

RESIDENTIAL ELECTRICITY RETICULATION POLICY

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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:

Burnt Connections mean reticulation infrastructure serving dwellings in an Informal Settlement destroyed or damaged by fire.

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.

Developer means a natural person or a juristic person, whether in the public sector or in the private sector, that carries out building and engineering operations to establish a development.

Electrical Installation means 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, as referred to in the Electrical Installation Regulations.

Electrification means the provision of electricity services limited to City owned land within the City's area of supply.

Formal Housing Development means a township development in a proclaimed area subdivided into serviced erven, road reserves and spaces for communal use, where dwellings can be either formal or informal (the latter usually with a view to constructing a formal dwelling in due course) including Subsidised Housing Developments, Gap Housing and any other housing developments meeting these criteria, whether not-for-profit or for commercial gain.

Gap Housing means 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.

Grant Funding means a grant from National Treasury and 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.

Infill means additional dwellings established in an informal settlement after the settlement was electrified. The term can also refer to dwellings that existed in an informal settlement when the settlement was electrified but for some reason were not connected at the time.

Informal Dwelling means a structure and unit of accommodation intended for human occupation, constructed of any material whatsoever, 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 means an unplanned settlement on land which may not have been surveyed or proclaimed as residential, consisting mainly of informal dwellings which was established with or without the permission of the land owner, including settlements in the process of being upgraded, which may further be categorised as:

- i. **Category 1 settlements**: Settlements for which housing subsidies and infrastructure funding are already approved and which are already scheduled for full upgrading or relocation with a suitable destination already or imminently available.
- ii. Category 2 settlements: Settlements that do not warrant immediate relocation and for which there is not yet any approved or imminent funding for full scale upgrading or relocation. These settlements require some form of interim servicing or emergency relief. With these settlements, upgrading is possible in the medium to long term and often through a process of incremental upgrading. Alternatively, a settlement may be difficult or impossible to upgrade fully due to difficult topography or very high densities.
- iii. **Category 3 settlements**: Settlements where the residents are in immediate danger or at high risk (for example, subject to regular flooding or exposure to toxic waste) or where land is urgently required for other purposes. Urgent action needs to be taken in order to enable rapid relocation, such as identification, acquisition and planning of alternative land.

Internal Reticulation means the reticulation owned and operated by a Service Provider for the provision of electricity within the boundaries of a land area that is necessary for the utilisation and development of the land.

Point of Control means 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 Supply means 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. 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).

Re-blocking means a community-led process of reconfiguring the current layout of an Informal Settlement, as defined in the City's Policy for Proactive Re-blocking of Informal Settlements (Policy number 13282).

Relocation of Service means the relocation of the Service Connection and the meter from an initial structure to another structure on the same property or from the initial structure to the same structure repositioned on the same property.

Relocation of Household means temporary or permanent relocation of electrified households to another geographic location as part of, or to facilitate, a housing development or for other reasons.

Reticulation means 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 means 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 dwelling, the service connection is deemed also to include the section of the electricity connection to the point of control.

Service Provider means a licensed electricity distributor. (Currently, there are two licensed electricity distributors serving the metropolitan area: Eskom and the Electricity Generation and Distribution Department of the City of Cape Town).

Subsidised Connection means a reduced connection fee payable by qualifying customers in terms of the City's tariff policy.

Subsidised Housing Development means a housing development, whether public sector or private sector, where the beneficiaries qualify for a national housing subsidy.

1 PROBLEM STATEMENT

- 1.1 In terms of the Constitution, the City, as Service Authority, has an obligation to provide electricity to all residents. This obligation is met through the agency of Service Providers.
- 1.2 In the implementation of the reticulation networks to meet this obligation, there are various situations that need to be considered.

2 DESIRED OUTCOMES

The Desired Outcome of this policy is the efficient and effective design, and construction of electricity reticulation infrastructure within formal developments I and informal settlements areas.

