



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

SHARED NETWORK CHARGE POLICY FOR ENERGY DIRECTORATE

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DEFINITIONS

For the purposes of this policy, except where clearly indicated otherwise, the words and expressions set out below have the following meanings:

Authorised Capacity (AC)	The capacity per point of supply made available by the service provider and paid for by the customer or developer.
Backyard Dwelling	Backyard dwellings refer to informal structures on formal, residential erven, regardless of ownership. These structures are used for habitation and may be positioned behind, in front of, or next to the primary dwelling.
City	means the City of Cape Town, a municipality established by the City of Cape Town Establishment Notice No. 479 of 22 September 2000, issued in terms of the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998), or any structure or employee of the City acting in terms of delegated authority;
Commercial Customer	As defined in the City's Tariff Policy (as amended annually).
Connection Fee	The fee payable to the City by the customer to provide or upgrade the service connection needed to connect the customer's point of supply to the shared network of the service provider. This cost excludes shared network charges.
Council	Means the Municipal Council of the City.
Customer	A customer shall mean a consumer as defined in the City's Electricity Supply By-law, 2010. In the case of multiple-metered connections where separate units on the property are metered directly by the service provider, the occupier of each unit thus metered shall be deemed to be a customer. A customer could also be a generator of energy.
Developer	A natural person or a juristic person, whether in the public sector or the private sector, that carries out building and engineering operations to establish a development.
Development	Means the erection of a building or structure on land or the change in use of land, including township establishment, the zoning, the subdivision or consolidation of land or any deviation from the land use or use permitted in terms of the development management scheme.
Electrical Installation	Any machinery, on or in any premises, used for the distribution of electricity from a point of control to a point of consumption anywhere on the premises, reflecting items included and excluded in the Electrical Installation Regulations.

External Engineering Services	Means: (a)municipal engineering services infrastructure external to the development site boundary and includes both: i) bulk engineering services, which means municipal services infrastructure external to the development, including land, required to provide engineering services to multiple users at a municipality-wide scale as indicated in the relevant master plans; and ii) link engineering services, which means municipal services infrastructure external to the development site boundary, including land, required to connect internal engineering services within the proposed development to proposed bulk engineering services; or b) bulk and link engineering services as described above in a) but which also falls within the site boundary where the characteristics of the site so require external engineering services to be included on the site in addition to internal engineering services.
Formal Housing Development	A township development in a development area subdivided into serviced erven, road reserves and spaces for communal use. Dwellings can be either formal or informal (the latter usually with a view to constructing a formal dwelling in due course). This includes Subsidised Housing Developments, Gap Housing and any other housing developments meeting these criteria, whether not-for-profit or for commercial gain.
Gap Housing	Residential units to serve the gap in the housing market where people earn too little to enable them to participate in the private property market and too much to qualify for State assistance.
Generator	A power generation plant using renewable power plant primary renewable energy sources or fuel driven energy sources that is grid tied.
Grant Funding	A grant from National Treasury in this context is a full or partial subsidy that is provided to give access to basic municipal services to qualifying beneficiaries in order to establish sustainable human settlements.
High Voltage (HV)	Nominal voltage levels equal to or greater than 44 kV up to and including 132 kV.
Informal dwelling	A structure and unit of accommodation intended for human occupation, constructed of any material, even though such material or the construction method may not comply with the standards of durability intended by the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).

