TO-DATE APPROVED SUPPLIERS LIST

In our ongoing commitment to enhance communication and foster seamless collaboration with our valued stakeholders, we have launched the 'Approved Suppliers for Project Adoption' e-Channel. This platform is designed to provide you with instant access to the most up-to-date list of approved suppliers, streamlining the supplier selection process for your critical projects, and ultimately facilitates a more efficient partnership in delivering successful projects to **Electricity and Water Authority (EWA)**.

HOW TO USE THE E-CHANNEL

For a walkthrough of the e-Channel's user-friendly query submission process, please refer to the below flow chart:



Related References

- **Ministerial Decision No. (13) of 2006**, with respect to the regulations of charges for the delivery of electricity and water services.
- **Ministerial Decision No. (788) of 2024,** amending some provisions of the executive regulations of Decree Law No. (3) of 1994 concerning the subdivision of lands designated for development, issued by Decree No. (56) of 2009.
- **Tender Board Decision No. (1) of 2020**, Concerning the Prequalification of Suppliers and Contractors.
- **Central Planning Office Guidebook of 2024,** Guide for Implementing Secondary Infrastructure Works in Master Development Plans.
- **EWA Standards,** Measured Term Contract (MTC 2024)
- **EDD Standard,** Classification of Service Conditions for Supply of Equipment/Materials (EDD 721-0-0: 2024)
- **EDD Standard,** Safety Rules (SOP S001)
- **EDD Standard,** Bringing New Plants into Service (SOP A008)
- **EDD Standard,** Electricity Distribution High Voltage Customers (SOP N005)
- **EDD Standard,** Procedure for Outage of Plant in EWA Power and Water System (SOPA009).
- **EDD Standard,** Technical Compliance Requirements for Electricity Distribution Network Components and Equipment (S-7000)
- **EDD Guide,** Guidelines for Material Classification (EDD/ESS/GD-04)
- **EDD Guide,** Guidelines for Pre-qualifications of Manufacturers (EDD/ESS/GD-02)
- **EDD Guide,** 11 kV Customer Guidelines (EDD-01)
- **EDD Guide,** Guidelines for Distribution Automation (EDD-02)
- **EDD Guide**, Guidelines for Data Submission in CAD Format (EDD-03)

Table of Contents

1.0 Background

Driven by the Kingdom of Bahrain's Economic Vision 2030, and in alignment with the directives of His Majesty King Hamad bin Isa Al Khalifa and His Royal Highness Prince Salman bin Hamad Al Khalifa, Crown Prince and Prime Minister, the **Electricity and Water Authority (EWA)** is committed to enhancing the **Kingdom's** competitiveness by ensuring sustainable services with utmost quality, efficiency, and reliability.

Recognizing the crucial role of modern and resilient infrastructure in supporting urban development and the economic growth of the **Kingdom**, the **Authority** is dedicated to meeting increasing demand through strategic investments and the development of new facilities, as articulated in the Energy Transition Plan, targeting carbon neutrality by 2060. A key element of this strategy is fostering strong public-private partnerships to support the **Kingdom's** continued progress and prosperity through the efficient and sustainable development of its electricity infrastructure.

2.0 Scope of Application

Building upon this strategic direction, this guide establishes a comprehensive framework for the development and adoption of electricity distribution infrastructure within a **Development Project**. It outlines all stages of the process, from urban consultations and contractual agreements to network planning and design, asset compliance, site construction, plant integration, project completion and handover. The infrastructure is developed at the **Developer's** own expense and is ultimately intended to be handed over to the **Authority**. To this end, the guide specifies the requirements and processes necessary for efficient infrastructure development, ensuring compliance with relevant regulations and standards enforced in the **Kingdom**, including the following:

- **Ministerial Decision No. (13) of 2006,** with respect to the regulations of charges for the delivery of electricity and water services. (1)
- **Ministerial Decision No. (788) of 2024,** amending some provisions of the executive regulations of Decree Law No. (3) of 1994 concerning the subdivision of lands designated for development, issued by Decree No. (56) of 2009.

This guide applies to all stakeholders involved in the infrastructure development and adoption process, including **Developers**, **Engineering Offices**, contractors, and suppliers. However, it does not cover the service connection process, defined as connecting customer premises to the **Authority's** distribution system.

(1) The **Authority** is currently revising Ministerial Decision No. (13) of 2006 regarding charges for electricity and water services. The MoU will detail all terms for electricity service provision.

3.0 Authority's Powers

3.1 In the event of any conflict or ambiguity in the interpretation of this guide, the interpretation of the **Authority** shall prevail.

3.2 The **Authority** reserves the right to refuse or discontinue the electricity supply in the event of a customer's failure to comply with any regulatory requirements or conditions specified in this guide.

3.3 The **Authority** retains the right to establish, amend, and update the technical standards and specifications for electricity distribution infrastructure. The **Developer** shall comply with the latest version of these standards.

3.4 The **Authority** may amend this guide from time to time. The **Developer** shall comply with the latest version of the guide.

3.5 The **Authority** shall be consulted at the earliest stages of project initiation to establish its requirements for project adoption.

3.6 The **Authority** shall have the right to review engineering design drawings, and assess the adopted assets' compliance with applicable standards and specifications.

3.7 The **Authority** shall have the right to access the **Development Project** at all reasonable times for the purposes of inspection and ensuring compliance.

3.8 The **Authority**, at its discretion, may conduct or delegate independent inspection, testing, and audit of the **Development Infrastructure** to a third-party testing agency, at the **Developer's** expense, to verify compliance.

3.9 The **Authority** shall have the power to suspend any or all work related to the adoption of the **Development Infrastructure** if, in its reasonable opinion, there is a risk to public safety or the integrity of the electricity network.

3.10 The **Developer** shall indemnify and hold the **Authority** harmless from any and all claims, losses, damages, liabilities, costs, and expenses arising from or in connection with the **Developer's** failure to comply with this guide or any applicable regulations and standards.

3.11 Upon successful adoption of the **Development Infrastructure**, the **Authority** shall assume responsibility for the operation and maintenance of the infrastructure.

3.12 In the event of an emergency affecting the stability or safety of the electricity network, the **Authority** shall have the power to take immediate action, including, but not limited to, disconnecting supply, without prior notice to the **Developer**.

3.13 The **Authority** reserves the right to expand or modify the adopted **Development Infrastructure** as deemed necessary to meet future electricity demand.

4.0 Applicant Obligations

4.1 The **Applicant** shall be thoroughly conversant with all applicable regulations and standards and shall ensure full compliance therewith throughout the project.

4.2 The **Applicant** shall submit all inquiries, and meeting requests for further clarifications related to this guide through the e-Channel 'Partner Services Support'.

4.3 The **Applicant** shall provide all necessary information and documentation to demonstrate compliance with all applicable regulations, and standards.

4.4 The **Applicant** shall ensure that all provided information is accurate, relevant, correct, and complete, and that all submitted documents are true, authentic, and not falsified.

4.5 The **Applicant** shall not hold the **Authority** liable for any costs, expenses, or liabilities arising from errors or omissions in the application.

4.6 The **Applicant** shall maintain the confidentiality of all non-public information received during the application and approval process.

4.7 The **Applicant** shall adhere to the relevant application submission instructions published on the 'Project Adoption Webpage'.

4.8 The **Applicant** shall ensure the applicable service request form available on the 'Project Adoption Webpage' is filled out as per relevant instructions.

4.9 The **Applicant** shall submit all documents in the format and through the designated channels specified on the 'Project Adoption Webpage'. This may include electronic submission or physical submission, as applicable.

4.10 The **Applicant** shall respond promptly and completely to any queries or requests for clarification from the **Authority** regarding the application.

4.11 The **Applicant** shall ensure that any amendments to the submitted application must be made in writing and may be subject to additional review and processing time.

4.12 The **Applicant** may withdraw their application at any time by providing written notice to the **Authority**.

4.13 The **Applicant** shall designate a single point of contact for all application-related communications and shall promptly notify the **Authority** in writing of any changes to the **Applicant's** legal name, address, or other relevant contact information.

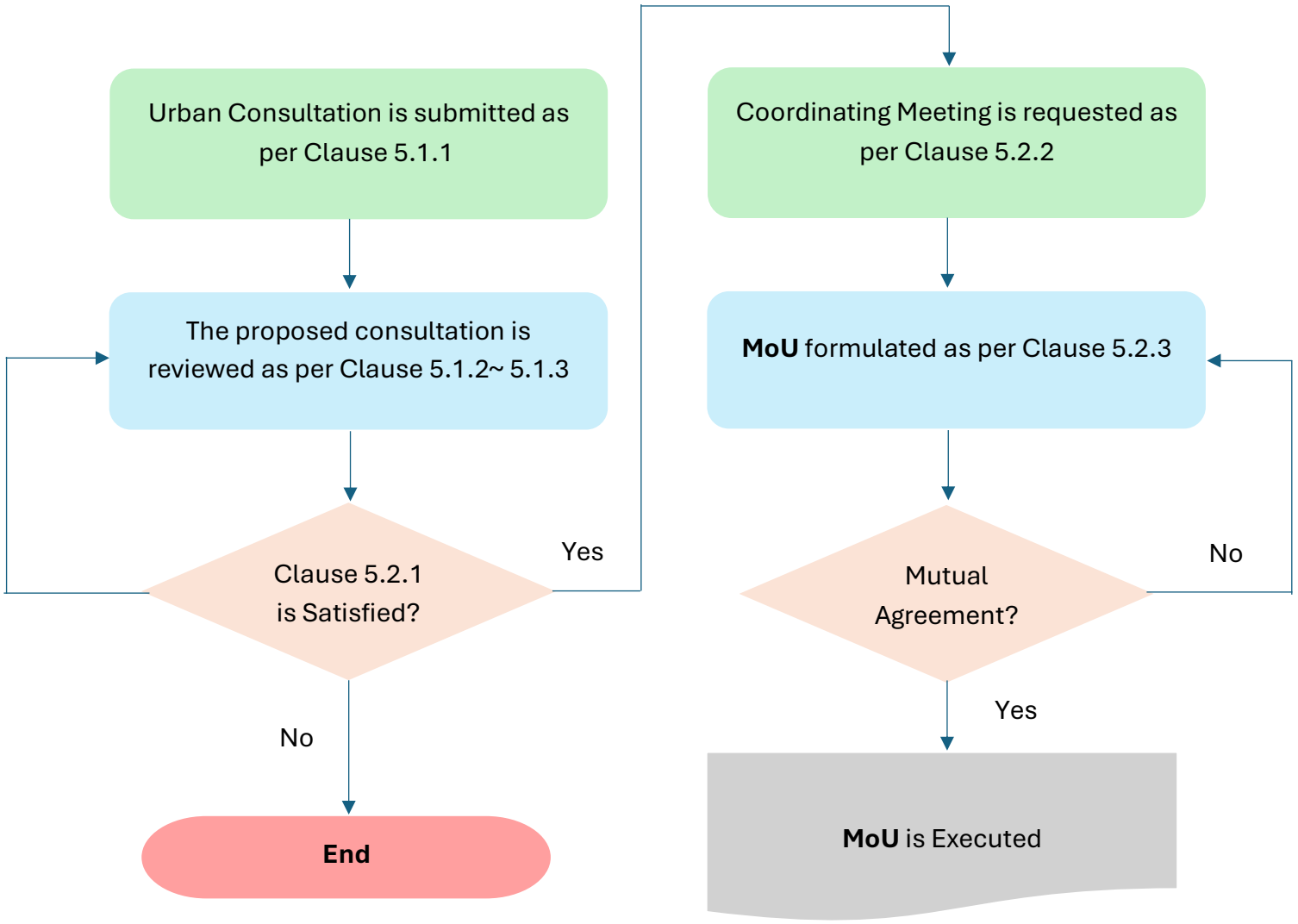
4.14 The **Applicant** shall present approvals in their entirety, without omissions, upon request.

4.15 The **Applicant** shall retain all relevant information and documents for a period of five (5) years following the date of approval.

4.16 These provisions constitute the agreement between the **Authority** and the **Applicant** and supersede all prior or contemporaneous communications and proposals, whether oral or written.

5.0 Consultations and Agreements

5.0.1 This process, illustrated in Flow Chart No. 1, establishes clear communication and formal agreements between the **Developer** and the **Authority**, defining the preliminary provisions for the electricity service connection. These agreements are formalized through urban consultations and, where necessary, the execution of a **Memorandum of Understanding (MoU)**.



Flow Chart No.1: Consultations and Contractual Agreements Workflow

5.1 Urban Consultations

5.1.1 The **Developer** shall submit the following urban consultations to the **Urban Planning and Development Authority (UPDA)** according to their website's submission instructions:
- Masterplan: A comprehensive, long-term development plan for large-scale, multi-use urban projects undertaken by the public and private sector.
- Subdivision: The division of a single plot of land into multiple smaller plots, adhering to applicable zoning and land subdivision regulations, which may include new road infrastructure planning.

5.1.2 Upon submission, the **Urban Planning and Development Authority (UPDA)** will circulate these consultations to all relevant **Service Entities** to gather their preliminary requirements. The **Developer** must fulfill these requirements to obtain initial approval.

5.1.3 The **Authority** will study the consultation and provide the preliminary service connection provisions, ensuring compliance with applicable regulations and standards.

5.2 Contractual Agreements

5.2.1 The **Developer** shall execute a formal **Memorandum of Understanding (MoU)** with the **Authority** in case the estimated total load for the project exceeds 12 MVA.

5.2.2 Following the **Urban Planning and Development Authority (UPDA)** approval of the development masterplan, the **Developer** shall submit a written request to the **Authority** for a coordination meeting to present the project overview and discuss the service connection provisions, along with the submittals listed in Appendix A.

5.2.3 The **Authority's** coordination committee will collaborate with the **Developer** to establish the **MoU**, an agreement that defines the rights, obligations, and responsibilities of both parties concerning the financing, planning, execution, and handover of electricity infrastructure within the **Development Project**, in accordance with applicable **Electricity Planning & Project Directorate (EPPD)** standards and guidelines.

