Eskom	Standard	Technology

Title: **STANDARD FOR MV/LV SELF-BUILD CUSTOMER PROJECTS IN DISTRIBUTION**

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1. Introduction

In compliance to the requirements of the Distribution Code (see below), Eskom must allow customers to construct connection assets, subject to Eskom's terms and conditions. This Standard sets out these terms and conditions. The Distribution Division recognises that there may be instances where it would be beneficial to both Eskom and the Customer to opt for Self-Build. Examples include instances where a Customer is in a more advantageous position than Eskom to build connection assets and thus achieve efficiencies in the capital cost and/or connection timelines.

The Distribution Network Code states:

7.3 Excluded services….

3) Excluded services include the following:

a) Design and construction of dedicated customer connections.

b) Recoverable works such as inspection and maintenance of non-Distributor owned installations, line relocation and other requested recoverable works.

c) The construction and maintenance of public lighting assets.

(4) For excluded services, customers will be allowed to choose a contractor other than the Distributor, provided that an agreement is reached between the Distributor and the customer prior to the project being undertaken detailing the conditions. These conditions will set out the following:

a) The assets the customer is allowed to work on or not.

b) The terms and conditions for the approval of the network design.

c) The terms and condition for the inspection and the work done prior to any agreement to take over and/or commission the supply.

d) The charges to be raised by the Distributor for monopoly related services.

Note: The Customer in terms of this document refers to loads, generators and Developers.

2. Supporting clauses

2.1 Scope

This standard outlines the requirements, conditions and process to be followed by Customers who elect to self-build their connection infrastructure to the Distribution network. The standard is limited to the Distribution scope of works for the various Customer connection projects.

Note: Service cables (Type 1 customers) & LV connections for individual connections (unless otherwise for scheme projects with multiple customers such as developments) are excluded from this process and are to be executed via Eskom or its appointed contractors.

2.1.1 Purpose

To provide a detailed standard to generators or direct load Customers who have elected to self-build their connection-infrastructure in order to connect to the Eskom Distribution System.

The standard describes:

a) The conditions under which the MV/LV self-build option will be allowed

b) To serve as guide to both contracting parties (Eskom and the Self Build customer) clearly identifying those activities and tasks which should be managed by the respective parties

c) To outline all applicable process/s to be followed during any MV/LV Self Build project from customer application to asset handover, commissioning and close out of project.

d) Identify the Eskom control points during the life of a self-build project

e) To identify the risks associated with such projects and the mitigating strategies.

f) To serve as a reference point for all MV/LV standards and specifications

g) To inform the development of the MV/LV Self Build Agreement.

2.1.2 Applicability

This standard shall apply to connections to the Eskom Distribution Business.

2.2 Normative/informative references

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] ISO 9001 Quality Management Systems.

[2] South African Distribution Code Version 6.0 – July 2014

[3] Eskom Lands and Rights Consideration and Compensation Standard (32-844)

[4] National Environmental Management Act, 1998 (Act No. 107 of 1998)

[5] Connection Charges for Customers connected to Eskom's Distribution Network Policy – 240-58853865

[6] Wires Business Project Life Cycle Governance Guideline – 240-64014170

[7] Wires Project Life Cycle Model and Work Package Standard - 240-76628703

[8] Spatial Planning and Land Use Management Act 16 of 2013 (awaiting proclamation)

[9] related Provincial Land Use Planning Act 3 of 2014 (awaiting proclamation)

[10] SPLUMA Regulations (awaiting publishing)

[11] SANS 10142

[12] Acquire Customer Value Chain website: Manage Direct Customer Project – Minor Process

[13] Customer Base Management PCM – 240-55054906.

2.2.2 Informative

[14] The Electricity Regulation Act as amended

[15] The Distribution Licence

[16] Grid connection code for renewable projects

[17] Procedure for Self-Build Customer projects in Transmission -240-61713594

[18] Procedure for Self-Build Customer projects in Distribution – 240-43874056.

2.3 Definitions

2.3.1 General

Definition	Description
Basic Design	means the process of analysing design alternatives and defining the architecture, components, interfaces, and timing and sizing estimates for a system or component
BOM	Bill of Materials

Definition	Description
Capital Costs	means the total actual capital costs of the Eskom Works including the Distribution and Transmission quotation fee, but excluding the costs of the Monopoly Works
Connection	means the physical connection of the Customer's assets to the Eskom Distribution System
Connection Charge Guarantee	means a guarantee from the Customer to cover the risk of non-payment where a schedule for the payment of connection charges has been agreed to between Eskom and the Customer
Connection charges	mean the total Standard Connection Charge and the Premium Connection Charge recouped or to be recouped by Eskom from the Customer for the cost of Eskom Works comprising the Capital Costs and the cost of the Monopoly Works, calculated in compliance with the South African Distribution Code
Connection works	means the planning, financing, insuring, land rights acquisition, design, engineering, procurement, supply, fabrication, construction, erecting, installation, inspection, pre-commissioning, testing, completion, commissioning, operating and maintenance of the electricity network infrastructure comprised in the connection and all activities and requirements ancillary to these, and includes the Customer Connection Works and the Eskom Connection Works
Consultant	means the customer-appointed agent assuming technical accountability for the self-build project
Contract works	means the portion of the Connection to be undertaken by the customer in accordance with the conditions of the Self-Build Agreement to be concluded between the Customer and ESKOM and as further defined in paragraph 3.6
Contract Works Equipment	means the plant, facilities, equipment and assets which together comprises the portion of the Connection to be supplied by the Customer and shall include any and all machinery, apparatus and materials that would ordinarily form part of the network infrastructure, such as telecommunication equipment, even if such machinery, apparatus or material may be removed without materially affecting the operation or reliability of the Eskom Distribution System
Contract Works Security Guarantee	means an on demand, irrevocable and unconditional bank guarantee issued by a bank licensed to do business in the Republic of South Africa with a credit rating acceptable to ESKOM and denominated in South African Rand
Contracting party	means the contracting parties shall be Eskom and the Customer
Contractor	means an Eskom authorised customer-appointed contractor undertaking the Contract Works
Control Plant	means all the equipment which is used in the detection of faults conditions in the network in order that the faulty parts of the network are promptly disconnected from the power system, thereby ensuring optimal quality of supply to customers, minimal damage to primary plant and sustained stability and integrity of the power system. It relates to all plant which is normally operated at voltages of less than 1 000 volts associated with and encompassing the activities of the Protection, Telecommunications, DC and Auxiliary Supplies, Metering and Tele Control resources
Customer	means developers or generators and/or load applicants that are or will be connected to the Eskom Distribution System

Definition	Description
Customer Connection Equipment	means the Customer's equipment, which shall be constructed, owned, operated and maintained by the Customer
Customer Connection Works	means the works to be carried out on the Customer side of the Point of Supply and all related activities by which the Customer Connection Equipment shall establish a Connection between the Customer's assets and the Eskom Distribution System
Dedicated assets	means those assets forming part of the Eskom connection works created to meet the customer's technical specifications and on which, total or pro-rated costs are used in the calculation of the connection charge (refer to the connection charges for customer's connected to Eskom Distribution network procedure.)
Dedicated connection equipment	means those assets forming part of the Eskom Connection Works constructed to meet the Customer's technical specifications and on which, total or pro-rated costs are used to calculate the connection charge
Design Review Team	means the Eskom Technical Governance Committee that evaluates any proposed designs for a project in order to provide assurance that the designs (from Eskom and Customer-appointed Consultant) conform to Eskom standards and specifications
Detail Design	means the process of refining and expanding the preliminary design of a system or component to the extent that the design is sufficiently complete to be implemented.
Developer	mans a person or entity that undertakes the required activities of developing a particular area and this could include rezoning land and meeting all the requirements set by Local Government
Developer Project	means a project where a Developer transforms a portion of land with the aim of creating a development that will be used for free-hold residential, industrial or commercial purposes (excludes sectional title stands for the purposes of this Standard).
Distribution Connection Charges	means that portion of the Connection Charge associated with the Eskom Distribution System, which may comprise of a Distribution Standard Connection Charge and a Distribution Premium Connection Charge
Environmental Impact Assessment (EIA)	means the process of examining the environmental effects of a development. It is normally a detailed study or a specialist study of significant issues that have been identified. After following the process, an environmental authorisation might be granted
Environmental Management Programme (EMPr)	means an environmental management plan that guarantees the end state of the affected areas and describes how activities that could have a negative impact on the environment will be managed and monitored. It also describes how the impacted areas will be rehabilitated
Eskom Authorised Contractors	means suppliers, contractors, vendors, consultants or other service providers with active Eskom ORHVS authorisation, if applicable, and technical accreditation specific to the Operating Unit where the asset is being constructed
Eskom Connection Equipment	means the plant, facilities, equipment and assets to connect the Customer's asset to the Eskom Distribution System, which shall be constructed in accordance with the budget quote and owned, operated and maintained by Eskom

Definition	Description
Eskom Connection Works	means the works, required to be constructed, changed or enabled on the Distribution System side of the Point of supply and all related activities by which the Eskom Connection Equipment shall establish a connection between the customer's assets and the Eskom Distribution System, including the Upstream Works, the Contract Works and the Monopoly Works
Eskom Distribution System	means all Eskom power networks from the voltage level of 132kV and less that are owned and operated by Eskom Distribution Division
Eskom Works	means the works comprising of the Eskom Connection Works but excluding the Contract Works
Final Design Package	means the Eskom accepted technical document detailing the design in line with the Eskom Standards and specifications in accordance with which the asset is to be constructed
Handover	means a point where the Contract Works is complete (including test and commissioning works), and where the risk and benefit of the Contract Works Equipment has been transferred to Eskom and the Contractor's permission to work on them has been removed
HV (High Voltage)	means networks with nominal voltage exceeding 44kV, but not more than 132kV
HV Plant Equipment	means HV equipment in a substation used in the transmission of electrical energy. This includes all the equipment used to insulate electrical conductors from earth and/or from one another. HV plant encompasses high-voltage switchgear, power transformers, isolators, current and voltage transformers, capacitor banks, copper and/or aluminium busbars, overhead conductors, HV cables, reactors, surge arrestors and insulators, and earthing systems
LV (Low Voltage)	means networks with nominal voltage $\leq$ 1kV
Major Project	Refer to paragraph 3.5.1
Milestone schedules	means the schedules of milestones to be achieved by Eskom and the Customer, respectively and by the corresponding dates specified in the schedules
Minor Project	Refer to paragraph 3.5.1
Monopoly works	means those works forming part of the Eskom Connection Works which remain Eskom's responsibility under the Self-Build Agreement that are required to ensure a standard of work that meets quality of supply, reliability and safety standards, and as further defined in paragraph 3.6
MV (Medium Voltage)	means networks with nominal voltage exceeding >1kV and ≤ 44kV
MV Plant Equipment	means MV equipment in a substation used in the distribution of electrical energy. This includes all the equipment used to insulate electrical conductors from earth and/or from one another. MV plant encompasses Medium-voltage switchgear, power transformers, isolators, current and voltage transformers, capacitor banks, copper and/or aluminium busbars, overhead conductors, MV cables, reactors, surge arrestors and insulators, and earthing systems
National Network Integration Forum (NNIF)	means an Eskom committee charged with ensuring that the network planning solution selected for a project or group of interdependent projects is agreed to by Distribution and Transmission as being appropriate to customer requirements, in alignment with other developments, and operable in a safe and secure manner