Informal Settlement	An unplanned settlement on land which may not have been surveyed or proclaimed as residential, consisting mainly of informal dwellings, and established with or without the permission of the land owner.
Internal Reticulation	The part of the electrical reticulation system, owned and operated by the service provider, that falls within the boundaries of a development and is necessary for the utilisation and development of the land.
Low Voltage	Nominal voltage levels up to and including 1 kV.
Maximum Export Capacity (MEC)	The contracted maximum export capacity, expressed in kW and based on a 30-minute integrating period per point of connection (POC) agreed to in writing between licensee and the customer, based on the requirements of the customer and the capacity of the network reserved for that customer's use under normal system conditions in all time periods. Generators apply for MEC.
Medium Voltage	Nominal voltage levels greater than 1 kV and less than 44 kV.
Net-consumer	Net consumer means a customer who imports (purchase) more electricity than the customer exports (feed-in to the network) over a rolling 12-month period.
Network Availability Charge (NAC)	Monthly tariff charges that are unbundled to reflect the costs associated with networks/wires and usually based on the utilised capacity of the supply.
Notified Maximum Demand (NMD)	Means the maximum demand or capacity notified in writing by the customer and accepted by the Service Provider as that which the customer requires the Service Provider to be in a position to supply on demand. For generators, or customers with embedded generation, MEC also applies.
Point of Consumption	Any point of outlet or the supply terminals of machinery, as defined in the Electrical Installation Regulations.
Point of Control	The point at which an electrical installation on or in any premises can be switched off by a user or lessor from the electricity supplied from the point of supply, or the point at which a particular part of an electrical installation on or in any premises can be switched off where different users occupy different portions of such premises.
Point of Delivery	A single point of delivery (is a point where electricity is delivered by the licensee).
Point of Supply	The point determined by the service provider at which the service provider supplies electricity to any premises. This is normally the point on the boundary of the property at which electricity is supplied to the property. The same applies to backyard dwellings. However, in the case of informal settlements and serviced-site developments with informal dwellings, it is the point where the service connection cable is connected to the customer's point of control (typically at the readyboard).

Prosumer	A customer who both produces and consumes electricity.
Residential Customer	As defined in the City's Tariff Policy (as amended annually).
Reticulation	The medium voltage and the low voltage infrastructure, which together form the distribution system required to deliver electricity to the points of supply to customers, and includes service connections.
Service Authority	Means the City of Cape Town (the City).
Service Connection	The infrastructure required to form the dedicated electricity connection from the shared portion of the transmission or the distribution system to the point of supply, and includes items of a dedicated nature such as switchgear, cables, metering and load management equipment. In the case of informal settlements the service connection is deemed also to include the section of the electricity connection to the point of control.
Service Provider	As this policy deals only with the City's area of supply, the service provider shall be read as the City's Energy Directorate.
Serviced Site Development	A development that consists of cadastrally defined land units, each with one-on-one access to public services. Services may include water, sanitation, electricity or refuse removal. Such sites are allocated to beneficiaries as part of a housing project or informal settlement upgrading process.
Shared Network	The high, medium and low voltage infrastructure, which together form the transmission and distribution systems required to deliver electricity to the points of supply to customers. It excludes service connections and other infrastructure dedicated to the supply of a particular customer or customers.
Shared network Charge (SNC)	A charge to cover the cost incurred to increase the capacity of the shared network to meet the additional demand imposed by either a new or upgraded development or connection and the additional capacity requested. The capacity requested shall be either the Notified Maximum Demand (NMD) NMD or the Maximum Export Capacity (MEC).
SPLUMA	Means the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).
Sub-service Main	The infrastructure required to connect the customer's electrical installation to the point of supply. The sub-service main therefore forms the electrical connection between the point of supply and the point of control.
Subsidised Connection Fee	A reduced connection fee payable by qualifying customers in terms of the City's Tariff Policy.
Subsidised Housing	A housing development, whether public sector or private sector, where the beneficiaries qualify for a national housing subsidy.
Systems Act	Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000)
Tariffs	As defined in the City's Tariff Policy (as amended).

Township	Means a group of pieces of land, or of subdivisions of a piece of land, which are combined with public places and are used for residential, industrial, business or similar purposes.
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ACRONYMS

AC	Authorised Capacity
EGD	Electricity Generations and Distribution
HV	High Voltage
MEC	Maximum Export Capacity
NAC	Network Availability Charge
NMD	Notified Maximum Demand
SNC	Shared Network Charge
SP	Service Provider