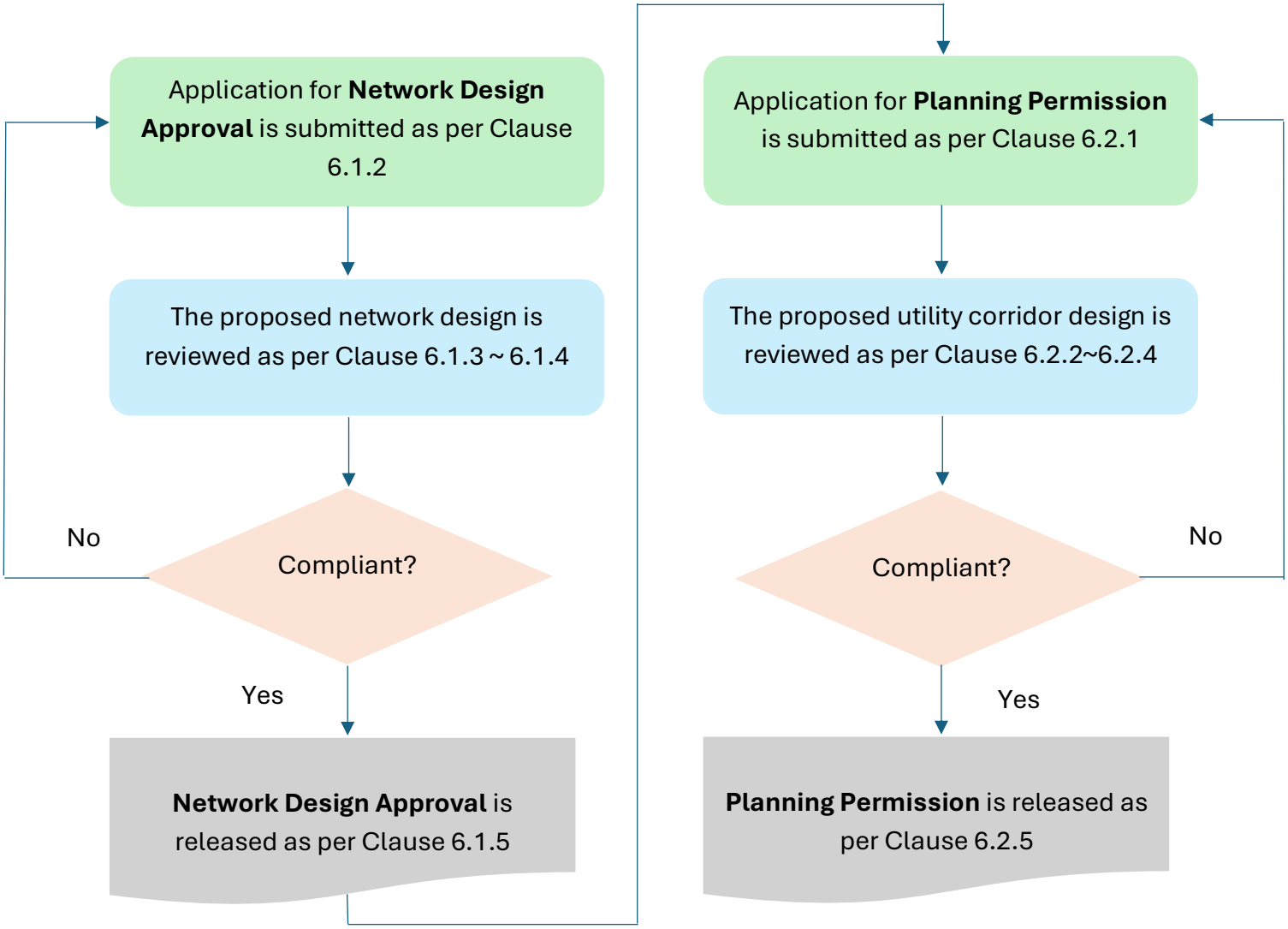
5.2.4 Upon signing the **Memorandum of Understanding (MoU)**, the **Authority** will issue an official letter that includes the Terms of Reference (ToR) for required consultancy services, as specified within the **MoU**. The **Developer** is then responsible for initiating the consultant appointment process to commence design activities.

6.0 Network Planning and Design

6.0.1 Upon the execution of contractual agreements with the **Authority**, and other relevant entities, the **Developer** shall appoint an **Engineering Office** to proceed with engineering designs and secure the required approvals and permissions from relevant **Service Entities**.

6.0.2 The **Engineering Office** shall be licensed by **CRPEP** to practice engineering in electrical field and approved by **EDD** to prepare engineering designs for **Development Infrastructure**. The up-to-date lists of **CRPEP** licensed firms are available at their website 'Licensees Data Webpage'.

6.0.3 The process illustrated in Flow Chart No. 2 ensures that network design adheres to the highest standards of supply security and optimization.



Flow Chart No.2: Network Planning & Design Workflow

6.1 Network Design

6.1.1 The **Engineering Office** may request a meeting with the **Planning Section** via our e-Channel 'Partner Services Support' prior to commencing the network design process, where the Appendix B submittals shall be provided in soft copy.

6.1.2 The **Engineering Office** shall apply for **Network Design Approval**, by submitting required documents listed in Appendix B, in accordance with the submission instructions on the 'Project Adoption Webpage'.

6.1.3 The proposed network design shall be aligned with the approved development masterplan or subdivision.

6.1.4 In the case of prospective **Distribution High Voltage Customers**, the **Engineering Office** shall adhere to the Single Line Diagram Approval requirements as specified in the **EDD** standard '11 kV Customer Guidelines (EDD-01)'.

6.1.5 Upon receipt of a complete application, the **Planning Section** will review the submission and communicate its decision within six (6) weeks. The decision will be either a request for resubmission with specified revisions or release a formal **Network Design Approval** with stamped network design drawings. (2)

6.2 Utility Corridor Design

6.2.1 Following **Network Design Approval**, the **Engineering Office** shall apply for **Planning Permission** through the **Central Planning Office** (**CPO)**, by submitting required documents specified in Appendix B.

6.2.2 Upon submission, the **Central Planning Office** (**CPO)** will circulate these consultations to all relevant **Service Entities** through to gather their comments.

6.2.3 The proposed utility corridor design must strictly align with the approved network design drawings.

6.2.4 Upon receipt of a complete application, the **Engineering Services Section** will circulate the submission among concerned sections and communicate the comments within nine (9) days. This response may include a request for resubmission with specified revisions, or a request for one or more of the following: a Letter of Commitment, a Site Visit, or a Virtual Meeting.

6.2.5 Upon completion of all required approvals within the system, the **Central Planning Office (CPO)** shall release the **Planning Permission** and provide a stamped copy of the associated engineering design drawings. This permission authorizes the **Engineering Office** to apply for Wayleave.

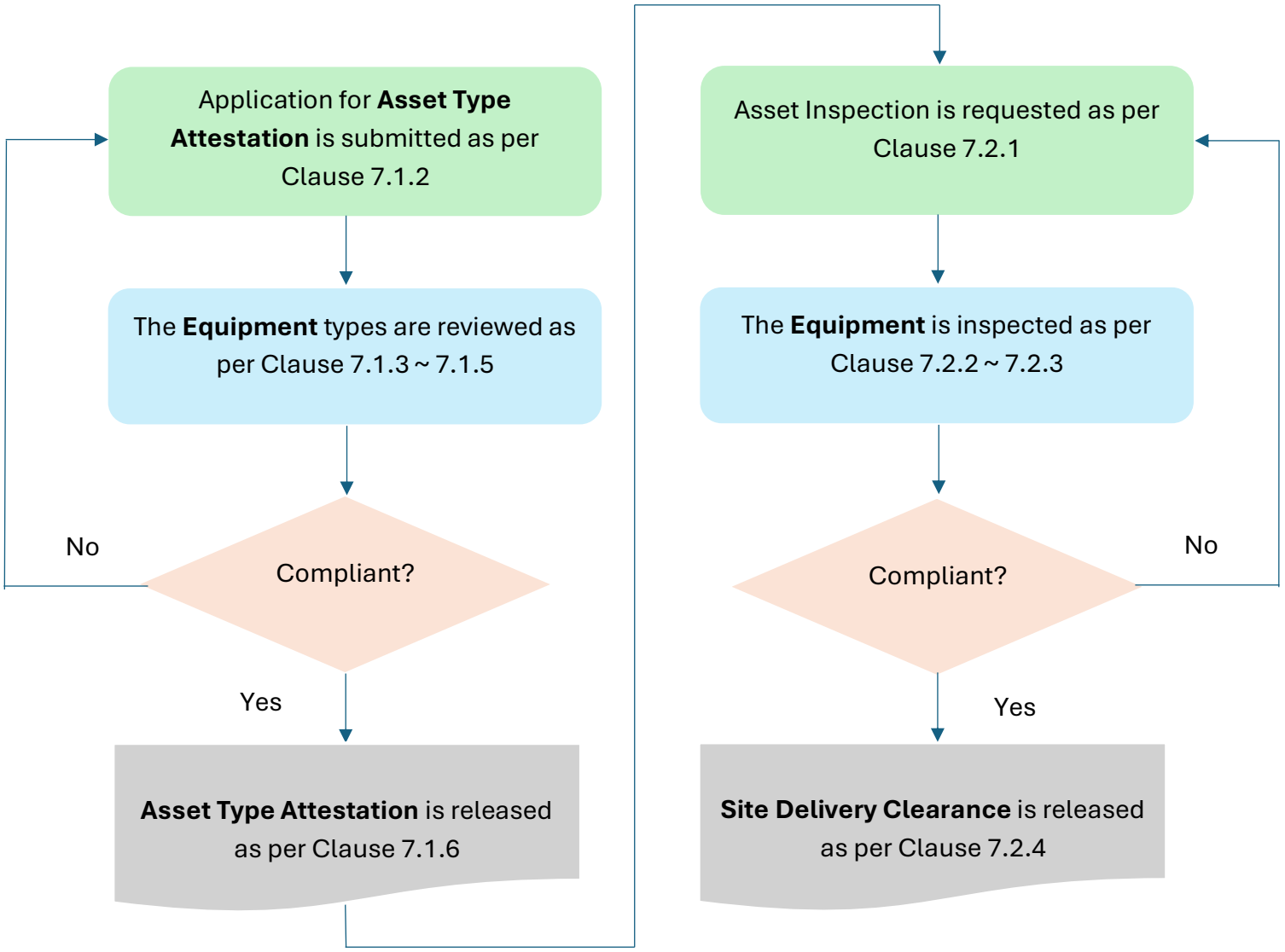
(2) The proposed network design drawings are internally routed to the **Distribution Control Centre (DCC)** and **Construction Section** for review and approval.

7.0 Asset Adoption Compliance

7.0.1 Upon **Network Design Approval** release, the **Developer** is responsible for procuring the **Equipment** and materials required for the construction of the **Development Infrastructure** from **Approved Sources**.

7.0.2 The up-to-date list of **Approved Suppliers** is available via our e-channel 'Approved Suppliers for Project Adoption'.

7.0.3 The process illustrated in Flow Chart No. 3 ensures optimal asset performance in terms of safety, efficiency, and reliability.



Flow Chart No.3: Asset Adoption Workflow

7.1 Type Attestation

7.1.1 The **Engineering Office** may request a meeting with the **Engineering Services Section** via our e-Channel 'Partner Services Support' prior to commencing the **Equipment** procurement process.

7.1.2 The **Engineering Office** shall apply for **Asset Type Attestation** by submitting the required submittals listed in Appendix C, in accordance with the submission instructions published on the 'Project Adoption Webpage'.

7.1.3 All **Equipment** classified as high and medium risk as indicated in Appendix C, is applicable for **Asset Type Attestation**.

7.1.4 The technical assessment is carried out according to the provisions outlined in **EDD** standard 'Technical Compliance Requirements for Electricity Distribution Network Components and Equipment (S-7000)'.

7.1.5 For the Medium Risk and High-Risk item categories, proposed **Equipment** must be of **Approved Type**, accessible through our e-channel 'Approved Suppliers for Project Adoption'. However, the following exceptions are applicable:

a) Minor technical deviations could be accepted if they meet **EDD** specifications.

b) A new product type from **EDD Pre-qualified** suppliers may be considered as a trial.

7.1.6 Upon receipt of a complete application, the **Engineering Services Section** will review the submission and communicate its decision within nine (9) working days. The communication will either request a resubmission, specifying any required revisions, or release a formal **Asset Type Attestation**.

7.2 Asset Inspection

7.2.1 Prior to the delivery of the **Equipment** to the site, the **Developer Site Supervisor** shall request asset inspection in writing at least five (5) working days before the scheduled delivery, by submitting required documents specified in Appendix C.

7.2.2 All **Equipment** classified as high and medium risk as indicated in Appendix C, is applicable for **Site Delivery Clearance**.

7.2.3 For Low-Risk item categories, the **Equipment** must be of **Approved Type**, accessible via the e-channel 'Approved Suppliers for Project Adoption', and shall be subject to on-site inspections after delivery.

7.2.4 Delivered **Equipment** shall be manufactured within the twelve (12) months preceding the application submission date.

7.2.5 Upon receipt of a request, the **Engineering Services Section** will communicate its decision within five (5) working days. The communication will either request an on-site inspection, specifying any required corrective actions, or waive the inspection and eventually release a formal **Site Delivery Clearance**.