3 POLICY PARAMETERS

- 3.1 The objective of this document is to set out the criteria, responsibilities, and design and construction standards to be applied in the provision of reticulation of Informal Settlements and Formal Housing developments areas within the City's area of supply.
- 3.2 This policy applies to the reticulation of all residential areas throughout the metropolitan area of Cape Town excluding Eskom supply areas and supersedes all previous policies and standards in this regard. Reticulation of both Formal Housing Developments and Informal Settlements is included.
- 3.3 Until such time that Council adopts a by-law allowing electrification on private property and state owned land other than City, electrification can only proceed with written permission from respective land owners, (provided the property does not have any pending litigations).
- 3.4 Electrification on private property, where permission has been obtained, will be subject to the requirement for registration of a servitude and related legal processes, excluding properties that has pending litigations. This will enable the City to operate and maintain the electrical network which is protected by such servitudes.
- 3.5 Backyard dwellings are dealt with under Electricity Generation and Distribution Department directive EBZA252: Electrification of Backyard Dwellings.

4 STRATEGIC INTENT

4.1 **Integrated Development Plan** (2022-2027) by setting the minimum technical standards, this policy supports the City's strategic approach to Infrastructure investment and electricity services rollout that can assist to provide energy security, with sufficient capacity for increased densities.

IDP priority Area: Basic services

- **OBJ 2:** Improved access to quality and reliable basic services
- 2.1 B Energy Access Project
- 2.1. E Backyard dwelling service project (City public rental stock)
- 4.2 **Inclusive Economic Growth Strategy** (2021) This strategy recognizes that quality service provision is a key enabler of jobs and investments and thereby grows Cape Town's economy.
- 4.3 **Human Settlements Strategy** (2021) As part of the City's commitment to Housing supply, this policy review must align with this strategy's aim to deliver integrated, sustainable human settlements and more specifically, safer, better quality homes in informal settlements and backyards over time.
- 4.4 This policy is based on recognised best practice and is intended to ensure equity, affordability and sustainability in the provision of electricity to residents.

5 ROLE PLAYERS AND STAKEHOLDERS

- 5.1 The following role players are identified for the purposes of implementing the provisions of this policy: the Service Authority, Service Providers, Developers, the Electricity Generation and Distribution Department, the Human Settlements Directorate, the Corporate Finance Directorate and the Urban Management Directorate.
- 5.2 The type of housing solution dictates the role that different role players take on. These are amplified within the Policy Directive Details.
- 5.3 The following key roles and responsibilities are defined for implementing this policy:

Activity	Service Provider	Developer	Human Settlements	Finance	Urban Management
Developers must provide, at their own cost or, the internal reticulation and service connections serving the specific development to the service provider's approved standard.	C/I	A/R		I	
Survey of housing structures in the settlement, numbered and a beneficiary list compiled.	I		A/R		I
Verify criteria is met before IS can be electrified.	A/R	I	С	I	I
Informing affected stakeholders of project.	A/R		I	I	I
Relocation of services.	1	R	Α		I
Reinstatement of burnt connections.	A/R		С	С	I
Application for funding.	A/R		С	С	
Application for funding for housing and service sites.	I	R	A	С	
Review of project implementation programme and budget process.	A/R	C/I	C/I	C/I	C/I
The affected Subcouncils have been informed regarding the electrification of the settlement and agrees to the scope of work.	A/R				A/R

Table 1: RACI Table for Residential Reticulation Policy (A -Accountable, R- Responsible, C-Consulted I Informed)

6 **REGULATORY CONTEXT**

Legislation and Codes: Department of Energy: Suite of Supply Policy Guidelines for the Integrated National Electrification Programme (INEP) 2012/13 (Revision 08).

> Department of Energy: Policy Guidelines for the Electrification of Unproclaimed Areas (Revision 0006)

> Municipal Finance Management Act, 2003 (Act No. 56 of 2003).

> Electrical Installation Regulations, 2009 as amended (Promulgated in terms of the Occupational Health and Safety Act, Act No. 85 of 1993, by GNR.242 of 6 March 2009).