Definition	Description
Point of supply (POS) or point of connection (POC)	means the physical point on the Eskom Distribution System where the Customer's electrical equipment is physically connected to Eskom's electrical equipment
Point to point	means the electrical infrastructure directly from the existing Eskom network to the Customer self-built asset, where no other Eskom customers or electrical infrastructure can be affected
Power Plant Equipment	has the same meaning as the HV Plant equipment
Premium Connection Charge	means that portion of the Connection Charge payable for costs associated with the premium connection included in the scope of the Eskom Works to meet customer specific requirements in excess of what is considered as the least life-cycle cost investment
Route plan	means a plan detailing the geographic path along which the asset will be constructed
Schedule of owners	means a listing of the names, addresses and contact numbers of all landowners along the route of the new *about-to-be-constructed* asset
Self-Build	means the planning, financing, insuring, land rights acquisition, design, engineering, procurement, supply, fabrication, construction, erection, installation, inspection, pre commissioning, testing, completion and commissioning of the Contract Works by the Customer, and on completion of the Contract Works the handover of the plant, facilities, equipment, assets and related designs, material guarantees/warranties, deeds and other documentation by the Customer to Eskom
Self-Build Agreement	means the agreement between Eskom and the Customer pertaining to the Contract Works and defining, inter alia, the terms, rights and obligations of these parties, and specifically including the conditions under which the self-build option requested by the Customer will be allowed and exercised
Self-Build Customer	means a Customer that will be connected to the Eskom network using the self-build option
Self-Build Works	refers to the customer connection assets built through the self-build option
Standard Connection Charge	means that portion of the Connection Charge that is payable for costs associated with the standard connection
Technical Evaluation Forum	means a forum which looks at various project solution proposals and which recommends the best technical option to meet the Customer's demand and ensure that designs are executed in line with the Eskom Standards and specifications – also has the same meaning as Design Review Team
Upstream assets/cost	Upstream assets used for the benefit of many customers and whose costs cannot be directly allocated to one or an identified set of customers

2.3.2 Disclosure classification

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

2.4 Abbreviations

Abbreviation	Description
BOM	Bill of Materials
BQ	Budget Quote
CD	Concept Design
CEL	Cost Estimate Letter
COW	Clerk of Works
CRA	Concept Release Approval
CRM	Customer Relationship Management
CSB	Customer Self-Build
CUOSA	Connection and use of system agreement
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs and Development Planning
DEXCO	Distribution Executive Committee
DRA	Definition Release Approval
DRT	Design Review Team
DWA	Department of Water Affairs
EA	Environmental Authorisation
ECSA	Engineering Council of South Africa
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ENS	Electrical Network Schematic
ERA	Execution Release Approval
ESA	Electricity Supply Agreement
FAT	Factory Acceptance Testing
FDD	Final Design Document
FRA	Finalisation Release Approval
FSOW	Functional Scope of Work
HV	High Voltage
LAP	List of Accepted Products
LES	Eskom Line Engineering Services
LUPO	Land Use Planning Ordinance
MV	Medium Voltage
NED	Network Engineering and Design
NERSA	National Energy Regulator of South Africa

Abbreviation	Description
NNIF	National Network Integration Forum
OHS Act	Occupational Health and Safety Act
ORHVS	Operating Regulations for High Voltage Systems
OU	Operating Unit
PCC	Point of Common Coupling
PCM	Process Control Manual
PDEA	Provincial Department of Environmental Affairs
POC	Point of Connection
POD	Point of Delivery
PTM&DC	Protection, Telecommunications, Metering and Direct Current
QOS	Quality of Supply
SACNASP	South African Council for Natural Scientific Professions
SAHRA	South African Heritage Resources Agency
SAT	Site Acceptance Testing
SBA	Self Build Agreement
SHE	Safety Health and Environment
SI	Supply Investigation
TEF	Technical Evaluation Forum
WBS	Work Breakdown Structure

2.5 Roles and responsibilities

The implementation responsibilities of this standard are outlined in Section 3 below.

2.6 Process for monitoring

The monitoring of effectiveness of this standard will be the accountability of the Provincial Asset Creation management which comprises members from Network Planning, Standards and Implementation, Network Engineering and Design , Project Execution, Land Development and Environmental and upon request, Customer Services.

Ensuring adherence to Eskom standards and specifications by the Self-Build Customer will be done through the following interventions during the life of the project:

a) Eskom Technical Evaluation Forum

b) Eskom Design Review Forum

c) All Eskom holding point as outlined in this standard and in accordance with the applicable checklists

Moreover, self-assessment audits and customer feedback would be used to ensure effective implementation of this standard.

2.7 Related/supporting documents

a) Cost Estimate Letter (pro forma)

b) Budget Quote (pro forma)

c) Self-build Agreement (pro forma)

d) Connection and use of system agreement (pro-forma)

e) Electricity Supply Agreement (pro-forma)

3. Standard for MV/LV Self-Build Customer Projects in Distribution

Various project types within the Distribution business have been identified that can be developed and executed as Self-Build projects at the request of the Customer. The HV Projects are governed by the requirements of the Standard for HV Self-Build Customers Projects in Distribution: 240-43874056. MV and LV projects will be governed by the requirements of this Standard. Projects types identified to be covered within this Standard include:

- MV Major Projects
- MV/LV Minor Projects
- Developer Projects

The Standard has been developed to allow Customers to do the self-building of networks for reasons of cost or time, or both cost and time.

A self-build project is one where the respective parties undertake the following commitments:

Customer	Eskom
1) Route/Site selection and acquisition	1) Complete Concept Design including telecom options
2) All Environmental Authorisations and any other legal requirements including telecommunication requirements	2) Accepting the Route/Site selection and acquisition
3) Complete Basic Design	3) Verifying whether the Basic and Final Designs comply with Eskom's requirements and the acceptance thereof
4) Complete Final Design Package	4) Performing quality control assurance during construction and pre testing site acceptance
5) Acquisition of all project material in compliance with Eskom's Buyers Guide and List of Accepted Products (LAP)	5) Approves the suppliers of electrical equipment and to inspect and accept the electrical equipment prior to installation.
	6) Leading the testing and commissioning of constructed assets
6) Appointment and management of the Construction contractor in consultation with Eskom	7) Operating and maintaining of constructed assets up to point of the Customer's meter after site handover
7) Appointment and management of the Control Plant contractor in consultation with Eskom, including testing and commissioning activities led by Eskom.	8) Monitoring compliance by all relevant stakeholder to this Standard
8) Stakeholder management and co-ordination to support and comply with the Eskom asset creation requirements.	9) Contract Management to ensure compliance with the provisions of the Self-Build Agreement

3.1 MV/LV Self-Build Principles

The principal reason for allowing self-build at the Distribution network level is to afford the customer the opportunity to seek efficiencies in capital costs and timelines in connecting their load to the grid. The following key principles shall apply in a self-build project:

1) The Customer may apply to exercise the self-build option;

2) The right of the Customer to opt for the self-build option must be balanced against the inalienable right of Eskom to protect the integrity and security of the upstream Distribution system;

3) Eskom shall determine the connection method and the point of connection for the project taking into consideration the Customer requirements. A customer may request for a modification to the Eskom determined connection method. The modification will only be allowed where it is technically and financially justifiable and adheres to the South African Distribution Code and Eskom specifications and standards;

4) Eskom shall take over the ownership and operation of the Contract Works Equipment;

5) In cases where the Contract Works Equipment does not comply with the applicable Eskom standards, Eskom will not permit energisation and connection of those assets to the existing network. Eskom shall in such cases request the Customer to rectify the identified defects in the Contract Works Equipment at the Customer's expense.

6) The self-build option shall apply only to the dedicated connection equipment. It is to be noted that dedicated equipment may mean equipment dedicated at the time of construction but which may be used to supply other customers once connected.

7) The Contract Works Equipment connecting to the Distribution System may not pass over a 3rd (third) party's property unless approved by Eskom beforehand;

8) Any Upstream Work or reinforcements required upstream on the Distribution System will not be eligible for self-build unless otherwise agreed to Eskom having considered the safety and security of the upstream network

9) All Contract Works Equipment shall be according to Eskom's standards and specifications. This is intended to protect the safety, integrity and security of the Distribution system.

10) Eskom will recover from the Self-Build Customer the cost of the Eskom Connection Works and the cost of the Monopoly Works (design review, all inspection, testing and supervision costs incurred, including the telecoms cost occurred in ensuring that the Contract Works Equipment are built to Eskom standards and specifications).

11) To facilitate maintainability and compatibility with the existing Eskom plant, Customers are required to source their primary plant and control plant equipment only from existing Eskom contract suppliers. The items of plant selected must be those on existing Eskom national contracts or LAP. Eskom reserves the right to witness FAT's and SAT's.

12) The Self-Build Customer takes full accountability for its own and its agent's Safety, Health, Environmental and Quality (SHEQ) incidents during the duration of the self-build project.

13) Eskom will accept no liability for costs or deemed energy payments as a result of late connection due to a refusal to take over assets that have not been built in accordance with the latest revision of Eskom Standards.

14) The integration of the projects for the upgrading and strengthening of Upstream Works and the Self-Built Customers project will be managed and coordinated by the Eskom Project Manager

15) Under the self-built option, the Customer is responsible for obtaining approvals from external parties. Should these external parties delay them, Eskom has the right to re-quote for increased costs due to the delay.

This self-build standard applies only to Distribution MV/LV connection works. If there are Transmission and sub-Transmission connection works, such assets will be constructed in accordance with the Standard for HV Self-Build Customer projects in Distribution and/or the Transmission self-build procedure.

3.2 Connection Charges and Raising of Fees and Guarantees

All charges and guarantees for self-build projects shall be raised in accordance with the latest version of the Connection Charge policy and procedure for connections to the Distribution network.

3.3 Self-Build Agreements

The Customer will be required to enter into Eskom's standard CSB Agreement in order for Eskom to allow the construction of the contract works. This agreement sets out the terms and conditions around the construction of the Contract Works and must be read in conjunction with this Standard.

3.4 Categories for MV/LV Self-Build Projects

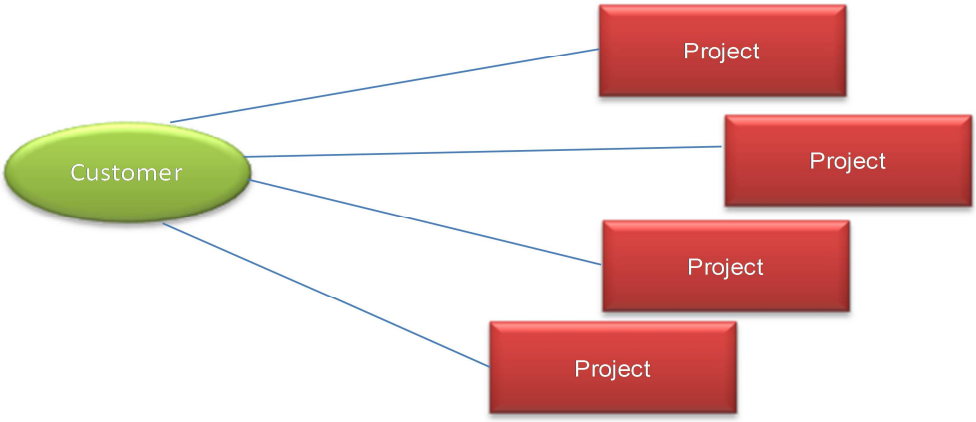
3.4.1 A single Customer with one Customer Self-Built Project

An Electricity Supply Agreement (ESA) or a Connection and use of system agreement (CUOSA) as the case may be, will be concluded with the Customer for the supply together with the CSB Agreement. . The CSB Agreement will be concluded between Eskom and the Customer for the construction of the Contract Works. The Customer, in turn will be responsible to:

- Provide to Eskom a Power of Attorney" letter (annexed) if the Customer Self-Built project is managed by a consultant appointed by the Customer
- Appoint an Eskom approved consultant to design and plan the installation as well as an Eskom approved contractor to do the construction work.
- Sign the CSB Agreement between Eskom and the Customer.
- Appoint an Eskom approved contractor per project to perform the construction of each project.
- If required formally request Eskom to carry out the design and plan the project. In this case Eskom may request the customer to appoint an Eskom accredited Surveyor to do the survey and survey related activities which will then be presented to Eskom for approval and to be incorporated into the final design for the project. Eskom NED will use this input to finalise the design package for the project. If the Customer is requested to appoint a Surveyor then the Customer will not be charged for the survey of the project.