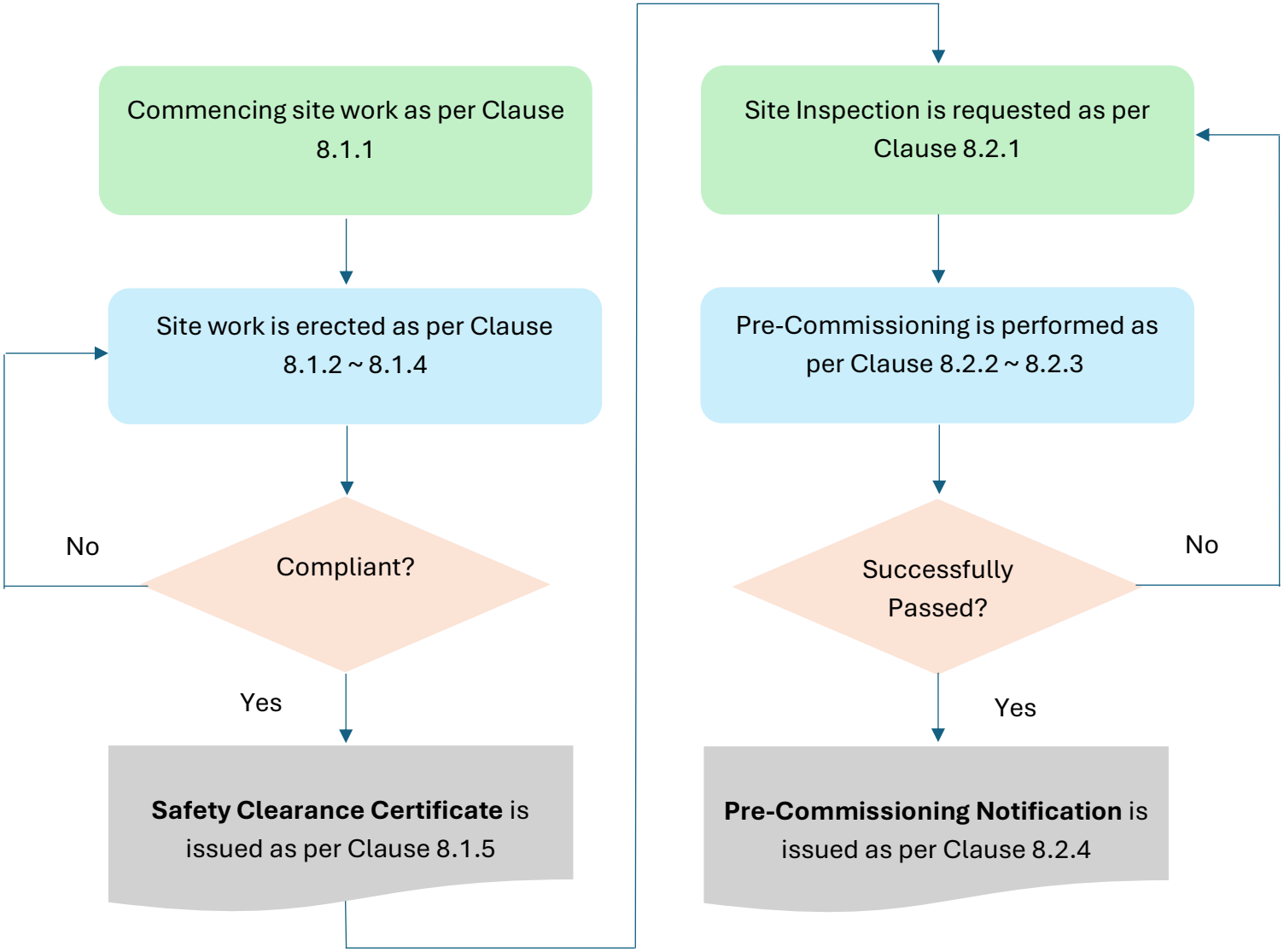
8.0 Site Construction Execution

8.0.1 Upon obtaining infrastructure **Planning Permission**, the **Developer** shall appoint a **Developer Site Supervisor** and **MTC Contractor** to commence site construction and secure required approvals and permits from relevant **Service Entities**.

8.0.2 The **Developer Site Supervisor** shall be a firm licensed by **CRPEP** to practice engineering in the electrical field and approved by **EDD** to supervise the construction of **Development Infrastructure**. The up-to-date lists of **CRPEP** licensed firms are available at their website 'Licensees Data Webpage'.

8.0.3 The up-to-date lists of **MTC Contractors** are available at 'MTC Contractors Webpage'.

8.0.4 The process illustrated in Flow Chart No. 4 ensures safe and compliant site work erection.



Flow Chart No.4: Site Construction Execution Workflow

8.1 Site Work Erection

8.1.1 The **Engineering Office** may request a meeting with the **Construction Section** via our e-Channel 'Partner Services Support' prior to commencing site work erection, where the Appendix D submittals shall be provided in soft copy.

8.1.2 The **Developer Site Supervisor** shall ensure that all necessary approvals and permissions are obtained prior to related construction.

8.1.3 The **Developer Site Supervisor** shall ensure that all **Equipment** is attested to the approved type, and site work is carried out as per the approved engineering design drawings.

8.1.4 Site work shall be erected by **MTC Contractor**, in accordance with the provisions of the **EWA** Standard 'Measured Term Contract (MTC 2024)'. (3)

8.1.5 During the progress of site construction, a **Safety Clearance Certificate** (Appendix D) shall be issued per project scheme by the **Developer Site Supervisor** as soon as any part of the new **Plant** could be electrically or mechanically energized, either by switching operations or proximity to other live plant, posing a potential hazard. Receipt of the certificate shall be acknowledged by the **MTC Contractor**.

8.2 Plant Pre-Commissioning

8.2.1 Upon completion of each project phase, the **Developer Site Supervisor** shall submit a request to the **Construction Section** to inspect the pre-commissioning at least five (5) working days before the scheduled date.

8.2.2 Pre-commissioning checks and tests shall be performed by an EDD-approved third-party agency and witnessed by a representative from the **Construction Section**. (4)

8.2.3 The **Developer Site Supervisor** shall verify that all **Endorsements** are listed in the **Pre-Commissioning Notification** and do not compromise safe and reliable **Plant** performance and operation.

8.2.4 The **Pre-Commissioning Notification** in Appendix D, completed and issued by the **Developer Site Supervisor**, formally notifies the **Construction Section** that the **Plant** has successfully completed pre-commissioning, and that the **Plant** is ready for commissioning. Receipt of the certificate shall be acknowledged by the **Construction Section**.

8.2.5 All As-built drawings shall be submitted to the **Construction Section** as soft copies in PDF and CAD format according to the **EDD** Guide 'Guidelines for Data Submission in CAD Format'.

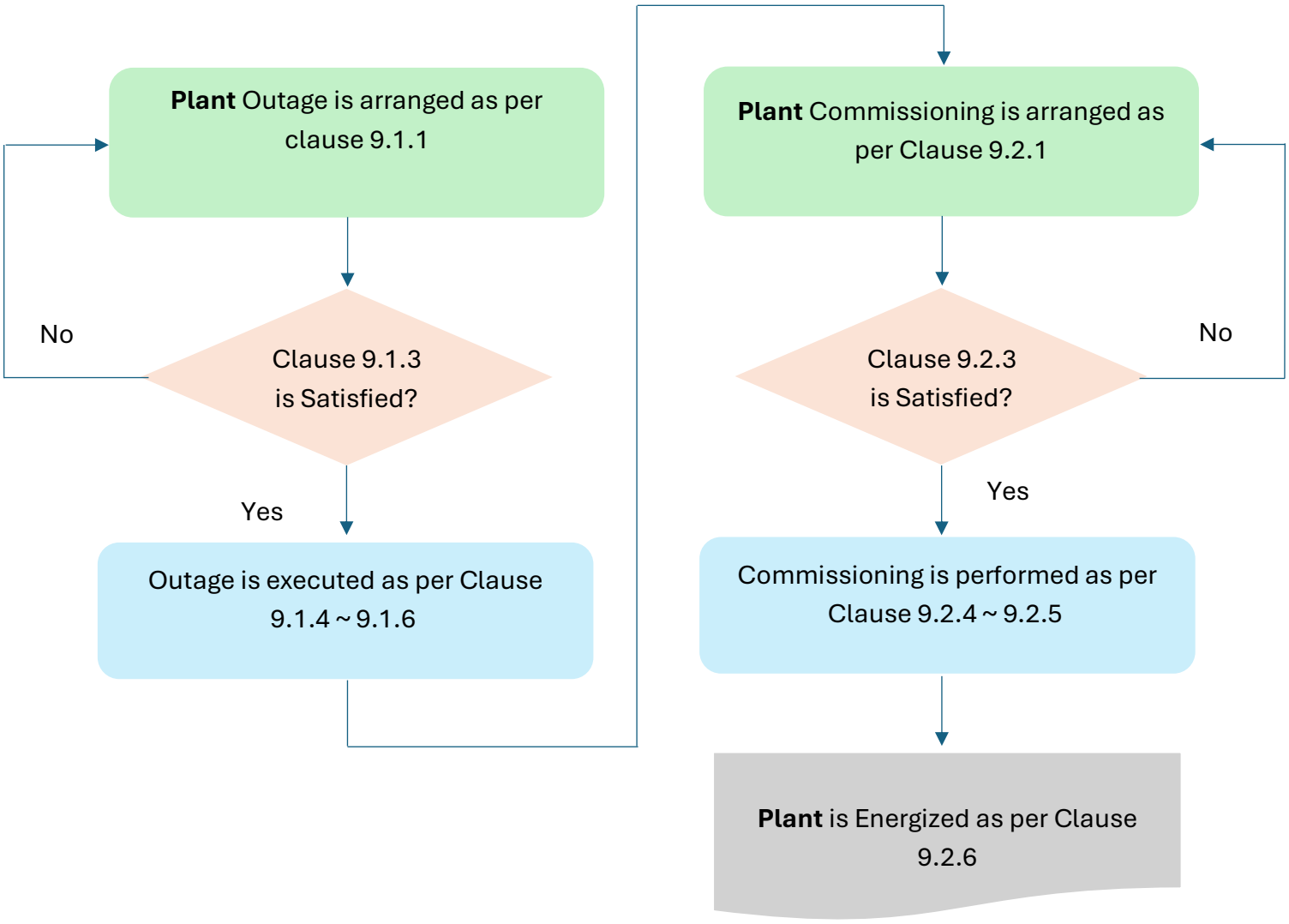
(3) The **MTC Contractor** is not obliged to apply the pricing terms outlined in the MTC 2025.

(4) For **HV Customers**, the **Authority** is responsible for pre-commissioning checks and tests on **EDD** intake substations and applying standard protection relay settings.

9.0 Plant Outages and Commissioning

9.0.1 Upon issuance of pre-commissioning notification, the **Developer Site Supervisor** shall coordinate with the **Construction Section** to schedule **Plant** outages and commissioning.

9.0.2 The process illustrated in Flow Chart No. 5 ensures safe and secure **Plant** integration into the existing **Distribution System**.



Flow Chart No.5: Plant Integration Workflow

9.1 Plant Outages

9.1.1 The **Developer Site Supervisor** shall coordinate closely with the **Construction Section**, including providing necessary information and adhering to agreed-upon timelines, to arrange for **Plant** outages. (5)

9.1.2 The **Construction Section** is responsible for isolating live parts of the existing **Distribution System** for interconnection with the new **Plant**.

9.1.3 Interconnection work shall be released by field personnel from the **Construction Section**, authorized in writing by the **Authority** to issue the relevant **Safety Documents**.

9.1.4 Before commencing any site work, field personnel responsible for the immediate supervision of that work must sign to acknowledge receipt of the relevant **Safety Document**, and confirm **Plant's** readiness for commissioning upon completion.

9.1.5 Interconnection works shall be carried out by **MTC Contractor** in accordance with the provisions of the **EWA** Standard, 'Measured Term Contract (MTC 2024)'. (6)

9.1.6 The field personnel from the **Construction Section** shall verify work completion and **Plant's** readiness for commissioning before the cancelation of the relevant **Safety Document**.

9.2 Plant Commissioning

9.2.1 The **Developer Site Supervisor** shall coordinate closely with the **Construction Section** including providing necessary information and adhering to agreed-upon timelines, to arrange for **Plant** commissioning. (5)

9.2.2 The **Maintenance and Operations Section** is responsible for ensuring the isolation of existing live parts of the **Distribution System**.

9.2.3 Testing shall be sanctioned by field personnel from the **Maintenance and Operations Section**, authorized in writing by the **Authority** to issue the relevant **Safety Documents**.

9.2.4 Before commencing any testing, field personnel responsible for performing the commissioning must sign to acknowledge receipt of the relevant **Safety Document**.

9.2.5 Commissioning tests shall be performed by field personnel from the **Maintenance and Operations Section**, who are authorized in writing by the **Authority** to carry such tests.

9.2.6 The field personnel from the **Maintenance & Operations Section** are responsible for verifying the **Plant's** readiness for energization prior to the cancellation of the relevant **Safety Document** and thereafter energize the **Plant**.

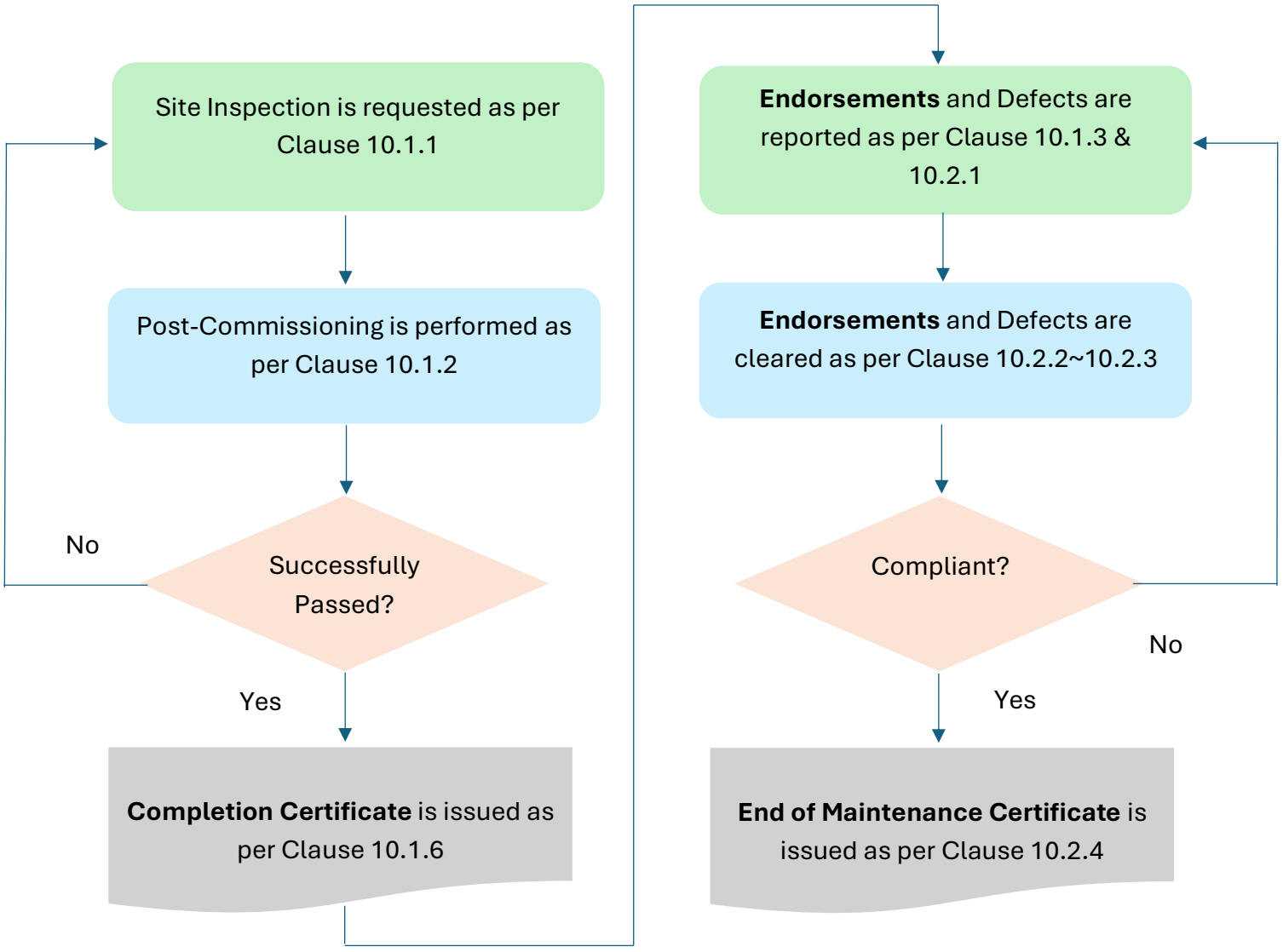
(5) All **Plant** outage and commissioning requests are internally routed to the **Distribution Control Centre (DCC)** for review and approval, in accordance with **EWA** Standard (SOPs).