National Environment Management: Waste Act (NEMWA), 2008 (Act 59 of 2008).

Environment Conservation Act, 1989 (Act 73 of 1989) (ECA).

National Water Act, 1998 (Act 36 of 1998).

City By-Laws: City of Cape Town Electricity Supply By-Law, 2010, and the

City of Cape Town Electricity Supply Amendment By-law,

2017.

City Policies: Policy No. 13282: Proactive Re-blocking of Informal

Settlements.

7 POLICY DIRECTIVE DETAILS

7.1 Provision of Reticulation Network

7.1.1 Private Housing Developments for Commercial Gain

- 7.1.1.1. This category includes Gap Housing, Finance-linked Individual Subsidy Programme or any other programme for commercial gain sanctioned by Human Settlements.
- 7.1.1.2. Developers must provide, at their own cost, the internal reticulation and service connections serving the specific development to the Service Provider's approved standard. The cost applicable shall include the cost determined as per the Shared Network Charge policy.
- 7.1.1.3. Until such time that Council adopts a by-law allowing electrification on private property and state owned land other than City owned land, electrification can only proceed with written permission from respective land owners, or where servitude rights have been obtained (provided the property does not have any pending litigations).

7.1.2 Subsidised Housing Developments

7.1.2.1. Subsidised housing includes Social Housing, Breaking New Ground (BNG) housing, Reconstruction and Development Programme (RDP) housing, Hostels to Homes, People's Housing Process (PHP), Incremental Development Areas (IDA), Community Residential Units (CRU) and any other national housing programme approved, sanctioned or implemented in terms of the City's Human Settlements Strategy (2021) and annual sector plan.

7.1.2.2. Developers must provide, at their own cost, the internal reticulation and service connections serving the specific development to the service provider's approved standard. In addition, where the point of control is not the point of supply, the Developer must provide the conductors on the property that connect the Electrical Installation to the point of supply. The cost applicable shall include the cost determined as per the Shared Network Charge policy once approved by Council.

7.1.3 Relocation of Services

- 7.1.3.1. Where relocations of services are required and are part of a Subsidised Housing Development, the Developer must fund and undertake the service relocation to the Service Provider's approved standard.
- 7.1.3.2. Where the owner of the dwelling requires the relocation of service, the actual cost of the relocation will be recovered from the owner. In the case of the relocation of a Subsidised Connection, the actual cost may be recovered either as a once-off payment or by instalments via the prepayment system.

7.1.4 Relocation of Households

- 7.1.4.1. Where relocations from an area that has previously been electrified are part of a Subsidised Housing Development, the Developer must provide the internal reticulation, including service connections, serving the specific development to the Service Provider's approved standard. Where the Point of Control is not the Point of Supply, the Developer must provide the conductors on the property that connect the Electrical Installation to the Point of Supply.
- 7.1.4.2. Where relocations are as a result of an emergency and grant funding is not available, the Service Provider may fund or provide the electrical internal electrical reticulation, including service connections, serving the relocated households from insurance or other internal funding sources. The relocated households must comply with the criteria for the electrification of Informal Settlements contained in 7.1.5 of this policy.

7.1.5 Informal Settlements

7.1.5.1. To improve the quality of life of the residents in informal settlements, the settlements will be provided with interim electricity services, subject to the settlements meeting certain criteria.