1 PROBLEM STATEMENT

- 1.1 Local government is empowered to provide municipal services in terms of section 156(1) of the Constitution, and Section 8 of the Systems Act, 2000. This obligation is discharged through, among others, the provision and operation of infrastructure, including external infrastructure. Section 73(2)(c) of the Municipal Systems Act also requires that these services must be provided in a financially sustainable manner and Section 75A of the same Act empowers a municipality to impose, inter alia, charges to pay for services.
- 1.2 The Shared-network Charge (SNC) tariff is imposed for any new and upgraded connections and is required to contribute towards the cost incurred to increase the capacity of the shared network to meet the additional demand imposed by either a new or upgraded development or connection and the additional capacity requested.
- 1.3 The Shared-network Charge tariff ensures that those customers who benefit most directly from the availability of infrastructure contribute their fair share to the cost of that infrastructure.
- 1.4 The tariff applies to both consumers and generators connecting to the shared network.

2 DESIRED OUTCOMES

- 2.1 The objective of this document is to stipulate the principles and standard methods of calculating and applying policies for the recovery of electricity network charges within the City of Cape Town.
- 2.2 A further objective is to provide clarity on the equitable application of the shared-network tariff for new and upgraded electricity connections.

3 POLICY PARAMETERS

- 3.1 This policy applies to charges for new connections, developments or when an upgrade is required to the electrical capacity of an existing connection throughout the City of Cape Town's network area. Customers within the Eskom area of supply are excluded, as customers must approach Eskom for new connections or upgrades to the network.
- 3.2 As the service authority within the Cape Town municipal boundary, the City as per the City's Municipal Planning By-law, 2015, reserves the right to elect the service provider for certain areas within the Eskom supply area and include these areas in the City's area of supply, where the City's network infrastructure layout allows for this.
- 3.3 There are two types of charges which make up the total cost of increasing the electricity capacity of an existing connection:

3.3.1 Shared Network charge: This charge pays for the authorised electrical capacity in kVA which is assigned to the property, which is a certain kVA (kilovolt-ampere) of electricity in the network reserved for use by the owner. The cost of the provision of this authorised capacity is calculated based on the proportional contribution to the upstream network needed to facilitate the specific authorised capacity assigned to the property.

3.3.2 Connection Fee: The connection fee refers to the direct costs of the material, labour and transport to provide the dedicated assets needed to connect a property. Material costs would include cables, meters and breakers required to connect the property to the upstream network.

- 3.4 This policy outlines the rationale and methodology for calculating the shared network charges related to the external engineering services applicable for changes to the electrical capacity of an existing connection.
- 3.5 This policy is not only applicable to net-consumers, but also applies in the case of prosumers and generators of electricity, where approved.
- 3.6 This policy excludes the charges for the following engineering infrastructure: roads, storm water, water, sewerage, public transport and solid waste. The charges for these services are covered in the City's Development Charges Policy for Engineering Services.
- 3.7 Downgrading of supplies is covered by the City's Notified Maximum Demand (NMD) rules directive.

4 STRATEGIC INTENT

- 4.1 This policy is based on recognised best practice and is intended to ensure equity, affordability and sustainability of electricity services.
- 4.2 There are two approaches to calculating the Shared Network Charge —
- 4.2.1 The deep charge approach is when much of the costs as possible are allocated to the connection charge and as little as possible to the tariff.
 - 4.2.2 The shallow approach is when a portion of the costs are allocated to the connection charge and the remaining portion to the tariff base.
- 4.3 **Equity:** There must be a fair balance between a deep and shallow SNC approach so as to equitably share costs between customers/developers using a combination of tariff and connection charges to cover network costs.
- 4.4 **Transparency:** To provide transparency as to how connection charges are raised.

5 STRATEGIC ALIGNMENT

5.1 IDP 2022-2027

Objective 1: Increased job and investment in Cape Town Economy: The IDP recognizes that economic growth is dependent on the City doing the basics well and providing an essential foundation for more dignity and faster economic growth.

Objective 2: Increased access to quality and reliable basic services: Improving residents' living conditions and health in formal contexts through the provision of basic services is a key commitment of the City's IDP. Reliable access to electricity is critical for a life of dignity.

Objective 4: Well-managed and modernized infrastructure to support economic growth: The City's IDP commits to prioritise investment in infrastructure to ensure the delivery of basic services efficiently and effectively into the future.