(6) The **MTC Contractor** is not obliged to apply the pricing terms outlined in the MTC 2025.

10.0 Project Completion & Handover

10.0.1 Upon successful completion of **Plant** energization, the **Developer Site Supervisor** shall collaborate with the **Construction Section** and **Engineering Services Section** to finalize project completion and facilitate handover.

10.0.2 The process illustrated in Flow Chart No. 6 ensures the **Plant** performs according to the contract terms and to the satisfaction of the **Authority**.



Flow Chart No.6: Project Handover & Completion Workflow

10.1 Project Completion

10.1.1 The **Developer Site Supervisor** shall submit a request to the **Construction Section** to inspect post-commissioning at least five (5) working days before the scheduled date.

10.1.2 Post-commissioning checks and tests shall be performed by an **EDD** approved third-party agency and witnessed by a representative(s) from the **Construction Section.**

10.1.3 The **Take-Over Certificate** in Appendix E, completed and issued per project scheme by the **Developer Site Supervisor**, formally notifies the **Construction Section** for the successful completion of work according to the contract terms and reports all remaining **Endorsements**. Receipt of the certificate shall be acknowledged by the **Construction Section**.

10.1.4 The **Developer Site Supervisor** shall apply for project completion by submitting the required submittals listed in Appendix E, in accordance with the submission instructions published on the Project Adoption Webpage.

10.1.5 The Defect Liability Period for **Equipment** covered under warranty certificates shall be as specified in Appendix E, commencing from the **Take-over Certificate** issuance.

10.1.6 Upon receipt of a complete application, the **Engineering Services Section** will review the submission and communicate its decision within nine (9) working days. The communication will either request a resubmission, specifying any required revisions, or issue the **Completion Certificate**.

10.2 Project Handover

10.2.1 Defects notified during the maintenance period under warranty terms will be reported to the supplier or contractor by the **Engineering Services Section**.

10.2.2 The **Defect Clearing Certificate** in Appendix E, completed and issued by the **Developer Site Supervisor**, formally notifies the **Engineering Services Section** that the defects are cleared, in accordance with contract terms. Receipt of the certificate shall be acknowledged by the **Engineering Services Section**.

10.2.3 The **Endorsement Cancellation Certificate** in Appendix E, completed and issued by the **Developer Site Supervisor**, formally notifies the **Engineering Services Section** that the **Endorsements** previously listed in the **Take-Over Certificates** have been cleared in accordance with the contract terms. Receipt of the certificate shall be acknowledged by the **Engineering Services Section**.

10.2.4 The **End of Maintenance Period Certificate** in Appendix E, completed and issued per project scheme by the **Developer Site Supervisor**, formally notifies the **Engineering Services Section** of the successful completion of the maintenance period as per contract terms. Receipt of the certificate shall be acknowledged by the **Engineering Services Section**.

Appendix A

Consultations and Agreements

Consultations and Agreements Coordination Meeting		
No.	**Submittal Title**	**Required**
1	Project Overview and Profile	Mandatory
2	Project Implementation Schedule	Mandatory
3	Project's Total Electricity and Water Requirements, Across the Project's Annual Phases	Mandatory
4	Development Masterplan/Subdivision (Approved by UPDA)	Mandatory
5	Formal letter from the Developer regarding the Appointment of Engineering Office	Mandatory
6	Contact Details of Developer Representatives	Mandatory
7	Contact Details of the Engineering Office Representatives	Mandatory

Appendix B

Network Planning & Design

Network Planning & Design Coordination Meeting		
No.	**Submittal**	**Required**
1	Formal letter from the Developer regarding the appointment of Engineering Office	Mandatory
2	Contact details of Developer Representatives	Mandatory
3	Contact details of the appointed Engineering Office Representatives	Mandatory
4	Council for Regulating the Practice of Engineering Professions (CRPEP) License	Mandatory
5	Execution Work Program for Network Planning & Design	Mandatory
Network Design Approval		
No.	**Submittal**	**Required**
1	Service Request Form	Mandatory
2	Development Masterplan/ Subdivision	Mandatory
3	Load Schedule	Mandatory
3	Supply Integration into the System	Mandatory
4	Low Voltage (LV) Single Line Diagram	Mandatory
5	Medium Voltage (MV) Single Line Diagram	Mandatory
6	Low Voltage (LV) Cable Trench Layout Plan	Mandatory
7	Medium Voltage (MV) Cable Trench Layout Plan	Mandatory
8	Service Corridor Cross-Section Diagram	Mandatory
9	Substation Location Plan	Mandatory
10	Street Lighting Single Line Diagram	Mandatory
11	Street Lighting Feeder Pillar Supply Integration into the System	Mandatory
12	Street Lighting Feeders Pillar land Poles Locations Plan	Mandatory
13	Street Lighting Cable Trench Layout Plan	Mandatory
14	Street Lighting Cross-Section Service Corridor	Mandatory
15	Street Lighting Pole Elevation Drawings	Mandatory
17	Street Lighting Illuminance and Luminance Calculations (CIE 115)	Mandatory
18	Street Lighting Voltage Drop Calculation	Mandatory
19	Substation Automation System Architecture Diagram (ex; Termination and Splicing)	If Applicable
Planning Permission		
No.	**Submittal Title**	**Required**
1	Project Scope and Description	Mandatory
2	Approved Network Design Drawings	Mandatory
3	Service Corridor Cross-Section Diagram	Mandatory
4	Executed Technical Interface Agreement with CPO	Mandatory
5	Authorization to use “Tasareeh “System	Mandatory

Note: Note: All drawings shall be submitted as hard copies at a scale of 1:500 or 1:1000, and as soft copies in PDF and CAD format according to the EDD Guide ‘Guidelines for Data Submission in CAD Format’.

Appendix C

Asset Adoption Compliance

Asset Type Attestation		
No.	**Submittal Title**	**Required**
1	Equipment Approval Request Letter	Mandatory
2	Application Form (Signed by Consultant)	Mandatory
3	List of Requested Equipment (Excel File)	Mandatory
4	Quality Management System Certificate in accordance with ISO 9001:2005	Mandatory
5	Laboratory Accreditation Certificate and Scope in accordance with ISO17025:2017	Mandatory
6	Dimensional/Technical Drawings	Mandatory
7	Specifications Datasheets and Catalogues	Mandatory
8	Complete Type / Special Test Reports and Certificates from Independent Laboratory Accredited by National Body	Mandatory
9	Schedule of Guarantee of the latest relevant EDD Specification (Signed by Manufacturer and Supplier)	Mandatory
10	Project Single Line Diagrams (Approved by Planning Section)	Mandatory
11	Project Bill of Equipment	Mandatory
12	Project Building Permit/ Address Card	Mandatory
13	Assembly Authorization (Signed by Manufacturer)	If Applicable
14	Technical Calculation Reports (Ex; Street Lighting, Power Factor Correction, Harmonics Suppression)	If Applicable
15	Environmental Management System Certificate in accordance with ISO 14001:2005	Upon Request
16	Occupational Health and Safety Management System Certificate in accordance with ISO 45001:2018	Upon Request
17	Manufacturer Profile	Upon Request
18	Instruction Manual (ex; Installation, Operation, Maintenance)	Upon Request
19	Other Conformity Certificates (Ex; UL, CE)	Upon Request
20	Equipment Sample	Upon Request
21	List of Previous EDD Approvals and Awarded Tenders	Upon Request
22	List of Project References	Upon Request
Site Delivery Clearance		
No.	**Submittal Title**	**Required**
1	Service Request Form	Mandatory
1	Asset Inspection Report (Including Images)	Mandatory
2	Supplier Routine Test Reports	Mandatory

Note: Images for asset inspection reports must be of high resolution (minimum 300 DPI or 1080p HD), captured from multiple angles (front, back, sides, and top), and include a clear close-up of the asset's nameplate displaying key identification details.

Applicable Equipment List			
No.	**Sheet ID**	**Sheet Title**	**Risk Level**
1	H-001	MINERAL OIL FILLED TRANSFORMERS	High
2	H-002	SILICONE OIL FILLED TRANSFORMERS	High
3	H-003	DRY TYPE TRANSFORMERS	High
4	H-004	RING MAIN UNITS (SF6)	High
5	H-005	11 KV VACUUM CIRCUIT BREAKERS (VCB)	High
6	H-006	11 KV XLPE CABLES	High
7	H-007	LV XLPE CABLES	High
8	H-008	LV PVC CABLE	High
9	H-009	SMART ENERGY METERS & DATA CONCENTRATORS	High
10	H-010	11 KV PRE-MOLD JOINTS AND TERMINATIONS	High
11	H-011	11 KV HEAT-SHRINK JOINTS AND TERMINATIONS	High
12	H-012	LV CAST RESIN JOINTS	High
13	H-013	LV DISTRIBUTION BOARDS	High
14	H-014	MINI DISTRIBUTION PILLAR	High
15	H-015	AIR CIRCUIT BREAKERS (ACB)	High
16	H-016	REMOTE TERMINAL UNITS (RTU)	High
17	H-017	LV CUT-OUTS (DOMESTIC & WALL MOUNTING)	High
18	H-018	ATS PANEL	High
19	H-019	SUBSTATION KIOSK	High
20	H-020	MINERAL OIL	High
21	H-021	SILICONE FLUID	High
22	H-022	AIR BREAK SWITCH	High
23	H-045	BARE & BINDING OVERHEAD WIRE	High
24	H-072	PVC COVERED OVERHEAD WIRE	High
25	L-039	LV CUT-OUTS (STREET LIGHTING)	Low
26	L-040	HV CABLE GLAND KIT	Low
27	L-041	LV CABLE GLAND KIT	Low
28	L-042	STREET LIGHTING LAMPS	Low
29	L-043	LAMP HOLDERS	Low
30	L-044	PHOTOELECTRIC CONTROL SWITCH & SOCKET	Low
31	L-046	BALLAST	Low
32	L-047	IGNITOR	Low
33	L-048	CAPACITOR (STREET LIGHTING)	Low
34	L-050	LINE TAP	Low
35	L-051	PVC PIPE	Low
36	L-052	DANGER SIGN BOARDS	Low
37	L-053	CAUTION TAPE	Low
38	L-054	LV HEAT-SHRINK TUBING & CAP TERMINATIONS	Low
39	L-055	CRIMPING TYPE SOCKET AND CONNECTOR	Low
40	L-056	THERMOSTAT SWITCH	Low
41	L-057	EXTERNAL INDICATOR FOR EFI	Low

42	L-058	PAD BARS	Low
43	L-059	GASKET	Low
44	L-060	CARBON DUST	Low
45	L-061	INNARDS	Low
46	L-062	HEAT SHRINK CAP END	Low
47	L-063	PORCELAIN INSULATOR	Low
48	L-064	PADLOCK	Low
49	L-065	BRACKETS FOR STREET LIGHTING	Low
50	L-067	GALVANIZED STEEL STRANDED WIRE	Low
51	L-068	DEAD END GUY GRIP	Low
52	L-069	PLAIN LEAD SEAL	Low
53	L-070	STAY TYPE ROD	Low
54	L-071	WOODEN POLES	Low
55	L-075	BATTERY LINKS	Low
56	L-078	CORROSION PROTECTION TAPE	Low
57	L-079	HEAT RESISTANT LABEL	Low
58	L-080	STREET LIGHTING LAMP BOWLS	Low
59	L-083	CONTACTORS	Low
60	L-085	PLASTIC (MASTIC) COMPOUND	Low
61	L-84	ASTRONOMICAL TIME SWITCH	Low
62	M-036	PIPE GALVANIZED	Low
63	M-037	SILICA GEL	Low
64	M-077	EARTH LEAKAGE CIRCUIT BREAKERS	Low
65	M-023	FIBER OPTIC CABLE	Medium
66	M-024	SPLICE BOX PATCH PANEL	Medium
67	M-025	STEEL DOORS	Medium
68	M-027	STREET LIGHTING COLUMNS & HIGH MAST	Medium
69	M-028	STREET LIGHTING FEEDER PILLAR STEEL ENCLOSURE AND ENCLOSED DISTRIBUTION PANEL	Medium
70	M-029	LV HRC FUSES & CARRIER	Medium
71	M-030	EARTH FAULT INDICATOR (EFI)	Medium
72	M-031	CURRENT TRANSFORMERS	Medium
73	M-032	LOUVERS	Medium
74	M-033	GRILL FOR EXHAUST FAN	Medium
75	M-034	EXHAUST FAN	Medium
76	M-035	EARTH ROD & CLAMP	Medium
77	M-038	LIGHTNING ARRESTER	Medium
78	M-066	LED STREET LIGHTING LUMINAIRES	Medium
79	M-074	BATTERIES	Medium
80	M-076	MOULDED CASE CIRCUIT BREAKERS	Medium
81	M-081	PROTECTION RELAYS	Medium
82	M-082	HV FUSES	Medium

Appendix D

Site Construction Execution

Site Construction Execution Coordination Meeting		
No.	**Submittal Title**	**Required**
1	Formal letter from the Developer regarding the appointment of Developer Site Supervisor	Mandatory
2	Contact details of the appointed Developer Site Supervisor Representatives	Mandatory
3	Formal letter from the Developer regarding the appointment of MTC Contractor	Mandatory
4	Contact details of the appointed MTC Contractor Representatives	Mandatory
5	Council for Regulating the Practice of Engineering Professions (CRPEP) License	Mandatory
6	Execution Work Program for Site Construction Execution	Mandatory

Safety Clearance Certificate

Certificate Ref:_____(1)

Project Details	
Name:	EDD Scheme Ref:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Plant Description	
Safety Clearance Statement	
I/we hereby certify that the above-described plant could be electrically or mechanically energized, either by switching operations or proximity to other live plant, posing a potential hazard, and from: Date: _____, Time: _____, will be subject to the EWA Safety Rules (SOP S001). No further work or testing on the below described plant unless it is released by the issuance of the relevant Safety document.	
Developer Site Supervisor	
Name:	Signature:	Date:
Acknowledgment Statement	
I/we acknowledge that I/we have received, read, and understood the Safety Clearance Certificate, and agree to comply with all specified safety requirements.	
MTC Contractor	
Name:	Signature:	Date:

(1) The certificate reference shall apply the following format: SCC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the notification are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the notification is provided to the Authority; retain a duplicate copy for your records.