- 7.1.5.2. The criteria that must be satisfied before a Category 1 or a Category 2 informal settlement, including Infills, will be considered for informal electrification are:
 - 7.1.5.2.1 The informal settlement will not be relocated or upgraded within a 18 month period. This is to be verified by the Human Settlements Directorate;
 - 7.1.5.2.2 The informal settlement is registered by the City's Human Settlements Directorate on their informal settlement Area of Informality (AOI) database;
 - 7.1.5.2.3 The informal settlement is in close proximity to existing infrastructure and in a position where electrification is practicable;
 - 7.1.5.2.4 The informal settlement is not encumbered by any of the following elements:
 - a) High voltage power lines;
 - b) Servitudes;
 - Road or rail reserves/corridors, where the Service Authority states in writing that the reserve/corridor is an essential part of their infrastructure plans,;
 - d) Areas below the 1:50 year flood return period contour;
 - e) Storm water retention or detention ponds as defined by the Roads and Storm water Department;
 - f) Bulk water pipes;
 - g) Landfill sites will be electrified in consultation with relevant Competent Authority (Waste Services Directorate/Western Cape Government) and in compliance with relevant legislation;
 - h) Unstable land;
 - i) Any other health or safety hazard;
 - j) Any other encumbrance identified and warranted not referred to in this document; or
 - k) No pending court cases affecting land ownership.
 - 7.1.5.2.5 Where an Informal Settlement is encumbered by zoning reservations the Service Provider will endeavor to get permission to proceed with the electrification as required, via the relevant executive director.

- 7.1.5.2.6 Where an informal settlement encumbered by a servitude (excluding high voltage power line servitudes) or a road or rail reserve/corridor may be considered for electrification if permission is granted in writing by the relevant City department. An informal settlement within a high voltage power line servitude cannot be serviced, not even on a temporary basis;
- 7.1.5.2.7 The housing structures in the settlement have been surveyed and numbered, and a beneficiary list has been compiled by the Human Settlements Directorate;
- 7.1.5.2.8 The affected Subcouncils have been informed regarding the electrification of the settlement and agrees to the scope of work;
- 7.1.5.2.9 A 2m width access way to be provided and maintained as part of the layout within the informal settlement; and
- 7.1.5.2.10 The community supports the proposal and is willing to co-operate in de-densification and opening up access ways, removing any illegal connections and reblocking, as necessary.
- 7.1.5.3. The Service Provider will install the reticulation infrastructure, including service connections, for qualifying informal settlements.

7.1.6 Infills

- 7.1.6.1. Where Informal Settlements have already been electrified, infills must meet the criteria for the electrification of Informal Settlements and the construction standard must be similar to that in the surrounding settlement.
- 7.1.6.2. The City as Service Provider will not return to service the same Informal Settlement for infills within a 12-month period. Thereafter, priority will be given to infills consisting of more than twenty households concentrated at one location.

7.1.7 Burnt Connections

7.1.7.1. The Service Provider must reinstate the network at its own cost. The extent of the damage will determine if a new layout design is required or if reinstatement is possible.

7.1.7.2. Re-blocking may be implemented prior to reinstating the network provided that the number of households to be electrified remains the same as the number of burnt connections and additional households are treated as infills.

7.2 Funding

- 7.2.1 The Service Authority will obtain grant funding to cover all cost to install electricity infrastructure and service connections in informal settlements.
- 7.2.2 The reticulation of residential developments for commercial gain must be funded by the Developer and the connection fees and shared-network charges, which shall be determined as per the Shared Network Charge for policy once approved by Council. The connection fee including the meter shall be funded by the Developer.
- 7.2.3 Should a Developer desire a more expensive method of construction than the minimum specified, any increase in cost over the minimum construction standard shall be borne by the Developer.
- 7.2.4 Residential customers qualifying for subsidised connections will not be required to pay as the Developer is required to pay the minimum connection fee. Non qualifying customers will be required to pay the minimum connection fee. This sum shall be included in the published schedule of tariffs, as amended from time to time, and payment may be made either as a once-off payment or by instalments via the prepayment vending system.

7.3 Design and Construction Standards

7.3.1 The City as Service Provider will set the minimum standards for the design and construction of the reticulation network and service connections.

8 IMPLEMENTATION PROGRAMME

8.1 The stipulations contained in this policy apply with immediate effect. Implementation of this policy in respect of electrification is determined jointly by the Electricity Generation and Distribution and the Human Settlements Directorate taking into consideration the provision of funding to implement the programme realistically.

9 MONITORING, EVALUATION AND REVIEW

- 9.1 The implementation programme shall be reviewed on an annual basis as part of the normal budget process.
- 9.2 This policy will be reviewed every ten (10) years or as needed.