Objective 16: A capable and collaborative city government: The City's IDP recognizes the need to contain costs and focus on the delivery of its core mandates to ensure the long-term financial viability of the municipality. Long-term fiscal health and administrative efficiency are maintained through responsible financial stewardship, effective risk management, performance management and robust internal administrative structures and processes. To ensure access to an affordable package of basic services, the City is to maintain its indigent application process and equitable cross-subsidisation regime to ensure affordable access to a package of basic services.

5.2 The City of Cape Town Human Settlements Strategy (HSS) (2021):

The Strategy commits the City to addressing informality by supporting the incremental, integrated development of informal settlements. This commitment recognises the dignity of residents and the importance of empowering residents in the on-going development of human settlements.

The HSS highlights the creation of an Informal Settlements Upgrading Pipeline (ISUP), outlining the various services that form part of an upgrading undertaking as well as the necessary conditions that must be met in order for upgrading to take place.

6 ROLE PLAYERS AND STAKEHOLDERS

The following role players are identified for the purposes of implementing the provisions of this policy:

- 6.1 City Electricity Generation and Distribution Department – responsible for the design of the network to facilitate the required capacity of new and existing customers.
- 6.2 Developers – responsible for payment of SNCs based on their development application in accordance with this policy.
- 6.3 Civil society responsible for payment of SNCs based on their application for increased capacity in accordance with this policy.
- 6.4 Government entities and City departments - responsible for payment of SNCs for new developments and upgrading of existing capacity requirements in accordance with this policy.

7 REGULATORY CONTEXT

The Shared-network Charge of the City's Energy Directorate forms part of the City's tariff structure and is underpinned by the following:

- 7.1 National legislation, through Section 75A of the Municipal Systems Act, further empowers a municipality 'to levy and recover fees, charges or tariffs in respect of any function or service of the municipality'. The City of Cape Town Municipal Planning By-law, 2015 (MPBL) gives effect to the municipal competencies conferred on Local Government in terms of Schedule 4 B of the Constitution.
- 7.2 Municipal Fiscal Powers and Functions Act, 2007 (Act No. 12 of 2007) ("the Act"), provides for, among other things, a regime for municipalities to levy development charges.
- 7.3 The City of Cape Town Municipal Planning By-law, 2015 (MPBL) part 6, section 64-66 sets out requirements for the provision of engineering services for land development and raising development charges while section 100 deals with imposing conditions.

- 7.4 Section 18 (Payment of Charges) of the City of Cape Town Electricity Supply By-law, 2010, as amended which stipulates that "the consumer shall be liable for all charges listed in the prescribed tariff for the electricity service as approved by the Service Authority". In Section 1 of the same document, Service Authority is defined as "the City of Cape Town, a metropolitan municipality established in terms of the law".
- 7.5 The name of the tariff was changed from development capital tariff (DC) to Shared-network Charge (SNC) with effect from 1 July 2017, a) to avoid confusion with development contributions payable for City services other than electricity, and b) to align with the term used by other electricity service providers across the country in terms of national standard NRS 069: Guidelines for Distribution Connection Charges for Loads (as amended).
- 7.6 A Notified Maximum Demand (NMD) and Maximum Export Capacity (MEC) Rules directive (December 2021) has been issued by NERSA and form a separate Directive. This is to provide the correct pricing signal that will allow the licensee to plan for the provision of new capacity.
- 7.7 Tariff Policies applicable to all tariff for electricity, water, sanitation and solid waste services provided by the City which is applicable to all sundry tariffs as provided for in the Schedule of Tariffs of the City.
- 7.8 City of Cape Town, Credit Control and Debt Collection By-law, 2006, and Policy.
- 7.9 National Energy Regulator of South Africa (NERSA) - Distribution-Tariff Code for licensed Distributors
- 7.10 Department of Mineral Resources and Energy Electricity Pricing Policy.

8 POLICY DIRECTIVE DETAILS

Connection fees and connection charges shall include dedicated costs and tariffs applicable to providing the dedicated assets, as well as the SNC tariffs applicable to the connection capacity applied for.