Pre-Commissioning Notification

Notification Ref:_____(1)

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Project Details	
Name:	EDD Scheme Ref:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Plant Description	
Pre- Commissioning Statement	
I/we hereby give notice that the above-described plant has successfully passed all pre-commissioning checks and tests on Date: _____, Time: _____, and it can be safely commissioned. The Outstanding Items listed in Endorsement Section (2nd Page) do not affect the safe and reliable plant performance and operation after energization.	
Developer Site Supervisor	
Name:	Signature: / Date:
Acknowledgment Statement	
I/we hereby acknowledge that I/we have received, read, and understood the Pre-Commissioning Notification.	
Construction Section	
Name:	Signature: / Date:

(1) The certificate reference shall apply the following format: PCN-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the notification are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the notification is provided to the Authority; retain a duplicate copy for your records.

Pre-Commissioning Notification

Notification Ref:_____(1)

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Endorsement List			
No	**Description**	**Location**	**Priority**
1			
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(1) The Certificate reference shall apply the following format: PCN-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the notification are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the notification is provided to the Authority; retain a duplicate copy for your records.

Appendix E

Project Completion and Handover

Completion Certificate		
No.	**Submittal Title**	**Required**
1	Taking Over Certificate	Mandatory
2	As-Built Drawings	Mandatory
3	Warranty Certificates	Mandatory
4	Safety Clearance Certificate	Mandatory
5	Pre-Commissioning Notification	Mandatory
6	Pre-Commissioning Report	Mandatory
7	Post-Commissioning Notification	Mandatory
8	Post-Commissioning Report	Mandatory
Acknowledgment of End of Maintenance Period Certificate		
No.	**Submittal Title**	**Required**
1	End of Maintenance Period Certificate	Mandatory
2	Endorsement Cancellation Certificates	Mandatory
3	Defect Clearing Certificates	Mandatory

Take Over Certificate

Certificate Ref:_____(1)

Project Details	
Name:	EDD Scheme No:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Work Description	
Take Over Statement	
I/we hereby certify that the above-described work has been completed as per the contract terms, and from Date: _____, Time: _____, the plant shall be taken over by the Authority. This signifies the start of the maintenance period, excluding the Outstanding Items listed in the Endorsement Section (2nd Page).	
Developer Site Supervisor	
Name:	Signature: / Date:
Acknowledgment Statement	
I/we hereby acknowledge that I/we have received, read, and understood the Take Over Certificate.	
Construction Section	
Name:	Signature: / Date:

(1) The Certificate reference shall apply the following format: TOC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the certificate are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the certificate is provided to the Authority; retain a duplicate copy for your records.

Take Over Certificate

Certificate Ref:_____(1)

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Endorsement List			
No	**Description**	**Location**	**Priority**
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(1) The Certificate reference shall apply the following format: TOC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the certificate are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the certificate is provided to the Authority; retain a duplicate copy for your records.

Endorsement Cancellation Certificate

Certificate Ref:_____(1)

Project Details	
Name:	EDD Scheme No:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Endorsement Description	
Endorsement Cancellation Statement	
I/we hereby certify that above-described endorsements previously listed in the Take-Over Certificates No: _____, Date: _____, have been cleared in accordance with the contract terms. The warranty period for those items commences on Date: _____, Time: _____.	
Developer Site Supervisor	
Name:	Signature:	Date:
Acknowledgment Statement	
I/we hereby acknowledge that I/we have received, read, and understood the Endorsement Cancellation Certificate.	
Engineering Services Section	
Name:	Signature:	Date:

(1) The Certificate reference shall apply the following format: ECC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the certificate are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the certificate is provided to the Authority; retain a duplicate copy for your records.

Defect Clearance Certificate

Certificate Ref:_____(1)

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Project Details	
Name:	EDD Scheme No:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Defect Description	
Defect Clerance Statement	
I/we hereby certify that the above-described defects notified during the maintenance period on the plant taken over via Take-Over Certificates No: _____, Date: _____, have been cleared in accordance with the contract terms. The warranty period for those items commences on Date: _____, Time: _____.	
Developer Site Supervisor	
Name:	Signature:	Date:
Acknowledgment Statement	
I/we hereby acknowledge that I/we have received, read, and understood the Defect Clearance Certificate.	
Engineering Services Section	
Name:	Signature:	Date:

(1) The Certificate reference shall apply the following format: DCC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the certificate are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the certificate is provided to the Authority; retain a duplicate copy for your records.

End of Maintenance Certificate

Certificate Ref:_____(1)

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Project Details	
Name:	EDD Scheme No:
Area:	Block:
Developer:	Engineering Office:
Developer Site Supervisor:	MTC Contractor:
Work Description	
End Of Maintenance Statement	
I/we hereby certify that the above-described work on the plant taken over via Take Over Certificates No: _____, Date: _____, as per contract terms. This signifies the end of the maintenance period on Date: _____, Time: _____.	
Developer Site Supervisor	
Name:	Signature: / Date:
Acknowledgment Statement	
I hereby acknowledge that I/we have received, read, and understood the Defect Clearance Certificate.	
Engineering Services Section	
Name:	Signature: / Date:

(1) The Certificate reference shall apply the following format: EMC-EDD Scheme No.-Two Digits Serial No.
(2) Ensure that all fields in the certificate are accurately completed and that the certificate is signed by all concerned parties.
(3) Ensure that the original copy of the certificate is provided to the Authority; retain a duplicate copy for your records.

Defect Lability Period List			
No.	**NSN**	**Item Description**	**DLP**
1	E1440-10-00003	WIRE, GALVANIZED STEEL, STRAND 7/4.00/70	12 M
2	E1440-30-00004	GRIP, GUY, DEAD END, SUITABLE (12MM DIA)	12 M
3	E1440-30-00568	SHACKLE, D BLACK FORGED STEEL OR GALVD	12 M
4	E1441-40-00789	FAN, EXHAUST, INDUSTRIAL, 450 MM DIA	24 M
5	E1441-40-00913	GRILL, STEEL, FOR EXHAUST FAN	24 M
6	E1447-10-00994	PIPE, 2 INCH, GALVANIZED	12 M
7	E1447-10-00995	PIPE, 1.5 INCH, GALVANIZED	12 M
8	E1451-10-01004	MACHINE, LABELLING, METAL EMBOSSING TOOL	12 M
9	E1451-20-00664	PULLER, RATCHET LEVER CABLE TYPE WIRE R	12 M
10	E1453-06-00605	BOLT,WITH NUT,B SIZE: M20X100 N SIZE:M20	12 M
11	E1453-06-00609	BOLT,WITH NUT,B SIZE: M20X400 N SIZE:M20	12 M
12	E1453-30-00899	SEAL, PLAIN LEAD (CIRCULAR SHAPE OF DIA 12 MM & THICKNESS OF 4 MM)	12 M
13	E1453-30-01005	STRIP, SPARE STAINLESS STEEL	12 M
14	E1453-40-00019	PADLOCK, BRASS, HARDENED NICKEL PLATED	12 M
15	E1453-40-00020	ROD, STAY TYPE 1. ITEM 1 " ADJUSTABLE "	24 M
16	E1453-40-00826	PADLOCK, HERCULES, 70 MM, C/W KEYS	12 M
17	E1453-40-01000	PADLOCK, AVA, WIDTH 50 MM	12 M
18	E1453-40-01031	PADLOCK, COMPLETE WITH MASTER KEY,	12 M
19	E1454-40-00532	LADDER, LINESMAN'S WOODEN, 6M X 11M	60 M
20	E1455-10-00028	POLE, WOOD TO BS 1990: PART 1 AND CREOSOTED TO BS 144	18 M
21	E1455-10-00693	POLE, WOOD TO BS 1990: PART 1 AND SALT IMPREGNATED TO BS 4072	18 M
22	E1456-70-00909	DOOR, STEEL, 2400 MM x 2495 MM	36 M
23	E1456-70-00911	DOOR, STEEL, 2900 MM x 2495 MM	36 M
24	E1456-70-00914	DOOR, STEEL , 2400 MM x 2880 MM	36 M
25	E1456-70-00997	DOOR, STEEL, 3550 MM x 2495 MM	36 M
26	E1459-20-00049	FUSE, 22 KV, 10 A, LIQUID FILLED,	12 M
27	E1459-20-00050	FUSE, 22 KV, LIQUID, 25 A	12 M
28	E1459-20-00054	FUSE, ELEMENT FOR B.P.E, C RATING: 30 A	12 M
29	E1459-20-00057	FUSE, ELEMENT FOR B.P.E, C RATING: 50 A	12 M
30	E1459-20-00061	FUSELINK, HRC CURRENT, SIZE: 361 X 63.5	12 M
31	E1459-20-00063	FUSELINK, HRC CURRENT, SIZE: 361 X 63.5	12 M
32	E1459-20-00066	FUSELINK, DOMESTIC, 60A DIA: 22.23±0.10 MM	24 M
33	E1459-20-00068	FUSELINK, DOMESTIC, 100 A	24 M
34	E1459-20-00077	FUSELINK, HRC, WEDGE TYPE, RATED C: 400A	24 M
35	E1459-20-00091	LIGHTNING ARRESTER, 11 KV, NOMINAL DISCHARGE CAPACITY OF 5KA	48 M
36	E1459-20-00106	FUSE (CUT-OUT), CURRENT RATING: 400A	12 M
37	E1459-20-00496	FUSE, ELEMENT FOR B.P.E, C RATING: 25 A	12 M
38	E1459-20-00509	FUSELINK, 11KV, HRC, CURRENT RATING 100A	12 M
39	E1459-20-00549	CARRIER, FUSE; 22KV, LIQUID FILL TYPE	12 M
40	E1459-20-00565	CARRIER, FUSE, 500 A, 92 MM FC	24 M
41	E1459-20-00566	CARRIER, FUSE, 400 A, 82 MM FC	24 M

42	E1459-20-00583	FUSE, 11KV, HRC, STRIKER PIN TYPE	12 M
43	E1459-20-00817	FUSELINK, WEDGE 200 A / 82 MM FC	24 M
44	E1459-20-00819	FUSELINK, WEDGE 315 A / 92 MM FC	24 M
45	E1459-20-00820	FUSELINK, WEDGE 355 A / 92 MM FC	24 M
46	E1459-20-00822	FUSELINK, WEDGE 315 A / 82 MM FC	24 M
47	E1459-20-00847	FUSELINK, DOMESTIC, 60A, DIA: 30.16±0.1MM, LENGTH: 16±0 .5MM	24 M
48	E1459-20-00882	FUSELINK, HRC CURRENT, C RATING 63 A	12 M
49	E1459-20-00890	FUSELINK, WEDGE 250 A / 82 MM FC	24 M
50	E1459-20-00891	FUSELINK, WEDGE 160 A / 82 MM FC	24 M
51	E1459-20-00892	FUSELINK, WEDGE 100 A / 82 MM FC	24 M
52	E1459-20-00893	FUSELINK, WEDGE 400 A / 82 MM FC	24 M
53	E1459-20-00894	FUSELINK, WEDGE 200 A / 92 MM FC	24 M
54	E1459-20-00895	FUSELINK, WEDGE 250 A / 92 MM FC	24 M
55	E1459-20-00953	FUSE UNIT, OUTGOING 500A 415V, 3PHASE,	12 M
56	E1459-20-01034	FUSELINK, HRC, WEDGE TYPE, RATED C: 63 A	24 M
57	E1459-25-00095	CUTOUT DOMESTIC , 1 PHASE, 60 A	24 M
58	E1459-25-00096	CUTOUT, DOMESTIC 1-PHASE, 100 A	24 M
59	E1459-25-00098	CUTOUT, DOMESTIC TP & N, 100 A	24 M
60	E1459-25-00110	INNARDS, 160 A, OUTDOOR	24 M
61	E1459-25-00794	INNARDS, 200 A, OUTDOOR	24 M
62	E1459-25-00796	INNARDS, 400 A, INDOOR	24 M
63	E1459-25-00872	CUTOUT, WALL MOUNTED, 100 A INDOOR	24 M
64	E1459-25-00873	CUTOUT, WALL MOUNTED, 160 A INDOOR	24 M
65	E1459-25-00874	CUTOUT, WALL MOUNTED, 250 A OUTDOOR	24 M
66	E1459-25-00875	CUTOUT, Rating 100A, TYPE: 4 (OUTDOOR)	24 M
67	E1459-25-00877	CUTOUT, WALL MOUNTED, 250 A INDOOR	24 M
68	E1459-30-00114	SWITCH, OUTDOOR, POLE MOUNTED 11KV, AIR	12 M
69	E1459-35-00121	CONNECTOR, SIZE: 32SQMM (3/3.75 MM APPX)	48 M
70	E1459-35-00122	CONNECTOR, MECHANICAL, SIZE: 70 SQMM	48 M
71	E1459-40-00141	GLAND KIT, LV 4 x 240, INDOOR	48 M
72	E1459-40-00143	GLAND KIT, LV 4 x 240 OUTDOOR	48 M
73	E1459-40-00161	SOCKET, CRIMPING, CU, 16 SQ MM	48 M
74	E1459-40-00164	SOCKET, CRIMPING, CU, 240 SQ MM	48 M
75	E1459-40-00165	TAP, LINE CONDUCT. SIZE: 16 SQMM,	48 M
76	E1459-40-00166	TAP, LINE CONDUCT. SIZE: 32/35 SQMM	48 M
77	E1459-40-00167	TAP, LINE CONDUCT. SIZE: 70 SQMM ,	48 M
78	E1459-40-00168	TAP, LINE CONDUCT. SIZE: 120 SQMM ,	48 M
79	E1459-40-00528	GLAND, KIT HV 3 x 70 SQ MM INDOOR	48 M
80	E1459-40-00529	GLAND, KIT HV 3 x 300 SQ MM INDOOR	48 M
81	E1459-40-00624	SOCKET, BIMETALLIC 70 SQ MM	48 M
82	E1459-40-00625	SOCKET, BIMETALLIC 300 SQ MM	48 M
83	E1459-40-00626	SOCKET, CRIMPING, AL, 25 SQ MM	48 M
84	E1459-40-00627	SOCKET, CRIMPING, AL, 70 SQ MM	48 M