Care must be taken that no impression is given that any contractual arrangements are concluded directly between Eskom and the consultant or contractor

3.4.2 A single Customer with multiple Customer Self-Built Projects (at different times and locations and on an Operating Unit or National basis e.g Vodacom, MTN and Cell-C, etc.)



An Electricity Supply Agreement (ESA) or a Connection and use of system agreement (CUOSA) as the case may be, will be concluded with the Customer for the supply together with the CSB Agreement for each project. The ESA may be a national agreement and one CSB Agreement can be concluded with the Customer for the construction of all the supply points (i.e. projects) annexed to the contract.

The Customer is responsible to:

- Provide to Eskom a Power of Attorney" letter (annexed) if the Customer Self-Built project is managed by a consultant appointed by the Customer
- Appoint an Eskom approved consultant to design and plan the installation as well as an Eskom approved contractor to do the construction work.
- Sign the CSB Agreement between Eskom and the Customer.
- Appoint an Eskom approved contractor per project to perform the construction of each project.
- If required formally request Eskom to carry out the design and plan the project. In this case Eskom may request the customer to appoint an Eskom accredited Surveyor to do the survey and survey related activities which will then be presented to Eskom for approval and to be incorporated into the final design for the project. Eskom NED will use this input to finalise the design package for the project. If the Customer is requested to appoint a Surveyor then the Customer will not be charged for the survey of the project.

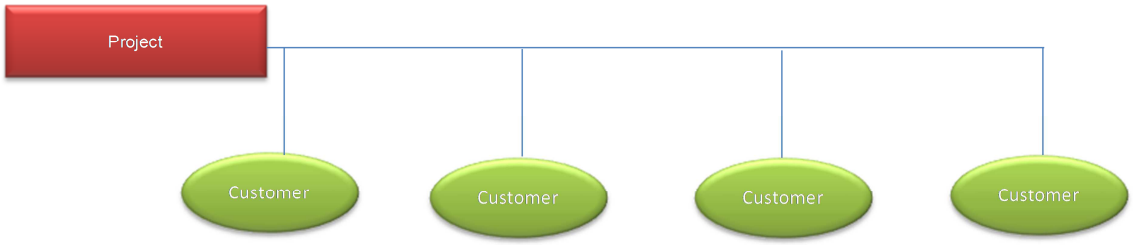
The Customer may make use of a different contractor for each project as long as the contractor is Eskom approved/ recommended. The reason for this is for example, that it may not always be possible to use the same contractor in two different OUs.

Since the CSB Agreement is a short period contract (valid for 12 months after the commissioning date), it is further advised that only one CSB Agreement (either National or Operating Unit) should be used for each calendar year covering the projects executed within that particular year.

The National Customer Executive or OU Customer Executive (depending if a National or Operating Unit Customer Self-Built Contract is concluded) will then keep the original Customer Self-Built Contract and coordinate the annexure in terms of each project to be attached to the contract. If the Customer is a generator this will be managed by the GAU and if the Customer is a load or a Developer is will be managed within the Customers Services environment.

Care must be taken that no impression is given that any contractual arrangements are concluded directly between Eskom and the consultant or contractor.

3.4.3 One Self-Built Project with multiple customers such as in the case of a scheme or development



An Electricity Supply Agreement (ESA) or a Connection and use of system agreement (CUOSA) as the case may be, will be concluded with the Customer for the supply together with the CSB Agreement. . The CSB Agreement will be concluded between Eskom and the Customer for the construction of the Contract Works. The Customer or representative (if a partnership or joint venture is legally formed), in turn will be responsible to:

- Provide to Eskom a Power of Attorney" letter (annexed) if the Customer Self-Built project is managed by a consultant appointed by the Customer
- Appoint an Eskom approved consultant to design and plan the installation as well as an Eskom approved contractor to do the construction work.
- Sign the CSB Agreement between Eskom and the Customer or representative of all customers for the construction of all the Contract Works for all the supply points which information will be annexed to the contract
- Appoint an Eskom approved contractor per project to perform the construction of each project. In this case Eskom may request the customer to appoint an Eskom accredited Surveyor to do the survey and survey related activities which will then be presented to Eskom for approval and to be incorporated into the final design for the project. Eskom NED will use this input to finalise the design package for the project. If the Customer is requested to appoint a Surveyor then the Customer will not be charged for the survey of the project.
- If required formally request Eskom to carry out the design and plan the project.

Care must be taken that no impression is given that any contractual arrangements are concluded directly between Eskom and the consultant or contractor

3.4.4 Self-Build for Line Moves

A shift in a point of supply or a relocation of existing LV or MV infrastructure can also be done as a self-build project. The CSB agreement will be concluded between Eskom and the Customer for the construction of the supply point or the relocation of the infrastructure. The Customer will be responsible to:

- Provide to Eskom a Power of Attorney" letter (annexed) if the Customer Self-Built project is managed by a consultant appointed by the Customer
- Appoint an Eskom approved consultant to design and plan the installation as well as an Eskom approved contractor to do the construction work.
- Sign the CSB Agreement between Eskom and the Customer or representative of all customers for the construction of all the Contract Works for all the supply points which information will be annexed to the contract
- Appoint an Eskom approved contractor per project to perform the construction of each project.

- If required formally request Eskom to carry out the design and plan the project. In this case Eskom may request the customer to appoint an Eskom accredited Surveyor to do the survey and survey related activities which will then be presented to Eskom for approval and to be incorporated into the final design for the project. Eskom NED will use this input to finalise the design package for the project. If the Customer is requested to appoint a Surveyor then the Customer will not be charged for the survey of the project.

Care must be taken that no impression is given that any contractual arrangements are concluded directly between Eskom and the consultant or contractor.

3.5 Outline of the various MV/LV Self-Build Processes

A customer electing to make use of the self-build option to undertake the Contract Works in order to connect to the Eskom Distribution System MUST do so in writing. The application for the self-build option will be managed in accordance with the Wires Project Life Cycle Model and Work Package Standard and the associated Governance Guideline. In certain cases Eskom may request the Customer to self-build the project or certain elements of the project.

The Self-Build cost estimate letter, quotations and associated agreements will follow the normal quotation and contracting process as defined in the Customer Base Management PCM (Process Control manual). The connection charges to be raised and capital allowance will be as per the Eskom Connection charge policy and procedure. The CELs and BQs for a CSB project will include the scope of work that is required to be self-built and will detail the associated Monopoly cost break-down as required by the CSB agreement (i.e. the Scope of Work and Monopoly Costs will be provided by NED).

Where Eskom is to carry out the design, NED will provide the cost to be quoted for the design work and where the customer is to appoint the surveyor, the design cost to be quoted will exclude all the related surveyor costs including profiles, wayleaves, stats, etc.

In order to for the BQ to be effective, the BQ must be accepted, the Connection Charges and Guarantees provided, the CSB agreement, the ESA and or the CUOSA must be signed. All of these must be in place before Eskom will permit the Eskom or Contract Works to proceed. .

Based on the type of project to be delivered, the Customer may at any time, apply for the option of self-build. This may require a revised CEL and/or BQ and may require additional CEL Fees and/or Quotation fees to be paid.

The timing and the opportunity for the Customer to request for the self build option will depend on the type of self build project being undertaken.

MV Major projects	MV/LV Minor Projects	Developer Projects
In the case of MV Major Projects, the Customer will have <u>two</u> opportunities to apply for the option of self-build: 1) At the time of Initial Customer Application – the Customer may indicate a preference for the self-build option which will then be provided for in the scope outlined in the Cost Estimate Letter (CEL). 2) After the CEL has been issued by Eskom, at the CEL acceptance stage, the Customer also has an opportunity to indicate preference for self-build.	In the case of MV Minor Projects, the Customer will have <u>one</u> opportunity to apply for the option of self-build: 1) At the time of Initial Customer Application – the Customer may indicate a preference for the self-build option which will then be provided for in the scope outlined in the Budget Quotation (BQ). The budget quotation will also give a breakdown of the Monopoly costs which will be provided by NED together with the scope and design fees where applicable	In the case of Developer Projects, the Customer will have one opportunity to apply for the option of self-build from the existing Eskom assets to the point of common coupling (the internal development will be done by the customer in any case): 1) At the time of the Initial Customer Application – the Customer may indicate a preference for the self-build option which will then be provided for in the scope outlined in the Cost Estimate Letter (CEL).

MV Major projects	MV/LV Minor Projects	Developer Projects
In the case of (2) and, a revised CEL will have to be issued to the Customer detailing: • a revised scope of work excluding the self-build scope of works • a revised cost estimate • a revised project schedule	2) The draft self-build contract will be compiled and sent together with the self-build quote and the ESA for load customers 3) If the customer accepts the self-build quotation, pays the required fees and signs the SBA. Eskom will sign the self-build contract and the project will be released for execution in term of the conditions contained in the self-build agreement 4) The customer will then need to appoint a responsible person in terms of the self-build agreement to do any required survey and design 5) The customer or the appointed responsible person will then present the design for acceptance to the Eskom Head of Minor Reticulation in Eskom. 6) Only once the customer has Eskom acceptance for the design as required in the self-build contract, may the construction work commence	

The cost estimates and or budget quotations for self-build projects will be referred to as a Self-Build Cost Estimate or Self Build Budget Quotation and will reflect separately that work which will be undertaken and executed by Eskom and that which will from the scope of the self-build project.

Figures 1, 2 and 3 below is a graphical representation of the various processes depicting key Eskom and Self-Build Customer deliverables from Customer application to asset handover and commissioning.

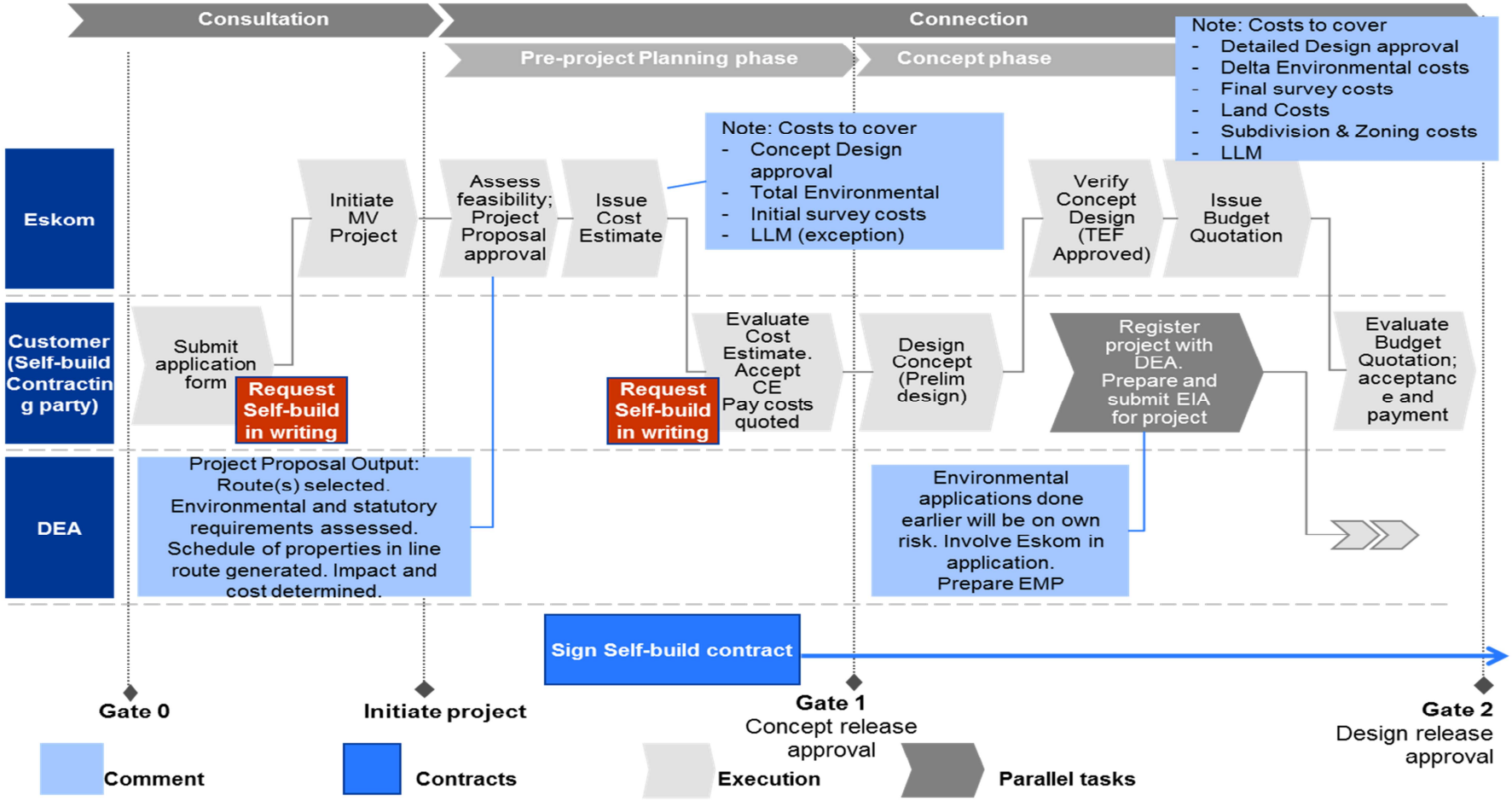
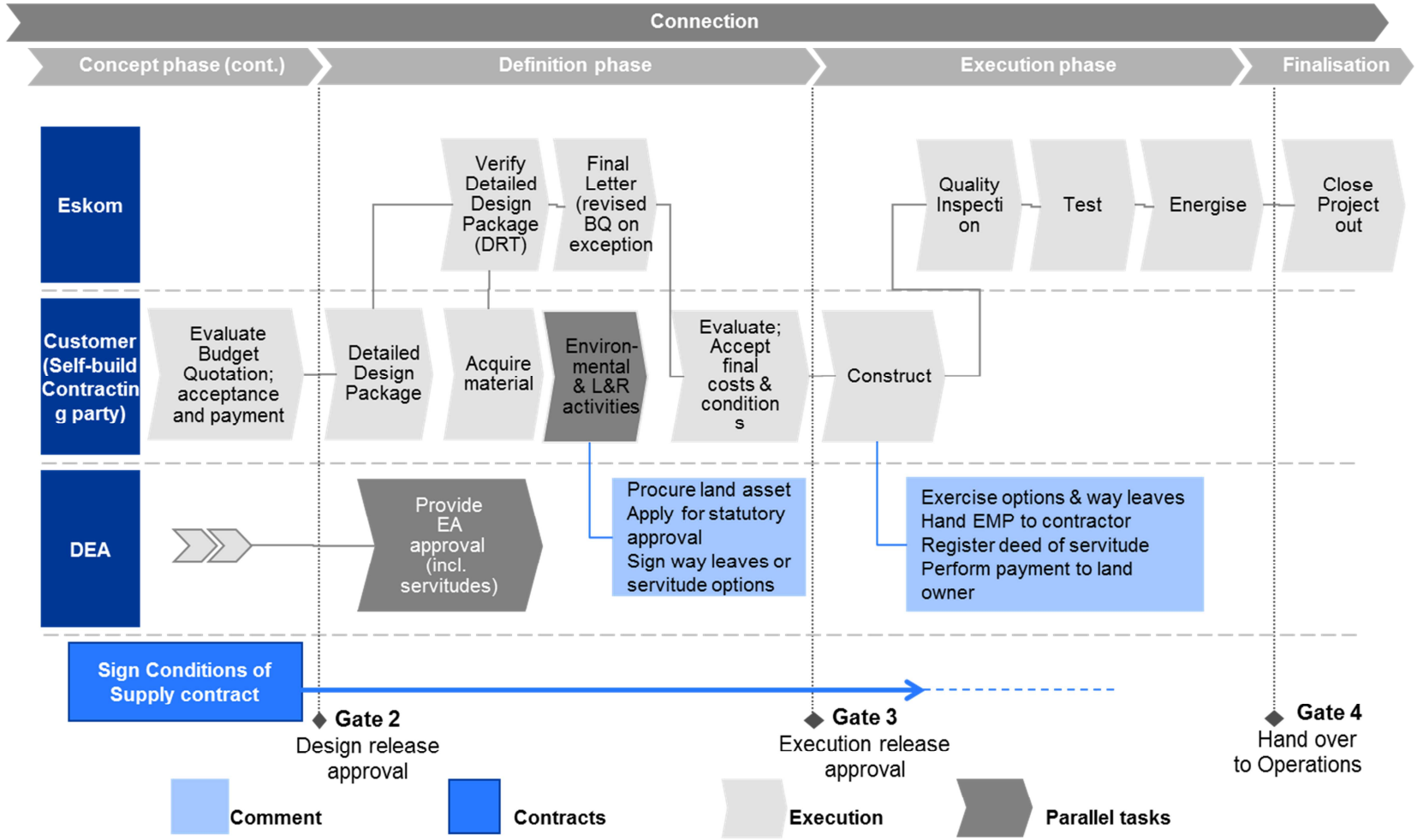


Figure 1: MV Major Projects



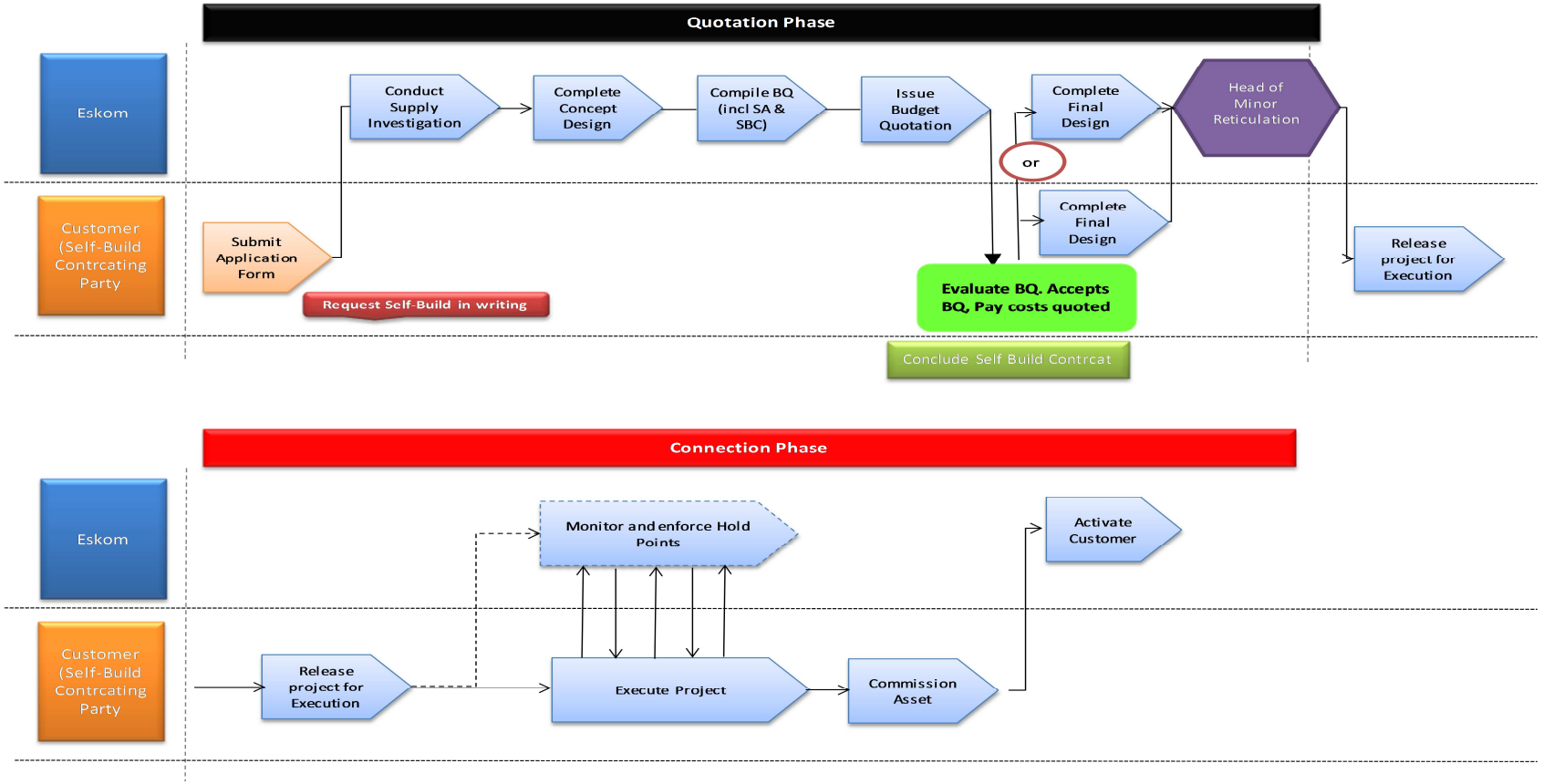


Figure 2: MV Minor Projects

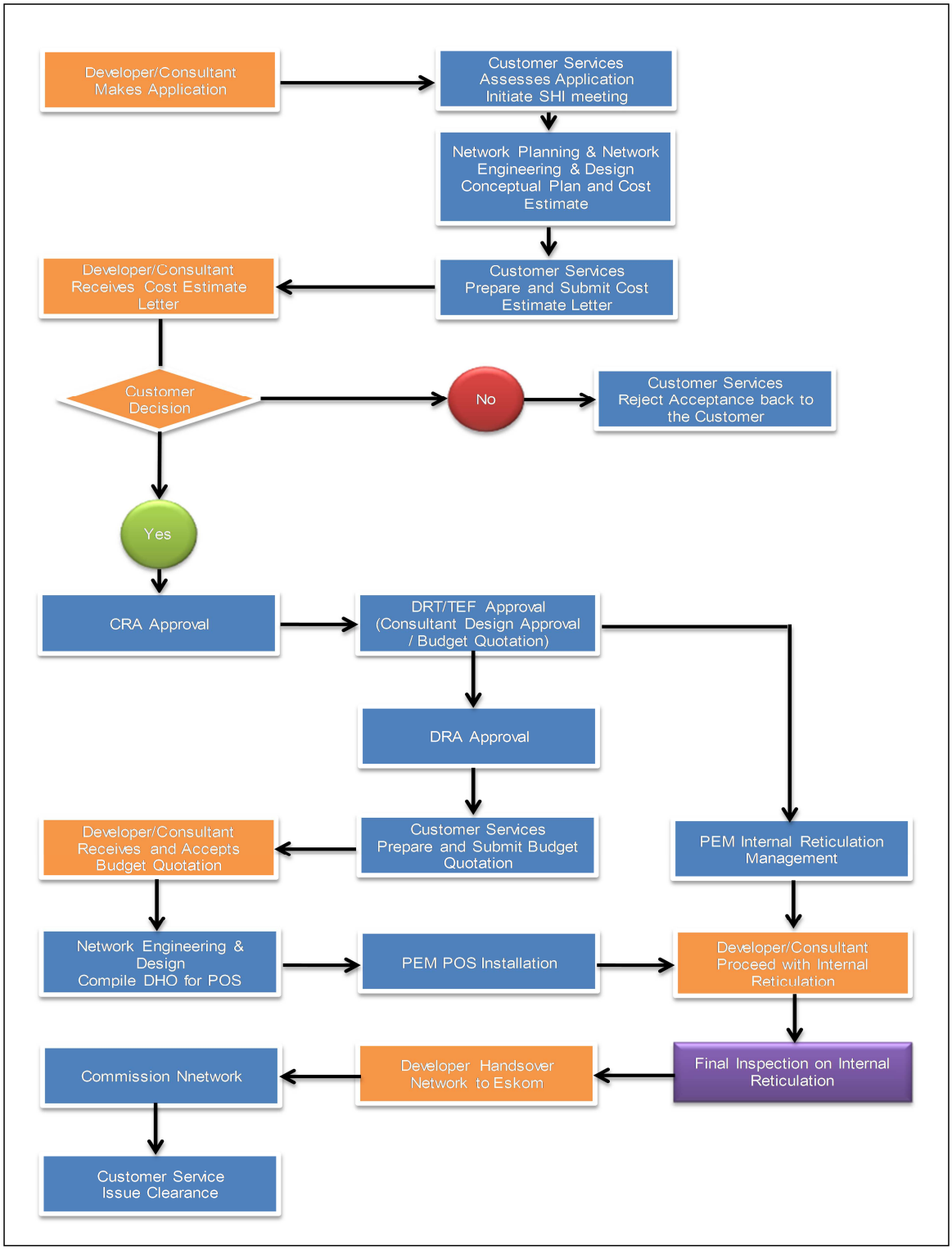


Figure 3: Developer Projects

3.6 Defining Contract Works and Monopoly Works

The following activities are considered the Contract Works and may be allocated to the Customer for self-build:

- Preparation of a Network Planning Report and/or Business Case Report, motivating the need for an asset to be created, in consultation with Eskom.
- Route and site selection including telecoms options (in consultation with Eskom)
- Route and site acquisition (include water and sewerage connections when applicable) to be undertaken in consultation with Eskom
- Environmental Impact Assessment (EIA)
- Environmental Authorisation (EA)
- All other assessments required; applications, permits and statutory approvals.
- Land rights
    - Any Eskom asset that requires servitude
    - Only land rights registered against the title deed of a property will be accepted
    - Servitude and Title Deeds for access roads
    - Wayleaves for MV/ LV overhead lines and servitudes for MV/ LV underground
    - cables.
    - Any registration costs for servitude are for Customer's account
    - The statutory approvals, permits and licenses required.
- Preliminary Designs (subject to Eskom design requirements) and associated governance approvals
- Project Risk Assessments (Basic and Final)
- Final Design Package (subject to Eskom design requirements)
- Equipment/material purchasing (in compliance with Eskom Buyers Guide and LAP)
- Construction using Eskom authorised contractor. Telecommunications design could be included if agreed upon.
- Construction profiles for MV lines
- Construction method statements
- Construction quality control and management
- Works and assets that are required by Eskom for system protection, communication and metering
- Work and assets if decided by the Distributor after having reviewed the safety and security concerns, which can be safely and efficiently separated from the existing live system.
- FAT (Eskom will witness when requested)
- Pre-commissioning tests (SAT) of primary plant and witnessed by Eskom if required. Provide & maintain auxiliary supplies until Eskom's works is energised. After construction works completion assist Eskom with pre-test and commissioning site readiness.
- Site clean-up, disposal of waste, and anti-erosion works in accordance to the EMP
- All the documentary proof to the Eskom Project Manager confirming that all the holding points and tests have met acceptance criteria.
- As build drawings and guarantees ceded to Eskom at asset hand over stage.

The following activities are considered Eskom Monopoly Works and will be undertaken by Eskom:

- Network Planning shall influence and approve the preferred network concept solution and decisions.
- The determination of the point of connection and the connection method (Network Planning Solution) subject to the Customer providing the load or generation information as requested by Eskom. Control plant planner to provide telecommunication options.
- All agreed to work related to upstream/or existing assets and associated system reinforcements.
- Work and assets that cannot be safely and efficiently separated from the existing live/in service systems.
- Network operational control and switching activities
- The outline specifications and requirements relating to sites/routes/ wayleaves and or servitudes.
- The Eskom standards to be used for but not limited to, Medium & Low Voltage lines and Part 22 Cables Systems and Part 8 Services.
- The verification of compliance with Eskom Standards for the Preliminary and Detailed Design of dedicated connection assets.
- Approval of the suppliers of electrical equipment for the Customer and the inspection and acceptance of the electrical equipment prior to installation
- Quality assurance and monitoring of the construction works in line with Eskom's construction holding points and the Eskom Standards, including witnessing FAT/SAT when required by Eskom. After construction works completion, conduct site inspection for interim site acceptance in order to perform Test & Commissioning works.
- Leading Customer's Control Plant contractors during the inspection, testing and commissioning activities of the newly constructed asset with final sign-off and acceptance as objective.
- Maintenance and operating of assets prior to it being transferred to Eskom's ownership.

3.7 Stakeholders

The following parties are stakeholders in the Self Build process:

1) The Self-Build Customer and all those contracted with the Customer including:

- Engineering surveyor and / or geographic information consultant
- Environmental Consultant and related specialists
- Negotiators or land acquisition consultants
- Design Engineering consultant(s)
- Construction contractor(s)
- Others as may be required by a contracting party

2) Eskom will be represented through the following departments, although not limited to, such as:

Customer Services, Key Customer Services, Grid Access Unit:

- Customer Acquisitions
  - Electricity Pricing (OU and Head Office)
  - Network Planning
- Land Development and Environmental
- Network Engineering and Design

- Project Execution
- Plant Management
- Customer Network Centre
- Network Operations and Management
- Operations and Management
- Standards and Implementation

3.8 Major and Minor MV/LV Projects (excluding Developments)

3.8.1 Requirements for project to be Major or Minor

Minor Projects:

Minor customer projects only occur with customers applying for an electricity connection or applying for existing Eskom infrastructure to be moved. Projects fulfilling the following criteria are defined as minor projects:

- Supplies < 1MVA
- The value (Eskom project cost) per project must not exceed R1 000 000 for overhead network projects and R1 500 000 in the case of urban underground projects. These values may be reviewed and updated from time to time. The latest defined values for Minor works will always apply
- All construction and site work can be done according to set guidelines without requiring non-standard design cells, thus utilising standard designs.
- All material used in the project is from the “Buyers’ Guide” and available as off-the-shelf material and normal fast-track stock items.
- Report all quotations against a 30-day and all connections against a 90-day rate of completion target in accordance with NRS047.

MV Major Projects:

All other MV projects falling outside of the above definition constitutes a MV Major project and will follow the Wires PLCM subset

3.8.2 Responsibilities of contracting parties

Eskom’s Responsibilities	Customer’s Responsibilities
Customer Services • All projects that conform to the Minor Works definition: **Are to be uniquely identified "Self-build" after the** GTX No. and customer Name. • Serve as interface between Eskom and the Customer • During later project phases where Project Management takes over, assist with serving as interface between Eskom and the Customer. (Where applicable)	• Provide all applicable documentation when requesting the self-build option. • The Customer accepts the BQ and complies with the conditions of the BQ to make it effective. • The Customer signs all the required agreements and adheres to the conditions of these agreements.

Eskom's Responsibilities	Customer's Responsibilities
• Ensure that the Project Manager appointed on the Customer's side is integrated in the Eskom Project Management Team (Where applicable) • Manage the quotation and acceptance of the quotation process. • Manage the physical approval of all relevant (self-build, POS, etc.) contracts with the Customer • Authorise Customer payments so that projects may proceed. • Obtain CRA approval. (Where applicable) • Reconcile actual project costs versus Customer contribution during project close-out.	
Network Planning • Obtains high-level technical requirements from Customer and analyses the network to determine what solutions can be accommodated. (Where applicable) • Confirms and accepts the proposed technical solution • Approves the Planning Proposal • Ensures inclusion of project in their Network Development Plans post acceptance of CEL by the Customer	• Provides the required load and network planning proposal. • Obtain Planning Proposal approval
Land Development • Performs all the necessary survey checks and approval checks as received from the Customer's appointed surveyor and ensures all the necessary system updates are carried out. (Where applicable) • Alternatively carries out the survey and associated tasks. • The customer has to obtain all required wayleaves/options and statutory approvals and submits to Eskom Land Development with the Final design Package • The Environmental practitioner must ensure that all environmental requirements are met	• Customer appoints an engineering surveyor (Eskom • approved) • Customer appoints a land surveyor (Eskom • approved) • Customer appoints an environmental consultant • (Eskom approved). • Customer must provide GIS information for small world (NOD)

Eskom's Responsibilities	Customer's Responsibilities
Network Engineering & Design • Provides Eskom costing for quotations. • Review the Technical Design Report. (Where applicable) • Convenes FSOW for acceptance of the concept design (Where applicable) • Convenes TEF for approval of the concept design (Where applicable) • Receives detailed Survey drawings and right of way document from the Customer where Customer has been requested to appoint a Surveyor • Supports the project design, drawings and bill of materials a) Receive and process the detailed design in accordance with Eskom standards b) Review the project at the technical evaluation forum c) Check and supports design, drawings and bill of materials at the Design Review Team meeting Technical Evaluation Forum d) Issue approval to the developer • Compiles the final detailed design where Eskom has agreed to do the design. a) Process the detailed design in accordance with Eskom standards b) Review the project at the technical evaluation forum (Where applicable) c) Compiles design, drawings and bill of materials for inclusion in the Self Build agreement d) Issue approval to the Customer / developer • Makes the final design document available to Project Management	• Customer appoints its own ECSA registered Design Engineer/Technologist/Technician (Eskom approved) who will ensure that the design, drawings and Bill of materials receives Eskom TEF and Design Review Team approval and final design package acceptance. a) Submit detailed design in accordance with Eskom standards to the Eskom Asset Creation Design Review Team meeting b) Present the concept design at the Eskom technical evaluation forum c) Obtain budget quotation for the Eskom connection costs d) Obtain approval for detailed design, bill of materials, drawings and EIA. • Customer procures own material (from Eskom approved suppliers). a) Obtain List of accepted suppliers for material to be procured for the project from Eskom b) Procure material from approved suppliers in compliance with Eskom's Buyers Guide and LAP. c) Request Eskom to inspect the material prior to delivery to site. d) Submit all routine and factory acceptance tests to Eskom. e) Transport and ensure safe delivery of materials to the project site.
Project Execution • Prepares and obtains ERA approval. (Where applicable) • Appoints a dedicated COW whose primary role will be to ensure the construction contractor has constructed in line with the approved Eskom Standards, through the introduction of pre-agreed construction hold points with Customers Clerk of Works and Construction Contractor. COW to ensure all checklists are completed by the contractor, self-build consultant and Eskom COW.	• Customer appoints its own construction contractor (Eskom pre-approved). a) Obtain List of approved installation contractors from the relevant SI department. b) Appoint the suitable approved contractor for the specified scope of works. c) Ensure the installation contractor performs the installation work in accordance to the Eskom standards and requirements. d) Keep documents and records of all the installation scope of work execution.

Eskom's Responsibilities	Customer's Responsibilities
• Verifies and with assistance from SI, ensure that the materials used during construction conform to Eskom's specifications and are procured from an Eskom approved supplier. • Confirms the use of Eskom Regionally-approved contractors. • Takes over the asset from the Customer after completion of testing and commissioning. • Requests the necessary outages. • Collates all guarantees and warrantees in respect of the equipment. • To approve the project handover a) All relevant stakeholders to sign off checklists. b) All relevant stakeholders to approve project handover • To ensure all guarantees and warrantees is obtained for the installation	e) Ensure all checklists are completed by the installation contractor, developer consultant, and Eskom Clerk of Works. • Customer appoints its own Clerk of Works so as to ensure quality workmanship on all construction work being executed and the proper handling and storage of material on site. • Customer to inform Eskom timeously to perform the checklists by the COW and the holding point installation inspections by SI a) All activities for the project need to be inspected by the Eskom Clerk of Works and the relevant checklists need to be used for this. b) All identified holding points listed below need to be inspected by the relevant SI department • Customer provides the listing of all guarantees and warrantees in respect of the equipment, and cedes them to Eskom • Customer to perform the project handover a) Ensure the project and network is ready for handover. b) Ensure Eskom is notified of the intended handover date
Control Plant Maintenance • Lead a Customer's control plant contractor during the testing and commissioning of the asset. . (Where applicable)	• Customer appoints its own construction contractor (Eskom approved) for the control plant execution.
Operations and Maintenance • Assist with the outage arrangements. • Inspect asset to confirm the operating diagrams and As-Built spatial data and network elements.	
Network Operations and Management • Takes over the asset to be maintained. • Updates the maintenance systems with the plant data. • Prepares the planned maintenance schedule for the plant that was taken over.	

3.8.3 Hold Points

3.8.3.1 Minor and LV Projects (Minor Project Process)

PROCESS	RESPONSIBILITY
1) Quotation Phase	• Network Planning, Project Engineering & Land Development: Preliminary design from Consultant is discussed with Eskom stakeholders to determine capacity, design proposal and route selection. • Land Development to provide approval and transformer number if the following are submitted and correct: o Spanning sheets o Geographical lay-out o DESD o Proof of applications for approvals o Coordinate list • Network Engineering and Design to provide support if the following are submitted and correct: o Final Design Document o All approvals for Land Development applications o Bill of Quantities o List of approved Eskom Contractors o BOM o SHEQ documents o Checklists • Customer services to ensure that the SBA accompanies the BQ • Customer Services to ensure acceptance of the BQ and payment of the required fees
2) Connection Phase	• Project Manager to confirm the use of approved Eskom Contractors by the customer to execute the job • Project Management will not permit commencement of construction before the Self Build design has been issued and approved by Eskom • Clerk of Works will not permit installation of electrical equipment unless it has been checked by Eskom first. • Clerk of works will not permit commencement of construction before the pre job plan has been concluded with the CNC • Project Management to perform regular site checks to ensure compliance to approved Final Design Document • Project Management to oversee outage meeting between Ops & Maintenance CNC and Customer's Consultant. • Clerk of Works will not permit outage to proceed if there are defects or the workmanship is not in line with the agreed Eskom scope and specs • Land Development to receive signed off as-built drawings from Consultant including project drawing, profiles and spanning sheets, ENS drawings and all necessary coordinates including as pegged data, etc. • Land Development to receive all wayleaves/servitudes, statutory approvals and any other legal approvals and related documentation required. • Project Management to receive signed hand-over document.

3.8.3.2 MV Major Projects (Wires PLCM Subset)

PROCESS	RESPONSIBILITY
PRE PROJECT PLANNING PHASE	
1) Customer Application	• Customer Services to ensure written proof of Customers request to undertake project as a self-build, payment of the Cost-Estimate fee and that all Eskom's requirements for self build projects have been provided to the applicant
2) Project Proposal	• Senior Planning Engineer must confirm and accept the proposed technical solution
3) Acceptance of Cost Estimate Letter	• Customer Services to confirm Customer's acceptance and payment of the cost estimate fee
Confirmation of all of the above requirements is necessary prior to Concept Release Approval (CRA)	
CONCEPT PHASE	
1) Establish the Core Project Team	• NED to confirm the use by the Customer of Eskom approved consultants to manage and prepare the basic and final design. • Land Development to provide written acceptance of the customers-appointed engineering surveyors/land surveyors to handle all surveying functions and other approvals (if applicable) • Environmental to provide written acceptance of the customers-appointed environmental consultants to handle all environmental functions and other approvals (if applicable)
2) Selection of Location	• Land Development must accept the route and/or site selection indicated by the self-build customer • Land Development to ensure Eskom wayleaves/options to be utilised for securing Eskom rights in prescribed format and to ensure wayleaves/options are signed and options exercised prior to Execution phase
3) Initiated Environmental Assessment	• Environmental/Land Development to confirm that EIA, EMPr and any other approvals/permit conditions undertaken by the customer has been reviewed prior to submission to the authorities
4) Basic Design	• NED to confirm acceptance by the TEF of the customer's basic design. It remains however the responsibility of the Customer or his Consultant to present at the TEF
Confirmation of all of the above requirements is necessary prior to Definition Release Approval (DRA)	
DEFINITION PHASE	
1) Acceptance of Budget quotation	• Customer Services to ensure the Budget Quote is provided together with the CSB Agreement, the ESA and /or CUOSA as the case may be. The BQ must be accepted, all required connection charge payments made, all guarantees provided and all agreements signed to give effect to the Budget Quote and to proceed with the connection
2) Detail Design	• NED to confirm acceptance by the DRT of the customers detail design. It remains however the responsibility of the Customer or his Consultant to present at the DRT
3) Detail Contracting and Procurement Strategy and Plan	• Project Execution to provide written acceptance of All the customers-appointed construction contractors
Confirmation of all of the above requirements is necessary prior to Execution Release Approval (ERA)	

PROCESS	RESPONSIBILITY
EXECUTION (Phase 1)	
1) Site Preparation / Establishment	• Project Execution to confirm that project Kick-Off meeting had taken place all Eskom pre-construction requirements have been adhered to • Land Development/Environmental to review approval/permit conditions prior to and during the execution phase in order to ensure all legal requirements are adhered to • Project Execution must not to permit the commencement of construction before the Self Build design has been issued and approved by Eskom • Project Execution must not permit commencement of construction before the pre job plan has been concluded with the CNC • Project Execution must verify that all materials procured by the customer, as listed in the Final Design Package, has been procured from Eskom-accredited suppliers • Project Execution to ensure adherence to the outlined Eskom Quality Control hold points during construction
Confirmation of the above requirements will allow the Customer's contractor to commence construction. Where the contractor has commenced work without satisfying the above requirements, all such work shall be undertaken at the Customer's risk and expense, should the contractor fail to meet Eskom's requirements	
EXECUTION (Phase 2)	
1) Operational Readiness	• Project Execution to ensure all Quality Control check sheets as per the Final Design Packages and all handover documents have been completed and signed by all parties • Project Execution to undertake the final check for compliance with EA, EMPr (if applicable) and all other environmental requirements which may have been specified. • Project Execution to ensure that customer obtains sign-off from the Landowner(s) (where applicable) and deliver release forms to Eskom confirming that Landowner(s) are in agreement that their properties have been rehabilitated after the completion of construction activities to at least the minimum requirement of the same condition as before construction started. • NED should review Checklists and Test certificates/results
2) As Built Data	• Project Execution to ensure that all As-Built drawings and all equipment data sheets (where applicable) is submitted in the required Eskom format after the completion of construction and prior to the commencement of testing and commissioning of the constructed asset. • Land Development to receive signed off as-built drawings from Consultant including project drawing, profiles and spanning sheets, ENS drawings and all necessary coordinates including as pegged data, etc. • Land Development to receive all wayleaves/servitudes, statutory approvals and any other legal approvals and related documentation required.
3) Commissioning and Energising	• Project Execution will not permit outage to proceed if there are defects or the workmanship is not in line with the agreed Eskom scope and specs • Customer Services to ensure that the connection agreement is signed by both parties before energising and must obtain the network guarantees as per (DST 34-147) before network is handed over. Guarantees/deposits for accounts must also be obtained where applicable • NED should review Checklists and Test certificates/results
Confirmation of the above requirements is necessary prior to the Hand Over Approval (HOA)	

PROCESS	RESPONSIBILITY
FINALISATION PHASE	
1) Transfer Obligations	• Project Execution to ensure that all warranties and guarantees in respect of equipment purchased by the customer is handed over to Eskom
2) Issue final reconciliation letter	• Customer Services to provide a final reconciliation letter to recover additional Connection Charges where costs are exceeded or pay back Connection charges for costs lower than what was quoted.
Confirmation of the above requirement is necessary prior to the Finalisation Release Approval (FRA)	

3.8.4 Risks

	Risk	Risk Mitigation
1)	Use of non-standard designs – leads to operating errors	Enforce design acceptance holding points as indicated in this Standard. Risk mitigated by complying with this procedure.
2)	Use of non-standard materials – leads to additional stock holding and operating errors.	
3)	Non-standard / different maintenance requirements.	
4)	Different wiring or schematic philosophies.	
5)	Different earthing and / or safety philosophies.	
6)	Paying excessive compensation for Servitudes	Consideration payable for any land rights acquired must be based on the principles set out in the Expropriation Act and must furthermore be in accordance with the Eskom Consideration and Compensation Standard (EST 32-844). Any additional payments paid to landowners must be done through separate agreement and may not be reflected in the Deed of Servitude as part of the price.
7)	Not consulting all the stakeholders during design and execution.	Enforce Project Management principles as accepted and applied in the Project Execution Department and described in this Self build Standard The network should not be taken over, until all requirements a stipulated in this standard are met, and all site defects and outstanding issues have been resolved.
8)	Missing holding points and expecting takeover at the end of construction.	
9)	Need to correct and equip consultants and contractors continuously during the project life cycle.	• Enforce design acceptance holding points as indicated in this Self-Build Standard. • All Eskom stakeholders' responsibilities are clearly defined in this Self-build Standard. • Eskom should make an urgent plan to equip more consultants to be familiar with Eskom Distribution's standard designs and procedures. Supply Management should follow this up urgently to increase the pool of accredited consultants available for self-build projects as well as the normal Eskom build programme.

	Risk	Risk Mitigation
10)	Confusion over responsibilities.	The Self-build Standard clearly allocates the responsibilities of Eskom and the Customer.
11)	Use of out-dated standards.	Enforce design acceptance holding points as indicated in this Self-build Standard. Eskom NED should ensure the Customer is informed of the latest Eskom Standards. Consulting Engineers to be advised that application can be made to Eskom's Standards and Implementation platform for the most updated and latest approved standards.
12)	Poor workmanship.	Enforce quality inspection holding points and completed checklists during construction as described in this Self-build Standard. Photographic evidence can be considered.
13)	Customer negotiates with supplier to procure Eskom-dedicated material (jumps the queue) at the expense of Eskom's projects	Group Commercial should strictly manage Eskom material orders with suppliers in line with the terms and conditions of the Supplier Contract and enforce penalties where applicable.

3.9 Developer Projects

Note: That as per a DEXCO decision no bulk-supplies to freehold developments are allowed i.e. Eskom will own and operate all assets to each individual household. The developer may self-build the assets but they will be handed over to Eskom in accordance with the requirements of this standard and the CSB agreement.

As any project developers have an option to request Eskom to quote on the design and installation of the internal network as a normal Eskom build project or they can apply to design and install the internal network in accordance to Eskom's requirements at their cost as a self-build project. If a self-build project the network shall be inspected and handed over to Eskom once all conditions stipulated in this Standard are adhered to

3.9.1 Subdivisions

In urban areas there is a tendency for residential property owners to subdivide their properties into two or more stands. The land owner who does this should be considered as a Developer and they are required to comply with the requirements of the Standard for MV/LV Self Built Customer projects in Distribution and the Connection charges for customers connected to Eskom's Distribution network Policy and Procedure in order to obtain a clearance certificate from Eskom. A subdivision is an existing property that is divided in such a way that access to all the sub-divided properties remains bordered on a public road and there are no internal roads or internal infrastructure being developed. A maximum of 6 sub divided stands can be supplied from the street front, of a small development, where no additional MV needs to be installed and where there is adequate space to install these kiosks. The developer can install the kiosks and the cable from the mini-sub as per the conditions of this Standard or request a quote from Eskom to do this installation.

3.9.2 Responsibilities of contracting parties for Developments

Eskom's Responsibilities	Developer's Responsibilities
Customer Services • Assist the developer in completing the application to ensure that all information is correctly captured to avoid delays on the project.	• Provide all documentation when submitting the application and on request from Eskom. • Ensure that Eskom's latest processes, standards, policies and requirements are adhered to at all times.

Eskom's Responsibilities	Developer's Responsibilities
• Provide the requirements for Cost Estimate Letter acceptance, Budget Quote acceptance and for the construction of the asset as per the Standard for MV/LV Self Built Customer Projects in Distribution. • Arrange the supply investigation meeting with the Developer and Eskom Key stakeholders on site. • Serve as interface between Eskom and the Developer during the entire project life cycle. • Manage the quotation and acceptance of the quotation • Manage the physical approval of all relevant (self-build, POS, etc.) contracts with the Developer • Authorise Customer payments so that projects may proceed. • On instruction from Project Execution, compile and release of the clearance letter for the issuing of the section 82 certificate once the Developer has complied with all requirements of this Standard.	• Make all payments during the project life cycle on receipt of a quotation from Eskom within the stipulated time frames on the agreement/contract. • Provide all documents on acceptance of the quotes.
Network Planning • Obtains high level technical requirements from the Customer and analyses the network to determine the network plans to accommodate the customer.	• Provides the load forecast based on an ADMD approved by a Professional Engineer or Technologist.
Land Development • Performs all the necessary survey checks which may include route and site selection, statutory approvals and servitude registrations for the works that Eskom will be responsible for. • Check if all environmental and land development documentation provided by the developer is valid, applicable to the project and is in compliance to all latest environmental and statutory requirements • Ensure that all the necessary system updates are completed.	• Developer to appoint an Eskom approved Surveyor to obtain servitudes and all statutory approvals. • Developer to appoint an Eskom Approved Professional Environmental Consultant to ensure that all environmental requirements are met including Water Use Licences and Environmental Impact Assessments done where necessary. • Ensures that all documentation is submitted to Eskom when requested. • Land Development to receive signed off as-built drawings from Consultant including project drawing, profiles and spanning sheets, ENS drawings and all necessary coordinates including as pegged data, etc. • As built data is especially important for the underground networks to an accuracy of 30cm or less including the positioning of joints on the network. • Land Development to receive all wayleaves/servitudes, statutory approvals and any other legal approvals and related documentation required.

Eskom's Responsibilities	Developer's Responsibilities
Network Engineering and Design • Obtains Technical Approval from the TEF and DRT for the scope of works that needs to be done by Eskom. • Obtains financial approval, from the Investment Committee, for the costing of the scope of works to be done by Eskom. • Checks all designs submitted by the developer's consulting engineer to ensure it is in compliance to Eskom requirements, standards and policies. • Makes the Final Design Document available to Project Execution • Conduct site visits with the Clerk of Works to ensure that the installation is as per the approved Final Design Package. • Should inspect test certificates and checklists from site (Eskom and Customer constructed assets)	• Developer to appoint a Professional Engineer or Technologist who shall ensure that the project receives Provincial TEF approval of the preliminary design for the customers SOW • Developers appointed Professional Engineer or Technologists to provide all technical and non-technical documentation when requested by the Eskom Design Engineer. • Developer's appointed Professional Engineer/Technologist shall ensure that the final design is presented and approved at the Provincial DRT. • The Developer's appointed Professional Engineer will sign-off all documents as required • Provide a Final Design Package with all Technical and non-technical documentation to the Eskom Engineer once DRT approval has been obtained. • Provide construction support until finalisation/close out
Project Execution • Ensures integration of the consultants plan with the Eskom project plan • Ensures that the customer is kept abreast of any changes to the Eskom project plan. • Manages the project from approval of the CRA till the project is commissioned and closed out. • Prepares and obtains Investment and Procurement approvals. • Appoints a clerk of work whose primary role is to ensure that the Developer appointed contractor has constructed the network in accordance to the approved designs and standards, through the pre-agreed construction hold points with the Customers Clerk of Works and the Construction Contractor. • Verifies that all material used by the Developers Contractors conforms to Eskom's latest Specifications and are procured from an Eskom Supplier. • Confirms the use of a Eskom approved contractors • Arranges and schedules the necessary outages • Arranges the Eskom Stakeholders to witness all tests to be conducted.	• Developer appoints an Eskom Approved contractor who is professionally registered with the SACPCMP. • Developer appoints an independent Clerk Of Works who shall ensure that the quality of the workmanship is in accordance to Eskom's latest standards and specifications. • Developer to ensure that all material is purchased from Eskom Approved suppliers and all such material is in compliance with Eskom's Buyers Guide and List of Accepted Products . • Developer provides all guarantees and warrantees in respect of the equipment to be handed to Eskom and cedes them to Eskom. • Developer provides all test certificates, calibration certificates, network guarantees and as-builts to Eskom prior to Eskom taking over the network.

Eskom's Responsibilities	Developer's Responsibilities
• Takes over the asset from the Developer after all documentation has been handed over which includes test certificates, checklists, warranties and invoices from the Eskom approved suppliers; after the all tests have been completed and accepted; after the signed as-built drawings have been submitted to Eskom and after the asset has been commissioned.	
Control Plant Maintenance • Control Plant to do the testing and commissioning of the asset.	• Developer to appoint his own contractor for the execution of the Control Plant Scope where required
Operations and Maintenance • Assist with the arrangements for the outage • Inspect Asset prior to hand over.	• Developer to ensure that his engineering team and contractors are available during all meetings, during any inspection and testing required by Eskom.
Network Plant • Takes over the asset to be maintained • Updates the maintenance system with the Plant Data • Prepares the planned maintenance schedule for the plant that was taken over.	
Finance Department • Updates the Eskom Asset Register with the value of the asset constructed by Eskom and the asset taken over from the developer.	

3.9.3 Hold Points for Developments

PROCESSS	RESPONSIBILITY
PRE PROJECT PLANNING PHASE	
1) Customer Application	• Customer Services to ensure written proof of Developers request to undertake project as a self-build, payment of the Cost-Estimate Fee and that all Eskom's requirements for self-build projects have been provided to the applicant
2) Project Proposal	• Senior Planning Engineer must confirm and accept the proposed technical solution
3) Acceptance of Cost Estimate Letter	• Customer Services to confirm Developer's acceptance and payment of the Budget Quote fee.
Confirmation of all of the above requirements is necessary prior to Concept Release Approval (CRA)	
CONCEPT PHASE	
1) Establish the Core Project Team	• NED to provide written acceptance of the customers-appointed consultants to manage and prepare the basic and final design.

PROCESSS	RESPONSIBILITY
	• Lands & Rights to provide written acceptance of the customers-appointed engineering surveyors/land surveyors to handle all surveying functions and other approvals (if applicable) • Environmental to provide written acceptance of the customers-appointed environmental consultants to handle all environmental functions and other approvals (if applicable)
2) Selection of Location	• Lands & Rights must accept the route and/or site selection indicated by the self-build customer
3) Initiated Environmental Assessment	• Environmental/Lands & Rights to confirm that EIA, EMPr and any other approvals/permit conditions undertaken by the customer has been reviewed prior to submission to the authorities
4) Basic Design	• NED to confirm acceptance by the TEF of the customers basic design
Confirmation of all of the above requirements is necessary prior to Definition Release Approval (DRA)	
DEFINITION PHASE	
1) Acceptance of Budget quotation	• The Budget Quote is provided together with the CSB Agreement. The BQ must be accepted, all required connection charge payments made, all guarantees provided and all agreements signed to give effect to the Budget Quote and to proceed with the connection.
2) Detail Design	• NED to confirm acceptance by the DRT of the Developers detail design
3) Detail Contracting and Procurement Strategy and Plan	• Project Execution to provide written acceptance of Developer's appointed construction contractors
Confirmation of all of the above requirements is necessary prior to Execution Release Approval (ERA)	
EXECUTION (Phase 1)	
1) Site Preparation / Establishment	• Project Execution to confirm that project Kick-Off meeting had taken place all Eskom pre-construction requirements have been adhered to • Lands & Rights/Environmental to review approval/permit conditions prior to and during the execution phase in order to ensure all legal requirements are adhered to • Project Execution must not to permit the commencement of construction before the Self Build design has been issued and or approved by Eskom • Project Execution must not permit commencement of construction before the pre job plan has been concluded with the CNC • Project Execution must verify that all materials procured by the customer, as listed in the Final Design Package, has been procured from Eskom-accredited suppliers • Project Execution to ensure adherence to the outlined Eskom Quality Control hold points during construction
Confirmation of the above requirements will allow the Customer's contractor to commence construction. Where the contractor has commenced work without satisfying the above requirements, all such work shall be undertaken at the Customer's risk and expense, should the contractor fail to meet Eskom's requirements	

PROCESSS	RESPONSIBILITY
EXECUTION (Phase 2)	
1) Operational Readiness	• Project Execution to ensure all Quality Control check sheets as per the Final Design Packages and all handover documents have been completed and signed by all parties • Project Execution to undertake the final check for compliance with EA, EMPr (if applicable) and all other environmental requirements which may have been specified. • Project Execution to ensure that the Developer obtains sign-off from the Landowner(s) (where applicable) and deliver release forms to Eskom confirming that Landowner(s) are in agreement that their properties have been rehabilitated after the completion of construction activities to at least the minimum requirement of the same condition as before construction started.
2) As Built Data	• Project Execution to ensure that all As-Built drawings and all equipment data sheets (where applicable) is submitted in the required Eskom format after the completion of construction and prior to the commencement of testing and commissioning of the constructed asset.
3) Commissioning and Energising	• Project Execution will not permit outage to proceed if there are defects or the workmanship is not in line with the agreed Eskom scope and specs • Customer Services to issue a Section 82 clearance certificate once confirmation has been received from NED and PEM that the Developer has complied with all the requirements and upon confirmation that all documents have been submitted by the Developer and on the Project file at Customer Services.
Confirmation of the above requirements is necessary prior to the Hand Over Approval (HOA)	
FINALISATION PHASE	
1) Transfer Obligations	• Project Execution to ensure that all warranties and guarantees in respect of equipment purchased by the Developer are handed over to Eskom
2) Issue of final reconciliation letter	• Customer Services to provide a final reconciliation letter to recover additional Connection Charges where costs are exceeded or pay back Connection charges for costs lower than what was quoted.
Confirmation of the above requirement is necessary prior to the Finalisation Release Approval (FRA)	

3.9.4 Risks

	Risk	Risk Mitigation
1)	Use of non-standard designs – leads to operating errors	• Enforce design acceptance holding points as indicated in this Standard. • Risk mitigated by complying with this Standard.
2)	Use of non-standard materials – leads to additional stock holding and operating errors.	
3)	Non-standard / different maintenance requirements.	
4)	Different wiring or schematic philosophies.	
5)	Different earthing and / or safety philosophies.	
6)	Not consulting all the stakeholders during design and execution.	• Enforce Project Management principles as accepted and applied in the Project Management Department and described in this Standard.
7)	Need to correct and equip consultants and contractors continuously during the project life cycle.	• Enforce design acceptance holding points as indicated in this MV/LV Self Built Standard • Eskom stakeholder's responsibilities and the Developer's responsibilities are clearly defined in the MV/LV Self built Standard. • Eskom should make an urgent plan to equip more consultants to be familiar with Eskom Distribution's standard designs and procedures. Eskom Project Management Office Skills Supply Management should follow this up urgently to increase the pool of accredited consultants available for self-build projects and the normal Eskom build programme.
8)	Confusion over responsibilities.	• The MV/LV Self-build Standard clearly allocates the responsibilities of Eskom and the Self-Build Customer • The SOW in the SBA must be clearly defined.
9)	Use of out-dated standards.	• Enforce design acceptance holding points as indicated in the MV/LV Self-build Standard. • Developers's Engineer to apply for access to Eskom's standards via the Eskom website. Developer's consultant to request information from the Eskom appointed Design Engineer that cannot be obtained from the Eskom website.
10)	Poor workmanship.	• Enforce quality inspection holding points during construction as described in the MV/LV Self-build Standard.

	Risk	Risk Mitigation
11)	Self-Build Customers working on upstream and shared assets	• Only on condition that the works to be undertaken has been reviewed by the Distributor who is satisfied that the works and assets can be safely and efficiently separated from the existing live system. All works undertaken under the supervision of an Eskom authorised ORHVS appointed contractor and all approvals (including statutory and environmental) for this work has been obtained and is valid for the entire duration of the project construction.
12)	Delayed commissioning of assets	• Both the developer and the Project Manager should ensure that their programmes are integrated and managed.
13)	Unauthorised issuing of the electrical clearance certificate	• Customer Services to ensure that all requirements are met, as per the Core Business Developer Projects Standard, before release of the electrical clearance certificate

4. Financial Management of MV/LV Self-Build Projects

4.1 Asset Class Identification

The Eskom Project Manager must, in line with the requirements received from Eskom Capital Finance, identify the asset classes created by this investment for all projects (irrespective of monopoly or contract works) this information must be communicated to Capital Finance prior to the commissioning of the assets.

4.2 Project Approval

The Eskom portion of the self-build project (the Monopoly Works and the Eskom Works) will follow the normal processes for investment approval as similar to the other Eskom capital project of the same (i.e. depending on the process - Major or Minor process). The release of funds by the Investment Committee will be subject to the Delegation of Authority limits for the specific Investment Committee. Documentation and presentations to Investment Committees must state the value of Monopoly Works and the Eskom Works as well as the estimated value of the Contract Works to be undertaken by the Customer. The Connection Charges to be raised and capital allowance (if applicable) must also be included.

4.3 Cost Management

Project Cost Management – the projects will be managed on the basis of the Wires PLCM principles (in the case of MV/LV Major and Developer projects) and the Minor process principles (for the MV/LV Minor projects) and agreed start and end dates. WBS structures should be set up to facilitate the allocation of budgets and costing of actual expenditure to separate the cost of monopoly works and the creation of plant assets per asset class.

Cost Reconciliation - A final cost reconciliation letter is to be sent to the customer indicating the project cost reconciliation versus customer payments once the initiative associated with a customer project has been completed and a reconciliation of project costs against payments made by the customer had been undertaken. Payments to the customer must be refunded within six months after the project completion date. Customer payments to Eskom are to be within one month of written notice or a revised account to the customer.

5. Authorization

This document has been seen and accepted by:

Name and surname	Designation
Alex Ndlela	Senior Manager: Asset Creation – KZNOU
Anton Kotze	Senior Manager: Asset Creation – MPOU
Ayesha Hardien	Middle Manager Acquisitions and Data
Bibi Bedir	Senior Manager: Customer Services Operations – FSOU/NWOU
Jonathan Baloi	Senior Manager: Customer Services Operations – MPOU (Acting)
Kolodi Makola	Senior Manager: Asset Creation– NWOU
Linda Kunene	Senior Manager: Customer Services
Lloyd Mokgotho	Senior Manager: Customer Services Operations – LOU
Molefi Rantsonyane	Senior Manager: Asset Creation – FSOU
Motlhabane Ramashi	Senior Manager: Asset Creation– NCOU
Ohna Smit	Senior Manager Electricity Supply Agreements
Philip Wahl	Senior Manager: Asset Creation – WCOU
Pravind Orrie	Senior Manager: Asset Creation – GOU
Rene Darby	Senior Manager: Customer Services Operations – WCOU & NCOU
Ronald Chonco	Senior Manager: Customer Services Operations – KZNOU
Seya Shayi	Senior Manager: Asset Creation– ECOU
Shirley Salvoldi	Corporate Specialist Retail Pricing
Thandazile Mazibuko	Senior Manager: Customer Services Operations – GOU
Wolfgang Bohmer	Middle Manager: Grid Operations
Zizo Mkhize	Senior Manager: Asset Creation – LOU
Zuhdi Hamza	Senior Manager: Customer Services Operations – ECOU

6. Revisions

Date	Rev	Compiler	Remarks
March 2016	1	M Barday	This is a first release of the document

7. Development team

The following people were involved in the development of this document:

- Mansoor Barday
- Dr Rob Stephen
- Graham Starkey
- Cecilia King
- Bruce Mclaren

- Ariseelan Moodley
- Peter Muller
- Glynn Sprunt
- Mohamed Kalla
- Trevor Reed
- Thinus du Plessis
- Jutas Maudu
- Rigard Sander

8. Acknowledgement

Not applicable.

Annex A – Applicable Standards and Specifications

The Self-Build Customer will liaise with the Eskom Project Manager to obtain the latest versions of the Eskom standards, specifications, and procedures applicable to the self-build works.

The Eskom Project Manager shall facilitate contact between the Self-Build Customer and the relevant Eskom technical specialists to address any queries relating to Eskom standards, specifications, and procedures applicable to the self-build works.

The table below reflects some of the standards and specifications relevant to MV and LV projects:

Unique Identifier	Title
DST_34-953	LOW-VOLTAGE RETICULATION SECTION 1: LOW-VOLTAGE OVERHEAD RETICULATION
DST_34-328	LOW-VOLTAGE LIVE WORKING
DST_34-1985	STANDARD: MV & LV EARTHING.
DST_34-1191	GENERAL INFORMATION AND REQUIREMENTS FOR OVERHEAD LINES UP TO 33KV.
DST_34-1192	LIGHT CONDUCTORS PARTICULAR REQUIREMENTS FOR OVERHEAD LINES UP TO 33KV WITH CONDUCTORS UP TO HARE CONDUCTOR.
240-56030635	GENERAL INFORMATION AND REQUIREMENTS FOR MEDIUM-VOLTAGE CABLE SYSTEMS.
SCSASAAL9	DISTRIBUTION STANDARD: PART 2, EARTHING, SECTION 1: MV AND LV RETICULATION EARTHING
SCSASACB6	MEDIUM VOLTAGE SYSTEM EARTHING PRACTICE
240-82737065	MV AND LV POLE NUMBERING
240-82737065	MV AND LV POLE IDENTIFICATION
240-82404858	EARTH RESISTANCE TESTING OF NV/LV TRANSFORMER STRUCTURES ON DISTRIBUTION OVERHEAD LINES
240-56065131	SPECIFICATION FOR 11 KV TO 33KV WITHDRAWABLE PATTERN AIR-INSULATED INDOOR PRIMARY SWITCHGEAR STANDARD.
240-56063705	REQUIREMENTS FOR THE WIRING OF INDOOR SWITCHGEAR FROM 11KV UP TO AND INCLUDING 33KV STANDARD.
240-56062704	SPECIFICATION FOR 11 KV TO 33 KV FIXED PATTERN METAL-ENCLOSED INDOOR PRIMARY SWITCHGEAR STANDARD
240-56030635	GENERAL INFORMATION AND REQUIREMENTS FOR MEDIUM-VOLTAGE CABLE SYSTEMS
DST_34-1985	DISTRIBUTION STANDARD PART 2, EARTHING, SECTION 1: MV AND LV DISTRIBUTION SYSTEM EARTHING
DST_34-1269	SERVICES SECTION 2: SCHOOLS.
DST_34-1195	HANDING OVER DOCUMENTATION: MAJOR/MINOR RETICULATION ELECTRIFICATION.
DST_34-1176	LV CABLE SYSTEMS – CHECKLISTS
DST_34-1176	GENERAL INFORMATION AND REQUIREMENTS FOR LOW-VOLTAGE CABLE
DST_34-1175	MV CABLE SYSTEMS – CHECKLISTS

Unique Identifier	Title
DST_34-953	LOW-VOLTAGE RETICULATION SECTION 1: LOW-VOLTAGE OVERHEAD RETICULATION
DST_34-609	LV PROTECTION PHILOSOPHY
DST_34-453	DISTRIBUTION STANDARD PART 4: MEDIUM VOLTAGE RETICULATION SECTION 4: SWER PARTICULAR REQUIREMENTS FOR 19KV SINGLE WIRE EARTH RETURN (SWER) OVERHEAD RETICULATION
DST_34-305	DISTRIBUTION STANDARD PART 8: SERVICES SECTION 3: OUTDOOR LOW-VOLTAGE SERVICES FOR SMALL POWER USERS AND LARGE POWER USERS
DST_34-225	PARTICULAR REQUIREMENTS FOR AUXILIARY EQUIPMENT AND STRUCTURES UP TO 33KV.
DST_34-209	MV CABLING IN SUBSTATIONS
34-225	DISTRIBUTION STANDARD - PART 4: MEDIUM VOLTAGE DISTRIBUTION SECTION 3: AUXILIARY EQUIPMENT PARTICULAR REQUIREMENTS FOR AUXILIARY EQUIPMENT AND STRUCTURES UP TO 33 KV
D-ST 34-147	CORE BUSINESS DEVELOPER PROJECTS
DST_34-06	MEDIUM-VOLTAGE SERVICES TO LARGE POWER USERS
NRS 043 : 2005 2	CODE OF PRACTISE FOR THE JOINT USE OF POLE ROUTE FOR POWER AND TELECOMMUNICATION LINES
NRS 092 : 2010	ELECTRICITY DISTRIBUTION - GUIDELINE FOR THE CONSTRUCTION OF MEDIUM-VOLTAGE OVERHEAD POWER LINES OF UP TO AND INCLUDING 22 KV, USING POLES WITH BARE AND AERIAL BUNDLED CONDUCTORS
SANS 10280 2.1	OVERHEAD POWER LINES FOR CONDITIONS PREVAILING IN SOUTH AFRICA (PART 1)

The above list is in no way a comprehensive list of standards, specifications and procedures. For a detail listing with the latest version, please access the following website:

a) http://www.eskom.co.za.

b) https://scot.eskom.co.za/

A Customer has to register to gain access to this site. In order to do so, the details in Appendix B will have to be completed.

Annex B – Standards and Implementation Internet Access Form

Group Technology: Design Base & Operating Unit Support

FAX: 086 662 6387

ESKOM INTERNET ACCESS

USE OF ESKOM STANDARDS AND SPECIFICATIONS

Company Name

1. Eskom hereby grants permission to ..... (please add the company's name) to use the material described below for your own exclusive purposes which may include the preparation and issue of copies to prospective tenderers and other users within the scope of your operations.
2. This material may not be exploited for financial gain by you.
3. The use, application, or interpretation of the material is entirely at your own risk and neither you nor anybody else shall have any claim against Eskom arising out of the use of the material.
4. Eskom is under no obligation to advise you of and supply later versions of the material.
5. Eskom retains the right to refuse the supply of further material without incurring liability for loss or damage in the event of such refusal.
6. Eskom reserves the right to modify and change the material as and when it sees fit.
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9. No rights of ownership in the material or licence to yourselves shall be deemed to pass with the supply of material to you.
10. Except as may be provided for in a separate agreement, Eskom shall not be obliged, by virtue of the supply of the material, to advise, interpret, analyse or otherwise give input on the material to you or any other person.
11. If you accept these conditions and fax this form to 086 662 6387, you'll be giving access to Distribution Technology WEB site. If you don't accept these conditions then you will not be getting access or your subscription will not be renewed to Distribution Technology WEB site.

ACCEPT CONDITIONS

Signed at _____ on this _____ day of _____ 20____

_____ _____

(Signature) (Print Name)

(on behalf of company)

Group Technology: Design Base & Operating Unit Support

ERIC Building
Avonside Road (Off Lower Germiston Road)
Rosherville - Cleveland
Johannesburg
South Africa

Private Bag 40175
Cleveland
2022

FAX: 086 662 6387

I will require the following details:

Subscription: Renewal _____ New _____

Company - Vat No: _____
(eg.: 4999999999)

Company Name: _____

Person Name: _____

Postal Address: _____

Role with Eskom
(consultant, contractor, etc.): _____

Office Phone: _____

Office Fax: _____

Cell phone: _____

e-mail: _____

Eskom

To whom it may concern

Date:

2 January 2016

Enquiries:

Brenda Morrison

011 629 5266

brenda.morrison @eskom.co.za

ESKOM INTERNET ACCESS

Details to subscribe

Subscription fee – R1400.00 (Vat included) per annum per site (Office complex).

Subscription period: 12 Months.

Bank: FNB JHB Corporate.

Description: Eskom Head Office (Cheques made out to: Eskom Holdings SOC Ltd)

Account Nr: 50610025211

Branch code: 255005

Deposit slip to be faxed to myself at 086 662 6387.

The Eskom Internet address is http://www.eskom.co.za. Try this address first to see whether you can get to this open site. Then try the DT secure Internet address at https://scot.eskom.co.za/

HOWEVER to access the secure site you will first need to be registered by DT. Your user ID and password will be e-mailed to you once your deposit slip has been received.

Yours sincerely

Brenda Morrison

Assistant Officer