8.1 SNC Application

- 8.1.1 SNC is calculated in direct proportion to the authorised capacity applied for by the customer. The unit for authorised capacity shall be kVA (kilovolt-ampere).
- 8.1.2 The SNC tariff applicable shall depend on the nominal voltage level at which the connection is taken as indicated in Appendix A. These tariffs shall be published, typically on an annual basis together with other City charges and tariffs as per Tariff Policies approved annually.

- 8.1.3 The SNC charges becomes payable upon application and is based upon:
 - 8.1.3.1 The authorised capacity (AC) of the service connection applied for in case of new connections, or
 - 8.1.3.2 The increase in authorised capacity, for upgraded connections.
- 8.1.4 These charges are in addition to the connection fee (CF) which entails the direct cost incurred to provide the dedicated assets to provide the customer with a supply.
- 8.1.5 SNC is not refundable if the existing site connection supply capacity entitlement is reduced.
- 8.1.6 The AC is reduced once the supply capacity is downgraded and any future increase will incur full SNC again.
- 8.1.7 The AC will be forfeited upon request to remove the POS and full SNC becomes payable on future request to service the property.
- 8.1.8 The AC will be forfeited and full SNC becomes payable if there is no supply for a period of 5 years to the property where no removal of supply was requested unless a Network Availability Charge (NAC) has been paid for the full period of no supply.

8.2 SNC calculation methodology

- 8.2.1 The SNC payable is based on the AC applied for. The unit of the tariff is R/kVA, with R (Rand) the unit for the charge payable and kVA (kilovolt-ampere) the unit for authorised capacity.
- 8.2.2 SNC should be differentiated by the generic point of the point of common coupling, which includes the supply voltage and network voltage as per Annexure A. The City shall determine the point of common coupling, and thereby also determine the network voltage and the applicable SNC tariff.
- 8.2.3 The SNC standard charges are calculated in R/kVA per voltage level to ensure every customer connected at that point contributes equitably to the upstream costs.
- 8.2.4 The SNC charges are calculated by dividing the replacement cost of the various network segments of the network by standard capacity of that particular network.
- 8.2.5 The additional or new capacity required is then determined for a customer or developer based on the AC applied for.

The charges are calculated for at least each network segment at the following voltage levels:

Network Segment	Description
High Voltage	High Voltage consumer, supply taken from a 132 or 66 kV Main Substation or Switching Station.
High Voltage / 11 kV and High Voltage / 33 kV	Medium Voltage consumer, supply taken from a 132/66/33 kV Main Substation where transformation to medium voltage takes place. HV/33kV MV only where tariff is published and where the infrastructure exists.
33 kV	Medium Voltage consumer, supply taken either from 33 kV Main station or 33 kV busbar, where available.
11 kV	Medium Voltage consumer, Supply taken from 11kV protected substation or via a OBMU in secondary MV network.
11 kV / Low Voltage	Low Voltage consumer, supply taken from secondary terminals of transformer/miniature substation.
Low Voltage	Low Voltage consumer, supply taken from a low voltage street furniture more than 20 m from substation.

- 8.2.6 The asset replacement values should be calculated at least every 3 years to take cognisance of change in materials, labour, transport and other cost involved in creating these assets.
- 8.2.7 The asset replacement value involves obtaining the quantities of installed equipment and replacement values of each in order to obtain the total replacement values of each segment.
- 8.2.8 SNC recovers part of the cost of the network investment, the balance is recovered via the tariff structure. Network infrastructure costs recovered include the high voltage to medium voltage transformer down to the lowest voltage shared-network items, and excludes public lighting infrastructure. (Developers shall provide public lighting infrastructure in new developments, or for upgraded public roads).
- 8.2.9 SNC does not recover costs in providing additional network reliability investment costs e.g. N-1 reliability), which is done via tariffs.