85	E1459-40-00629	SOCKET, CRIMPING, AL, 120 SQ MM	48 M
86	E1459-40-00630	SOCKET, CRIMPING, AL, 240 SQ MM	48 M
87	E1459-40-00726	SOCKET, CABLE CRIMPING CU 120 SQ.MM	48 M
88	E1459-40-00729	CONNECTOR, COMPRESSION, TYPE: CB2	48 M
89	E1459-40-00730	CONNECTOR, COMPRESSION, TYPE: CC7	48 M
90	E1459-40-00767	SOCKET, CRIMPING, CU, 70 SQ MM, M12	48 M
91	E1459-40-00770	SOCKET, CRIMPING, CU, 300 SQ MM, M16	48 M
92	E1459-40-00771	SOCKET, CRIMPING, CU, 300 SQ MM, M12	48 M
93	E1459-40-00772	SOCKET, CRIMPING, CU, 500 SQ MM, M12	48 M
94	E1459-40-00773	SOCKET, CRIMPING, CU, 500 SQ MM, M16	48 M
95	E1459-40-00902	CONNECTOR, COMPRESSION, TYPE: CB1	48 M
96	E1459-40-00915	SOCKET, CABLE CRIMPING CU 240 SQ.MM	48 M
97	E1459-40-00985	SOCKET, CRIMPING, CU, 1000 SQ MM	48 M
98	E1459-40-01086	LV SOCKET, CRIMPING, CU, 630 SQ MM, M12	48 M
99	E1459-40-01087	LV FERRULE CU, 630 SQ MM, SINGLE CORE	48 M
100	E1459-45-00967	RELAY, PROTECTION, TYPE: SIEMENS SIPROT	24 M
101	E1459-45-00969	RELAY, PROTECTION, TYPE: VIP 30 FOR SCH	24 M
102	E1459-50-00169	FRAMEWORK, SUPPORTING POLE, 11 KV FUSE	48 M
103	E1459-50-00170	TRANSFORMER, CURRENT CT 150/5A	48 M
104	E1459-50-00171	TRANSFORMER, CURRENT, C. T. 300/5 A	48 M
105	E1459-50-00173	TRANSFORMER, CURRENT, C. T. 500/5 A	48 M
106	E1459-50-00174	TRANSFORMER, RING TYPE C.T., 800/5A	48 M
107	E1459-50-00176	TRANSFORMER, RING TYPE C.T., 1600/5A	48 M
108	E1459-50-00177	TRANSFORMER, RING TYPE C.T., 2000/5A	48 M
109	E1459-70-00184	CAP, HEAT SHRINK WITH INNER, 15 TO 35 MM	24 M
110	E1459-70-00185	CAP, HEAT SHRINK WITH INNER, 25 TO 50 MM	24 M
111	E1459-70-00186	CAP, HEAT SHRINK WITH INNER, 50 TO 95 MM	24 M
112	E1459-70-00187	INSULATOR, DUMB-BELL ASSEMBLY, HOUSE SE	24 M
113	E1459-70-00188	INSULATOR, ONE PIECE COMPLETE WITH COACH	18 M
114	E1459-70-00195	INSULATOR, L.V. PORCELAIN SHACKLE TYPE	18 M
115	E1459-70-00196	INSULATOR, L.V PORCELAIN, WET F.O: 12 KV	18 M
116	E1459-70-00197	INSULATOR, 11KV STAY BEAM TYPE	48 M
117	E1459-70-00210	TERMINATION KIT,HS,300 PILC,11 KV INDOOR	24 M
118	E1459-70-00215	SLEEVES, HEAT SHRINKABLE WRAP-AROUND REPAIR SLEEVES	24 M
119	E1459-70-00223	TUBING, HEAT SHRINK, 0.6/1KV TO ED SPEC	24 M
120	E1459-70-00224	TUBING, HEAT SHRINK, 0.6/1KV, COLOR BLUE	24 M
121	E1459-70-00225	TUBING, HEAT SHRINK, 0.6/1KV,	24 M
122	E1459-70-00226	TUBING, HEAT SHRINK, 0.6/1KV TO ED SPEC	24 M
123	E1459-70-00227	TUBING, HEAT SHRINK 0.6/1KV, COLOR BLACK	24 M
124	E1459-70-00228	TUBING, HEAT SHRINK 0.6/1KV, COLOR BLUE	24 M
125	E1459-70-00229	TUBING, HEAT SHRINK 0.6/1KV COLOR RED	24 M
126	E1459-70-00230	TUBING, HEAT SHRINK, 0.6/1KV,COLOR YELLO	24 M
127	E1459-70-00231	TUBING, HEAT SHRINK, 0.6/1K, COLOR BLACK	24 M

128	E1459-70-00232	TUBING, HEAT SHRINK, 0.6/1KV, COLOR BLUE	24 M
129	E1459-70-00233	TUBING, HEAT SHRINK, 0.6/1KV , COLOR RED	24 M
130	E1459-70-00234	TUBING,HEAT SHRINK,0.6/1KV COLOUR YELLOW	24 M
131	E1459-70-00769	TERMINATION KIT, HEAT SHRINK 11 KV	24 M
132	E1459-75-00123	END CAP, BUSBAR ASSY 11KV 3PH.	12 M
133	E1459-75-00204	TERMINATION KIT,HS,70RAXLPE 11KV,450 I/D	24 M
134	E1459-75-00206	TERMINATION KIT,HS,70RA XLPE 11KV,650I/D	24 M
135	E1459-75-00208	TERMINATION KIT, HEAT SHRINK 11 KV, INDO	24 M
136	E1459-75-00211	TERMINATION KIT, HEAT SHRINK 11 KV, IND	24 M
137	E1459-75-00241	BOX, TINNED BRASS CONNECTOR, 35 SQ MM	24 M
138	E1459-75-00260	BRACKET, WALL CORNER TYPE Y	24 M
139	E1459-75-00262	BRACKET, WALL RIGHT ANGLE TYPE	24 M
140	E1459-75-00263	BRACKET, WALL STRAIGHT TYPE	24 M
141	E1459-75-00265	GRIP; WEDGE, LOOP TYPE	12 M
142	E1459-75-00267	CLAMP, EARTH ROD, U, 2 X 70 SQ MM	12 M
143	E1459-75-00268	CLAMP, TENSION SOCKET ENDED (16MM)	12 M
144	E1459-75-00271	CLAMP,D SUITABLE FOR SINGLE GROOVED	12 M
145	E1459-75-00279	PIPE, PVC, SIZE: 4, BLACK, 6M LONG	48 M
146	E1459-75-00280	PIPE, PVC, SIZE: 6, BLACK, 6M LONG	48 M
147	E1459-75-00287	BOLT, EYE, GALVANISED MILD STEEL TYPE 2	12 M
148	E1459-75-00288	HOOK, BALL-ENDED, FOR O/H LINES UPTO 11K	12 M
149	E1459-75-00297	JOINT KIT, HEAT SHRINK 11KV, 300 AL X/X	24 M
150	E1459-75-00299	JOINT KIT, HEAT SHRINK 11KV, 300 AL P/X	24 M
151	E1459-75-00300	JOINT KIT, HEAT SHRINK, 11KV, 300 AL P/P	24 M
152	E1459-75-00315	ROD, EARTH EXTENSIBLE COPPER CLAD STEEL	12 M
153	E1459-75-00319	PIN, INSULATOR, LINE TYPE, LARGE STEEL	18 M
154	E1459-75-00323	STRAP, TERMINATING; FOR 11 KV. O.H. LIN	48 M
155	E1459-75-00327	THIMBLE & STAY STRAP FOR LV OVERHEAD LI	48 M
156	E1459-75-00328	WASHER, SQUARE (CURVED) TO FIG. 3 OF ESI	12 M
157	E1459-75-00494	TERMINATION KIT, HEAT SHRINK, 0.6/1KV,OUTDOOR, POLE MOUNTING	24 M
158	E1459-75-00495	TERMINATION KIT,HS, LV120XLPE,POLE M,O/D	24 M
159	E1459-75-00501	JOINT, LV, AL, 240MM^2 CABLE,SJ2A,ST-THRO	48 M
160	E1459-75-00502	JOINT KIT, LV CABLE, STRAIGHT/THROUGH	48 M
161	E1459-75-00503	JOINT KIT, LV CABLE, STRAIGHT/THROUGH,	48 M
162	E1459-75-00504	JOINT KIT, LV, AL, 240/240MM^2 CABLE,TJ7A	48 M
163	E1459-75-00505	JOINT KIT, LV, AL, 240/70-120MM^2 CABLE	48 M
164	E1459-75-00506	JOINT KIT, LV, AL, 240/25MM^2 CABLE,TJ9	48 M
165	E1459-75-00507	JOINT KIT, LV CABLE, STRAIGHT/THROUGH,	48 M
166	E1459-75-00527	TERMINATION KIT, HS, 11KV, 300 XLPE, I/D	24 M
167	E1459-75-00533	CHANNEL, CABLE PROTECTION, POLE MOUNTIN	48 M
168	E1459-75-00534	TERMINATION KIT, HS,11 KV, 300 XLPE,O/D	24 M
169	E1459-75-00536	TERMINATION KIT, HS, 11KV, 300 XLPE, I/D	24 M
170	E1459-75-00537	TERMINATION KIT, HEAT SHRINK 11 KV,	24 M

171	E1459-75-00633	BRACKET, POLE MOUNTING FOR LIGHTING	24 M
172	E1459-75-00635	POT END KIT, LV CABLE,CAST RESIN,240SQMM	48 M
173	E1459-75-00636	POT END KIT, LV CABLE,CAST RESIN,70/120	48 M
174	E1459-75-00637	POT END, LV CABLE, CAST RESIN, 25 SQ.MM	48 M
175	E1459-75-00639	CLIP, WIRING OUTDOOR USE BUCKLE TYPE	12 M
176	E1459-75-00648	TERMINATION KIT, HS, 11KV, 500CU, INDOOR	24 M
177	E1459-75-00660	SPINDLE, PILOT INSULATOR AS PER EDD DRAW	12 M
178	E1459-75-00755	CROSSARM, SECTION POLE, STANDARD 43-95	12 M
179	E1459-75-00756	CROSSARM, TERMINAL POLE, STANDARD 43-95	12 M
180	E1459-75-00757	STRAP, CROSSARM TIE TO ESI STANDARD 43-	12 M
181	E1459-75-00765	JOINT KIT, LV CABLE, STRAIGHT/THROUGH	48 M
182	E1459-75-00768	JOINT KIT, HEAT SHRINK,11KV, 300 X/X, CU	24 M
183	E1459-75-00808	JOINT KIT, LV CABLE, STRAIGHT/THROUGH	48 M
184	E1459-75-00835	JOINT KIT, HEAT SHRINK,11KV, 300 X/X, AL	24 M
185	E1459-75-00836	JOINT KIT, HEAT SHRINK 11KV,ST,	24 M
186	E1459-75-00897	CLAMP, AUTOMATIC ANCHOR CLAMP	12 M
187	E1459-75-00988	FERRULE CU, 500 SQ MM, SINGLE CORE	48 M
188	E1459-75-00989	CONNECTOR, TERMINAL FLEXIBLE ASSEMBLY	48 M
189	E1459-75-00990	FERRULE CU, 1000	48 M
190	E1459-75-01013	TERMINATION KIT,	24 M
191	E1459-75-01014	TERMINATION KIT,	24 M
192	E1459-75-01015	JOINT KIT, HEAT SHRINK, 11KV	24 M
193	E1459-75-01037	JOINT KIT, PRE-MOLD 11 KV, X/X,CU/CU 300	36 M
194	E1459-75-01038	JOINT KIT, PRE-MOLD 11 KV, X/X,AL/AL 300	36 M
195	E1459-75-01039	JOINT KIT, PRE-MOLD 11 KV, X/X,CU/AL 300	36 M
196	E1459-75-01058	BATTERY LINK (CONNECTOR) AS PER DRAWING	12 M
197	E1459-75-01059	CABLE CLAMP, SINGLE BOLT, SUITABLE	12 M
198	E1459-75-01060	FIBER OPTIC CABLE SPLICE BOX 48 CORE	48 M
199	E1459-75-01062	PATCH PANEL, FIBER OPTIC CABLE, 48 CORE,	48 M
200	E1459-75-01063	PANEL, PATCH FIBER CABLE,1V, 24 CORE	48 M
201	E1459-75-01066	PANEL,42U, OPTICAL MAIN DISTRIBUTION	48 M
202	E1459-77-01053	DUST, CARBON FOR ELECTRICAL EARTHING	12 M
203	E1461-10-00357	BOARD, LV, 2 WAY, 1000A, WALL	24 M
204	E1461-10-00358	BOARD, LV, 7 WAY, 2000A, TRUNK	24 M
205	E1461-10-00359	BOARD, LV, 7 WAY, 2000A, WALL	24 M
206	E1461-10-00360	CIRCUIT BREAKER, ACB OR MCCB, 800 A	24 M
207	E1461-10-00361	CIRCUIT BREAKER, ACB OR MCCB, 1600 A	24 M
208	E1461-10-00368	HANDLE, OPERATING HANDLE, OSA- O/FSA-O	12 M
209	E1461-10-00394	SWITCH, OIL, 11KV, 400A, LUCY,	12 M
210	E1461-10-00710	CIRCUIT BREAKER, ACB OR MCCB, 500 A	24 M
211	E1461-10-00781	SWITCHBOARD, VCB PANEL, 11 KV, CONSISTI	12 M
212	E1461-10-00784	CIRCUIT BREAKER, ACB, 2500 A, 415 V	24 M
213	E1461-10-00812	SWITCHBOARD, VCB PANEL 11KV,	12 M

214	E1461-10-00888	BREATHER, SILICA GEL, BEND TYPE	12 M
215	E1461-10-00927	SWITCHBOARD, VCB PANEL, 11kV, TYPE 1	12 M
216	E1461-10-00928	SWITCHBOARD,VCB,11KV, 3 PANEL: 2T2+1T3	12 M
217	E1461-10-00937	RING MAIN UNIT, SF6, 2 I + 1 B	24 M
218	E1461-10-00938	RING MAIN UNIT, SF6, 3 I + 1 B	24 M
219	E1461-10-00939	RING MAIN UNIT, SF6, 2 I + 2 B	24 M
220	E1461-10-00956	PILLAR, MINI DISTRIBUTION LV 3 PHASE 4,	24 M
221	E1461-10-00958	PILLAR, MINI DISTRIBUTION LV 3 PHASE 4	24 M
222	E1461-10-00999	BOARD, LV, 10 WAY	24 M
223	E1461-10-01007	CIRCUIT BREAKER, MOULDED CASE,100A, 400V	24 M
224	E1461-10-01008	CIRCUIT BREAKER, MOULDED CASE,160A, 400V	24 M
225	E1461-10-01009	CIRCUIT BREAKER, MOULDED CASE,250A, 400V	24 M
226	E1461-10-01016	SWITCHBOARD, VCB PANEL 11KV,	12 M
227	E1461-10-01020	RING MAIN UNIT, SF6, 3 I + 2 B	24 M
228	E1461-10-01032	SWITCHBOARD,VCB PANEL,11KV,12T2,2T4,3T7A	12 M
229	E1461-10-01033	SWITCHBOARD,VCB PANEL,11KV,6T1,2T4,3T7	12 M
230	E1461-10-01054	RING MAIN UNIT, SF6, 2 I + 1 B, MOTORISE	24 M
231	E1461-10-01055	RING MAIN UNIT, SF6, 2 I + 2 B, MOTORISE	24 M
232	E1461-10-01056	RING MAIN UNIT,SF6, 3 I + 1 B, MOTORISED	24 M
233	E1461-10-01057	RING MAIN UNIT, SF6, 3 I + 2 B,MOTORISED	24 M
234	E1461-10-01070	SWITCHBOARD,VCB PANEL,11KV,6T2,1T4,2T7	12 M
235	E1461-10-01071	SWITCHBOARD,VCB PANEL,11KV,4T2,1T8	12 M
236	E1461-10-01072	SWITCHBOARD,VCB PANEL,11KV,2T3,1T8,2T1	12 M
237	E1461-10-01073	SUBSTATION, SF6, 500 KVA WITH LVB	18 M
238	E1461-10-01074	SUBSTATION, SF6, 500 KVA WITH ACB	18 M
239	E1461-10-010745	SUBSTATION, SF6, 1000 KVA	18 M
240	E1461-10-010746	SUBSTATION, SF6, 1000 KVA	18 M
241	E1461-10-01075	SUBSTATION, SF6, 1000 KVA WITH LVB	18 M
242	E1461-10-01076	SUBSTATION, SF6, 1000 KVA WITH ACB	18 M
243	E1461-10-01077	SUBSTATION, SF6, 1500 KVA WITH LVB	18 M
244	E1461-10-01078	SUBSTATION, SF6, 1500 KVA WITH ACB	18 M
245	E1461-10-01081	11KV 9-way VCB PANEL	12 M
246	E1461-10-01082	11KV PANEL VCB 400A, 2No.s TYPE T1	12 M
247	E1461-10-01083	LV ATS PANEL 2500A	24 M
248	E1461-10-01084	LV ATS PANEL 1600A	24 M
249	E1461-10-01088	VCB Panel 9-way CONS	12 M
250	E1461-10-01089	VCB Panel 11 way	12 M
251	E1461-10-01090	VCB Panel 14 way	12 M
252	E1461-10-01091	VCB Panel 5 way EDD	12 M
253	E1461-10-01092	VCB Panel 5 way CONS	12 M
254	E1461-20-00399	SUBSTATION, OIL, 500 KVA WITH BOARD	18 M
255	E1461-20-00400	SUBSTATION, OIL, 500 KVA WITH ACB	18 M
256	E1461-20-00401	SUBSTATION, OIL, 1000 KVA WITH BOARD	18 M

257	E1461-20-00402	SUBSTATION, OIL, 1000 KVA WITH ACB	18 M
258	E1461-20-00405	TRANSFORMER, OIL, 200 KVA POLE MOUNTED	18 M
259	E1461-20-00406	TRANSFORMER, OIL, 500KVA	12 M
260	E1461-20-00407	TRANSFORMER, OIL, 1000KVA	12 M
261	E1461-20-00409	TRANSFORMER, SILICONE, 1000 KVA	12 M
262	E1461-20-00546	TRANSFORMER, SILICONE, 500KVA,	12 M
263	E1461-20-00785	TRANSFORMER, SILICONE, 1500 KVA	12 M
264	E1461-20-00844	VENT, STEEL LOUVERED TYPE B	36 M
265	E1461-20-00845	VENT, STEEL LOUVERED TYPE C	36 M
266	E1461-20-00920	TRANSFORMER, DISTRIBUTION 11000/415V,	12 M
267	E1461-20-00962	SUBSTATION, OIL, 1500 KVA WITH BOARD	18 M
268	E1461-20-00963	SUBSTATION, OIL,1500 KVA WITH ACB	18 M
269	E1461-20-00996	TRANSFORMER, 1500 KVA, OIL,	12 M
270	E1461-35-00542	BATTERY, WITH CHARGER 30V AS PER CLAUSE	12 M
271	E1461-35-01041	BATTERY, DRY TYPE, 2 VOLTS, 25 AMPERE	12 M
272	E1461-45-00417	CABLE, UNDERGROUND, HV, 3C-300 SQ MM, AL	48 M
273	E1461-45-00421	CABLE, U/G, LV, 4C-240 SQ.MM, CU	48 M
274	E1461-45-00429	CABLE, CIRCULAR/COMPACTED, SIZE: 70SQ.MM	48 M
275	E1461-45-00430	CABLE, CIRCULAR/COMPACTED, SIZE: 70SQ.MM	48 M
276	E1461-45-00431	CABLE, CIRCULAR/COMPACTED, SIZE: 70SQ.MM	48 M
277	E1461-45-00432	CABLE, SINGLE CORE, 70 SQMM, 600/1000V,	48 M
278	E1461-45-00437	CABLE, COMPACTED CIRCULAR, BLACK PVC	48 M
279	E1461-45-00439	CABLE, COMPACTED CIRCULAR, SIZE: 120SQMM	48 M
280	E1461-45-00440	CABLE, COMPACTED CIRCULAR, SIZE: 120SQMM	48 M
281	E1461-45-00444	CABLE, COPPER CONDUCTOR, SIZE: 185 SQMM	48 M
282	E1461-45-00445	WIRE, O/H CU, PVC, LV, 16 SQ MM	48 M
283	E1461-45-00446	WIRE, O/H SERVICE, CU, PVC, LV, 35 SQ MM	48 M
284	E1461-45-00449	CABLE, CU, PVC, LV, 2C-35 SQ MM	60 M
285	E1461-45-00450	WIRE, O/H CU, BARE, 11KV, 32 SQ MM	48 M
286	E1461-45-00451	WIRE, O/H CU, BARE,LV, 35 SQ MM	48 M
287	E1461-45-00452	WIRE, O/H, CU, BARE, 70 SQ MM	48 M
288	E1461-45-00454	WIRE, O/H CU, PVC, 11KV, 70 SQ MM	48 M
289	E1461-45-00455	WIRE, O/H COND., CU, PVC, LV, 35 SQ MM	48 M
290	E1461-45-00456	WIRE, O/H CU, PVC, LV, 70 SQ MM	48 M
291	E1461-45-00497	CABLE, U/G, LV, 4C-25 SQ.MM, AL	48 M
292	E1461-45-00498	CABLE, U/G, LV, 4C-70 SQ.MM, AL	48 M
293	E1461-45-00499	CABLE, U/G, LV, 4C-120 SQ. MM, AL	48 M
294	E1461-45-00500	CABLE, U/G, LV, 4C-240 SQ. MM, AL	48 M
295	E1461-45-00538	CABLE, U/G, LV, 4C-70 SQ. MM, CU	48 M
296	E1461-45-00539	CABLE, U/G, LV, 4C-25 SQ.MM, CU	48 M
297	E1461-45-00548	CABLE, UNDERGROUND, HV, 3C-70 SQ MM, AL	48 M
298	E1461-45-00621	CABLE, LV,PVC, CU, 1C-70MM, GREEN/YELLOW	48 M
299	E1461-45-00634	CABLE, UNDERGROUND, LV, 1C-500 SQ MM, CU	48 M

300	E1461-45-00647	CABLE, UNDERGROUND, 11KV, 1C-500 SQMM CU	48 M
301	E1461-45-00753	CABLE, UNDERGROUND, HV, 3C-300 SQ MM, CU	48 M
302	E1461-45-00786	CABLE, UNDERGROUND, LV, 1C-1000 SQ MM CU	48 M
303	E1461-45-00806	CABLE, UNDERGROUND, LV, 4C-300 SQ MM, CU	48 M
304	E1461-45-00998	CABLE, UNDERGROUND, LV, 4C-400 SQ MM, CU	48 M
305	E1461-45-01011	CABLE, U/G, 6.35/11KV, 3C 300 MM^2 AL,	48 M
306	E1461-45-01012	CABLE, U/G, POWER, 6.35/11KV, 3 CORE	48 M
307	E1461-45-01017	CABLE, U/G POWER, 6.35/11 KV, 3 CORE	48 M
308	E1461-45-01018	CABLE, U/G POWER, 6.35/11 KV, 3 CORE	48 M
309	E1461-45-01064	CABLES,FIBER OPTIC 24-CORES,SINGLE MODE,	48 M
310	E1461-45-01065	CABLES,FIBER OPTIC 48-CORES	48 M
311	E1461-45-01079	CABLE, UNDERGROUND, COPPER, 2 C, 0.6/1KV	48 M
312	E1461-45-01085	LV Cable - 1CX630SQMM CU	48 M
313	E1461-50-00459	COUPLING, BUSBAR BAND JOINT 241MM LONG	12 M
314	E1461-50-00553	BAR, COPPER STRIP, W: 60MM, TH: 6MM	12 M
315	E1461-50-00588	POLE, OPERATING, SIX SECTIONS, 122 CM <	12 M
316	E1466-25-00467	INDICATOR, (EFI) 240 V, TYPE 1	24 M
317	E1466-25-00472	METERING UNIT, OIL, HV, LUCY	12 M
318	E1466-25-00474	PROBE, TESTING CABLE SET,	12 M
319	E1466-25-00919	AVOMETER, BASIC ACCURACY CLASS	12 M
320	E1466-25-00940	METER,KWH LV,3-PH, CT, 5A,4W, 2G/3G/4G	48 M
321	E1466-25-00941	METER,KWH,LV,3-PH, DIRECT,100A, PLC	48 M
322	E1466-25-00942	METER,KWH,LV,1-PH, DIRECT,80A, PLC	48 M
323	E1466-25-01021	METER,KWH,HV, 3-PH, CT, 1A,4W, 2G/3G/4G	48 M
324	E1466-25-01022	METER,KWH,HV, 3-PH, CT, 1A,3W, 2G/3G/4G	48 M
325	E1466-25-01023	METER,KWH,HV, 3-PH, CT, 5A,4W, 2G/3G/4G	48 M
326	E1466-25-01024	METER,KWH,HV, 3-PH, CT, 5A,3W, 2G/3G/4G	48 M
327	E1466-25-01025	METER,KWH,LV, 3-PH, CT, 5A,4W RS485	48 M
328	E1466-25-01026	METER,KWH,LV,3-PH,DIRECT,100A, 2G/3G/4G	48 M
329	E1466-25-01027	METER,KWH,LV,1-PH, DIRECT,80A, 2G/3G/4G	48 M
330	E1466-25-01028	CONCENTRATOR DATA, FOR COMMUNICATION	48 M
331	E1466-25-01029	SPIKER CABLE , COMPLETE	12 M
332	E1466-25-01030	CARTRIDGE BLANK FOR CABLE SPIKER, 44 CAL	12 M
333	E1466-25-01035	INDICATOR EARTH FAULT, 240V, 50HZ, TY: 3	24 M
334	E1466-25-01036	INDICATOR EARTH FAULT, 240V, 50HZ, TY: 2	24 M
335	E1466-25-01040	INDICATOR, EXTERNAL SIGNAL LIGHT FOR EFI	24 M
336	E1466-25-01046	MODULE, COMMUNICATION TYPE E65C-CU-P42	48 M
337	E1466-25-01068	METER,KWH,LV,1-PH, DIRECT,80A, NB-IOT	48 M
338	E1466-25-01069	METER,KWH,LV,3-PH,DIRECT,100A, NB-IOT	48 M
339	E1466-85-00790	THERMOSTAT, FOR 500 W LV EXHAUST FAN	24 M
340	E1466-85-00791	THERMOMETER, DIAL TYPE, TROPICAL DESIGN	12 M
341	E1468-00-00552	SILICA GEL, ORANGE CLOUR, 50KG DRUM	12 M
342	E1480-30-00483	COMPOUND, PLASTIC FOR USE WITH THERMOPLASTIC INSULATED CABLES	12 M

343	E1491-60-00486	OIL, MINERAL, CLASS 1 TO BS 148:1984	12 M
344	E1491-60-00556	FLUID, SILICONE LIQUID, DOW CORNING 561	24 M
345	E1493-90-00712	CORK, ELASTOMER , 1800 X 1000 X 1.5 MM ,	24 M
346	E1493-90-00713	CORK, ELASTOMER/RUBBERISED, TYPE: B	24 M
347	E1493-90-00714	CORK, ELASTOMER, 1800 X 1000 X 3 MM,	24 M
348	E1493-90-00716	CORK, ELASTOMER, 1800 X 1000 X 6 MM,	24 M
349	E1493-90-00717	CORK, ELASTOMER , 1800 X 1000 X 3 MM ,	24 M
350	E1493-90-00718	CORK, ELASTOMER RUBBERISED SHEET, TYPE B	24 M
351	E1493-90-00719	CORK, ELASTOMER, 9000 X 60 X 6 MM ,	24 M
352	E1493-90-00720	CORK, ELASTOMER , 9000 X 60 X 6 MM ,	24 M
353	E1495-30-01067	PAD-BAR, POWDER COATED STEEL	36 M
354	E1499-05-00488	WIRE, BINDING, ANNEALED '0' CONDITION,	48 M
355	E1499-05-00489	BOARD, SIGN DANGER PLATE FOR WOOD POLES	12 M
356	E1499-05-00490	DANGER/CAUTION POSTER,ALUMINUM	12 M
357	E1499-05-00491	TAPE, CAUTION FOR UNDERGROUND CABLE	36 M
358	E1499-05-00569	DISC (PLATE), TH: 2 MM CENTRE HOLE: 6 MM	12 M
359	E1499-05-00582	DISC (PLATE), DISC DIAMETER 60 MM	12 M
360	E1499-05-00620	DISC (PLATE). DISC DIAMETER : 60 MM	12 M
361	E1499-05-00978	TAG, ALUMINUM IN ROLL FORM WITH ONE HOL	12 M
362	E1499-05-01080	DANGER/CAUTION POSTER AS PER DRAWING NO.	12 M
363	E1553-40-00323	BOLT, M6 SIZE, 55mm LENGTH UNDER BOLT HEAD	12 M
364	E1556-80-00018	COLUMN, TYPE: 10R, TAPERED OCTAGONAL	48 M
365	E1556-80-00019	COLUMN, TYPE: 10F, TAPERED OCTAGONAL	48 M
366	E1556-80-00025	COLUMN, TAPERED OCTAGONAL- CIRCULAR CONICAL	48 M
367	E1556-80-00026	COLUMN, TAPERED OCTAGONAL- CIRCULAR CONICAL	48 M
368	E1556-80-00034	COLUMN, TAPERED OCTAGONAL- CIRCULAR CONICAL	48 M
369	E1556-80-00037	COLUMN, TAPERED OCTAGONAL, 18M	48 M
370	E1556-80-00039	COLUMN, TUBULAR STEEL 4.85M LONG,	48 M
371	E1556-80-00042	COLUMN, STEEL TUBULAR SECTION 8M	48 M
372	E1556-80-00046	DOOR, STEEL FOR 16F AND 18F	48 M
373	E1556-80-00047	DOOR, STEEL FOR 5M COLUMN	48 M
374	E1556-80-00048	DOOR, STEEL FOR 8M COLUMN	48 M
375	E1556-80-00278	BRACKET, FOR 5 METER STEEL COLUMN MALE	24 M
376	E1556-80-00300	DOOR, STEEL FOR 10M COLUMN	48 M
377	E1556-80-00326	MAST WITH RAISING AND LOWERING HEADFRAME	48 M
378	E1556-80-00332	MAST, 35 M HEIGHT, C/W 6 LUMINAIRES,	48 M
379	E1556-80-00333	MAST, 35 M HEIGHT, C/W 4 LUMINAIRES	48 M
380	E1556-80-00343	COLUMN, STEEL, TAPERED OCTAGONAL, FLANGE	48 M
381	E1556-80-00344	COLUMN, STEEL, TAPERED OCTAGONAL, FLANGE	48 M
382	E1559-10-00057	CAPACITOR, DRY FILM, SELF HEALING TYPE,	24 M
383	E1559-10-00058	CAPACITOR, DRY FILM, SELF HEALING TYPE,	24 M
384	E1559-10-00059	CAPACITOR, DRY FILM, SELF HEALING TYPE,	24 M
385	E1559-10-00061	CAPACITOR, DRY FILM, SELF HEALING TYPE,	24 M

386	E1559-10-00314	CAPACITOR, DRY FILM, SELF HEALING TYPE,	24 M
387	E1559-20-00266	FUSELINK, FOR STREET LIGHTING , 6 A	24 M
388	E1559-20-00267	FUSELINK, FOR STREET LIGHTING , 10 A	24 M
389	E1559-20-00305	FUSELINK, FOR STREET LIGHTING , 16 A	24 M
390	E1559-20-00316	FUSELINK, FOR STREET LIGHTING , 20 A	24 M
391	E1559-20-00317	FUSELINK, FOR STREET LIGHTING , 25 A	24 M
392	E1559-20-00360	FUSELINK, CYLINDRICAL, HRC, 6 A,	24 M
393	E1559-20-00361	FUSELINK, CYLINDRICAL, HRC, 10 A,	24 M
394	E1559-20-00362	FUSELINK, CYLINDRICAL, HRC, 20 A, 400 V	24 M
395	E1559-20-00363	FUSELINK, CYLINDRICAL, HRC, 25 A, 400 V	24 M
396	E1559-25-00065	CUT-OUT, LV, 25A, TYPE B3,	24 M
397	E1559-25-00066	CUT-OUT, LV, 25A, TYPE A3,	24 M
398	E1559-25-00334	CUT-OUT, 25A, TYPE A4,	24 M
399	E1559-25-00335	CUT-OUT, 25A, TYPE B4,	24 M
400	E1559-40-00072	GLAND KIT, BRASS MECHANICAL INDOOR/OUTDOOR TO BS6121	48 M
401	E1559-40-00337	JOINT, LV, CU, 16MM^2 CABLE, SJ22,ST-THRO	48 M
402	E1559-61-00076	SOCKET, FOR PHOTO SWITCH, ONE PART	24 M
403	E1559-61-00078	SWITCH, ASSEMBLY FOR PHOTOELECTRIC CONTR	24 M
404	E1559-61-00354	SWITCH, DIGITAL ASTRONOMIC TIMER	24 M
405	E1559-75-00093	BRACKET, STEEL, SINGLE ARM, CURVED, TYP	24 M
406	E1559-75-00094	BRACKET, STEEL, SINGLE ARM, STRAIGHT, TY	24 M
407	E1559-75-00097	BRACKET, STEEL, DOUBLE ARM, CURVED, TYP	24 M
408	E1559-75-00098	BRACKET, STEEL, DOUBLE ARM, STRAIGHT, TY	24 M
409	E1559-75-00218	BRACKET, SINGLE ARM FOR STREET LIGHTING	24 M
410	E1559-75-00219	BRACKET; SINGLE ARM, FOR STREET LIGHTING	24 M
411	E1559-75-00220	BRACKET; DOUBLE ARM, TYPE 2UA	24 M
412	E1559-75-00221	BRACKET; DOUBLE ARM; U SHAPE. TYPE 2UB	24 M
413	E1559-75-00222	BRACKET, FOUR ARM. H SHAPE, FOR STREET	24 M
414	E1559-75-00223	BRACKET; FOUR ARM; H SHAPE; FOR STREET L	24 M
415	E1559-75-00224	BRACKET; DOUBLE ARM; T SHAPE; TYPE 2TA	24 M
416	E1559-75-00225	BRACKET; DOUBLE ARM; T SHAPE. TYPE 2TB	24 M
417	E1559-75-00226	BRACKET; FOUR ARM, X SHAPE, TYPE 4XA	24 M
418	E1559-75-00227	BRACKET; FOUR ARM; X SHAPE, TYPE 4XB	24 M
419	E1559-75-00228	BRACKET; THREE ARM; TYPE 3XA	24 M
420	E1559-75-00229	BRACKET; THREE ARM; TYPE 3XB	24 M
421	E1559-75-00230	BRACKET, DOUBLE ARM; T SHAPE;	24 M
422	E1559-75-00231	BRACKET, SINGLE ARM, 1.5 METRE OUTREACH	24 M
423	E1559-75-00232	BRACKET, DOUBLE ARM, PROJECTION	24 M
424	E1559-75-00298	BRACKET, SINGLE ARM STEEL FOR 5 METER	24 M
425	E1559-75-00310	BRACKET, WALL MOUNTING FOR STREET LIGHT	24 M
426	E1559-75-00311	BRACKET, EXTENDED WALL MOUNTING	24 M
427	E1561-10-00131	IGNITOR,USE WITH H.P.S LAMPS(250-400W)	24 M
428	E1561-10-00133	PANEL, DISTRIBUTION (ENCLOSED) FOR STREET LIGHTING	24 M

429	E1561-10-00240	CONTACTOR, 3 PHASE 415V 50HZ 63AMP, HEAV	24 M
430	E1561-10-00289	IGNITOR,USE WITH H.P.S LAMP UPTO 400W	24 M
431	E1561-10-00306	STEEL ENCLOSURE, STREET LIGHTING FEEDER	24 M
432	E1561-10-00325	FEEDER-PILLAR, HIGH STRENGTH STEEL, IP54	24 M
433	E1561-10-00329	IGNITOR,FOR USE WITH H.P. SODIUM LAMP70W	24 M
434	E1561-10-00340	CIRCUIT BREAKER, EARTH LEAKAGE,	24 M
435	E1561-10-00342	CIRCUIT BREAKER, EARTH LEAKAGE,	24 M
436	E1561-10-00364	IGNITOR, SUPERIMPOSED TO IEC 60927	24 M
437	E1561-45-00309	CABLE, UNDERGROUND, POWER, 0.6/1 KV, 4 C	48 M
438	E1562-10-00165	LUMINAIRE, H.P. SODIUM , 250 W	24 M
439	E1562-10-00170	LUMINAIRE, H.P. SODIUM, 70 W	24 M
440	E1562-10-00216	LUMINAIRE, H.P.SODIUM WITH PHOTOCELL, 400W	24 M
441	E1562-10-00291	BOWL, CLEAR POLYCARBONATE/GLASS SUITABLE	24 M
442	E1562-10-00293	LUMINAIRE, H.P. SODIUM , 150 W	24 M
443	E1562-10-00299	BOWL, PEARL-PATTERNED POLYCARBONATE SUIT	24 M
444	E1562-10-00338	LUMINAIRE, H.P. S WITHOUT PHOTOCELL400 W	24 M
445	E1562-10-00351	BOWL, GLASS	24 M
446	E1562-10-00355	LUMINAIRE, LED, ≤ 50W,230V, A1,	36 M
447	E1562-10-00356	LUMINAIRE, LED, ≤100W, 230V, A2,	36 M
448	E1562-10-00357	LUMINAIRE, LED, ≤150W, 230V, A3,	36 M
449	E1562-10-00358	LUMINAIRE, LED, ≤200W,230V, A4, TYPE III	36 M
450	E1562-10-00359	LUMINAIRE, LED, ≤300W,230V, A5, TYPE V	36 M
451	E1562-40-00203	LAMP, HIGH PRESSURE SODIUM DISCHARGE 250	24 M
452	E1562-40-00204	LAMP, H.P. SODIUM, 250W, TUBULAR CLEAR G	24 M
453	E1562-40-00207	LAMP, H.P. SODIUM, 400W TUBULAR CLEAR GL	24 M
454	E1562-40-00294	LAMP, HIGH PRESSURE SODIUM, 150W,	24 M
455	E1562-40-00302	LAMP, SODIUM HIGH PRESSURE, 1000W,	24 M
456	E1562-40-00318	LAMP, METAL HALIDE, 2000 W, 400V (PHASE	24 M
457	E1562-40-00331	LAMP, HIGH PRESSURE SODIUM, 70 W TUBULAR	24 M
458	E1562-50-00070	LAMP HOLDER; EDISON SCREW TYPE E27, PORC	24 M
459	E1562-50-00071	LAMP,HOLDER, GIANT EDISON SCREW, TYPE: E	24 M
460	E1562-50-00212	BALLAST, FOR 250W HIGH PRESSURE SODIUM	24 M
461	E1562-50-00213	BALLAST, FOR 400W HIGH PRESSURE SODIUM	24 M
462	E1562-50-00313	BALLAST, FOR H.P. SODIUM LAMP, 1000W	24 M
463	E1562-50-00319	BALLAST, 400 V, ±6%, SUITABLE FOR USE WITH METAL HALIDE LAMP, 2000 W	24 M
464	E1562-50-00330	BALLAST, FOR H.P. SODIUM LAMP, 70W	24 M
465	E1562-50-00353	BALLAST, FOR 150W HIGH PRESSURE SODIUM	24 M
466	E1580-30-00336	TAPE, CORROSION PROTECTION PETROLATUM IMPREGNATED FABRIC	12 M
467	E1599-05-00301	LABLE, HEAT RESISTANT FOR STREET LIGHTIN	12 M
468	E1556-80-XXXXX	UP TO 18M COLUMNS, STEEL FOR STREET LIGHTING HOT DIP GALVANIZED	48 M
469	E1559-75-XXXXX	ALL BRACKETS, STEEL FOR STREET LIGHTING HOT DIP GALVANIZED	24 M
470	E1459-40-XXXXX	ALL TYPES OF SOCKETS AND CONNECTORS	48 M
471	E1459-75-XXXXX	ALL TYPES OF FERRULES	48 M

472	E1459-70-XXXXX	ALL TYPES TUBING, HEAT SHRINK	24 M
473	E1461-10-01093	REMOTE TERMINAL UNIT (RTU) 2+1 OR 2+2	48 M
474	E1461-10-01094	REMOTE TERMINAL UNIT (RTU) 3+1 OR 3+2	48 M
475	E1461-10-00917	SWITCHBOARD, VCB PANEL,SIX	12 M
476	E1466-25-01098	METER, KWH, LV, 3-PH, CT, 5A, 4W, NBIOT	48 M
477	E1466-25-01103	METER, KWH, HV, 3 PH, 3CTS, HIGHER THAN11KV, 2G/3G/4G	48 M
478	E1459-40-01097	BI-METALLIC SOCKET, M 16 HOLE	48 M