8.3 SNC Rebates

- 8.3.1 Rebates are determined based on what network segment the applicant is to be connected to. Developers are required to install all internal engineering infrastructure required as well as all internal bulk engineering services downstream of the point of common coupling. No rebate is given for internal engineering infrastructure other than those required to provide a premium supply (e.g.N-1) and approved as part of the application. Note: this excludes any dedicated network items which are fully funded by the customer.

8.3.2 Rebates are applicable to bulk engineering external to the development where approval to install was granted to the applicant. Section 36 of the City of Cape Town Electricity Supply-By-law, 2010, as amended, also applies. The developer is responsible for all internal bulk services where indicated in the conditions pertaining to the application in accordance with published tariffs.

8.3.3 The rebate shall not exceed the SNC. Should the calculated rebate exceed the SNC, the applicant shall elect to:

8.3.3.1 Either delay the work until the City is able to provide the infrastructure for which the rebate is being contemplated. (The infrastructure may not be excluded or postponed until after the development has been completed – the development may not proceed without the infrastructure contemplated.) Note: the delay period is dependent on contracts available, time to issue a new tender for the work where no contracts exist, and on budget availability, or

8.3.3.2 Proceed without compensation to provide the infrastructure.

8.4 **SNC Grants / Subsidies**

8.4.1 Developers of formal low cost housing and informal settlements are not exempted from the payment of SNC, but are required to include the SNC in their state subsidy claim. Should no grant funding be available Developers/SP are still required to fund the SNC out of their project funding.

8.4.2 Exemptions for payment of SNC and connection cost may be granted as per City approved process linked to dedicated funding which must be used to offset any revenue foregone through the granting of exemptions.

8.4.2.1 Exemptions could be considered for applications that can demonstrate a contribution to socio-economic outcomes identified in the City's Integrated Development Plan (IDP), strategies and policies,

8.4.2.2 The applicant must pay a contribution of the charges applicable, either upfront or as per an agreed payment plan, which must include provisions relating to the exemptions that may be granted in terms of clause 8.4.2.1.

8.4.3 Temporary supplies are exempt from SNC for a period not exceeding 12 months with a maximum capacity of 500 kVA and to be used for construction purposes only. If a temporary supply is required either for longer than 12 months or greater than 500 kVA, an SNC is applicable. The SNC capacity paid for on such a supply may be used to offset the final AC i.e. can be transferred to the final AC of the supply.

IMPLEMENTATION

9.1 SNC is payable upfront as a part of the application for a new, or upgrade to an existing, connection and is subject to conditions for granting development/subdivision/consent use/ land use approval processes. Payments should in all cases be made as follows:

9.1.1 In subdivisions before section 137 of the Municipal Planning Bylaw, 2015 clearance of the subdivided portion is given in terms of the approved subdivision plan.

9.1.2 Where a customer applies for a new connection or the upgrading of the authorised capacity of an existing connection, before approval of the application and commencing the upgrade of the connection.

9.2 Where a customer exceeds the authorised capacity before commencing with the required upgrading of the service connection, the City will implement a limit to the authorised capacity, or will charge an additional Capacity Charge until the SNC is paid and upgrading of connection is completed. It is the customer/generator's obligation to ensure the maximum demand of the installation is limited to the authorised capacity.

9.3 For rezoning and consent use, payment of charges stipulated in clause 3.3 should be paid before starting the upgrading of the network and approval of the land use application.

9.4 On completion of the internal electricity distribution infrastructure, including internal reticulation and external engineering services, to the City's EGD Department's satisfaction, it shall be handed over formally to the City's EGD Department. The applicant shall nonetheless remain responsible for securing the infrastructure and for the cost of all repairs resulting from vandalism and theft until such time that the development has been occupied 80% or to a level acceptable to the Department. The Department will release the applicant from this responsibility only on formal application by the applicant.

9.5 All of the above will be strictly adhered to and no agreement or guarantees will be accepted in lieu of compliance.

10 MONITORING, EVALUATION AND REVIEW

10.1 The implementation program shall be reviewed on an annual basis as part of the normal budget process.

10.2 This policy will be reviewed every ten (10) years or as needed.

Annexure A: Network segment for different voltage levels:

