APPLICATION FOR AN ELECTRICITY TRANSMISSION LICENCE IN TERMS OF THE ELECTRICITY REGULATION ACT, 2006 (ACT NO. 4 OF 2006)

Table of Contents

SECTION A PARTICULARS OF APPLICANT

A1 Full name of applicant (business name) and business registration number

National Transmission Company South Africa SOC Ltd
Registration number: 2021 / 539129 / 30

A2 Address of applicant, or in the case of a body corporate, the registered head office

Physical address:
2 Maxwell Drive
Sunninghill
Sandton
Gauteng
2157

Postal address:
PO Box 1091
Johannesburg
Gauteng
2000

A3 Telephone number of applicant: **Redacted**

A4 Fax number of applicant: **Redacted**

A5 Email address of applicant: **Redacted**

A6 Contact person:

First name: Segomoco Martin

Surname: Scheppers

Telephone No: **Redacted**

Mobile No: **Redacted**

Fax No.: **Redacted**

Email address: **Redacted**

A7 Legal form of applicant

National Transmission Company South Africa SOC Ltd
Registration number: 2021 / 539129 / 30

Names of Directors:
- Calib Cassim
- Segomoco Martin Scheppers
- André Marinus De Ruyter

Company Secretary:
- Mayor Mlawuli Manjingolo

National Transmission Company South Africa SOC Ltd is a juristic person and a state owned company that is wholly owned by Eskom Holdings SOC Ltd.

Note to Section A

1) State whether the applicant is a local government body, a juristic person established in terms of an act of parliament, a department of state, a company or other legal body.

2) If the applicant is a local government body, attach a copy of the proclamation establishing such body. Where the applicant is a company, the full names of the current directors and the company registration number are required.

SECTION B COMMENCEMENT DATE OF LICENCE

B1 *Desired date from which the licence (if granted) is to take effect*

The date on which the agreement concluded between Eskom Holdings SOC Ltd and National Transmission Company South Africa SOC Ltd (hereafter referred to as "**NTC**") pursuant to sections 113, 115 and 116 of the Companies Act No. 71 of 2008, in terms of which the transmission business of Eskom Holdings SOC Ltd will be transferred to the applicant by operation of law ("**Merger Agreement**") becomes fully effective in accordance with its terms. The relevant date is stated in the Merger Agreement to be the 1st (first) day of the 2nd (second) calendar month following the date upon which the last of the suspensive conditions provided for in the Merger Agreement is fulfilled or waived, and subject to the solvency and liquidity test having been passed by both Eskom Holdings SOC Ltd and National Transmission Company South Africa SOC Ltd as required by the Companies Act No. 71 of 2008) ("**Implementation Date**").

The aspiration is that all the Merger Agreement suspensive conditions would be fulfilled to enable an Implementation Date of 1 April 2023.

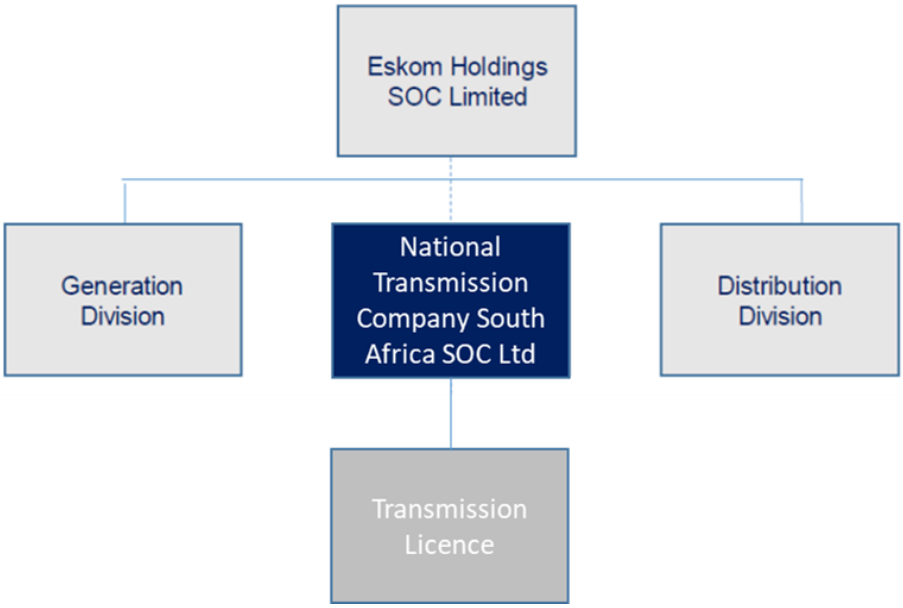
Note to Section B

1) The normal processing time for a licence application is 120 days once all relevant information has been provided and there are no objections received.

Scope of Licence Application and Company Shareholding

National Transmission Company South Africa SOC Ltd (hereafter referred to as "**NTC**") is a wholly owned subsidiary of Eskom Holdings SOC Ltd as shown in Figure 1.

Figure 1: National Transmission Company South Africa SOC Ltd Licensing



This NTC licence application, in terms of the Electricity Regulation Act (2006), is to operate transmission facilities. The following services as contained in the existing Eskom Holdings Transmission licence are included in this application:

- The Transmission Network Service Provider (TNSP);
- The System Operator (SO);
- Transmission System Planner (TSP); and
- Grid Code Secretariat function.

SECTION C AREA OF OPERATION TO WHICH APPLICATION RELATES

C1 Please provide a sufficient description of the area of operation to which the application relates

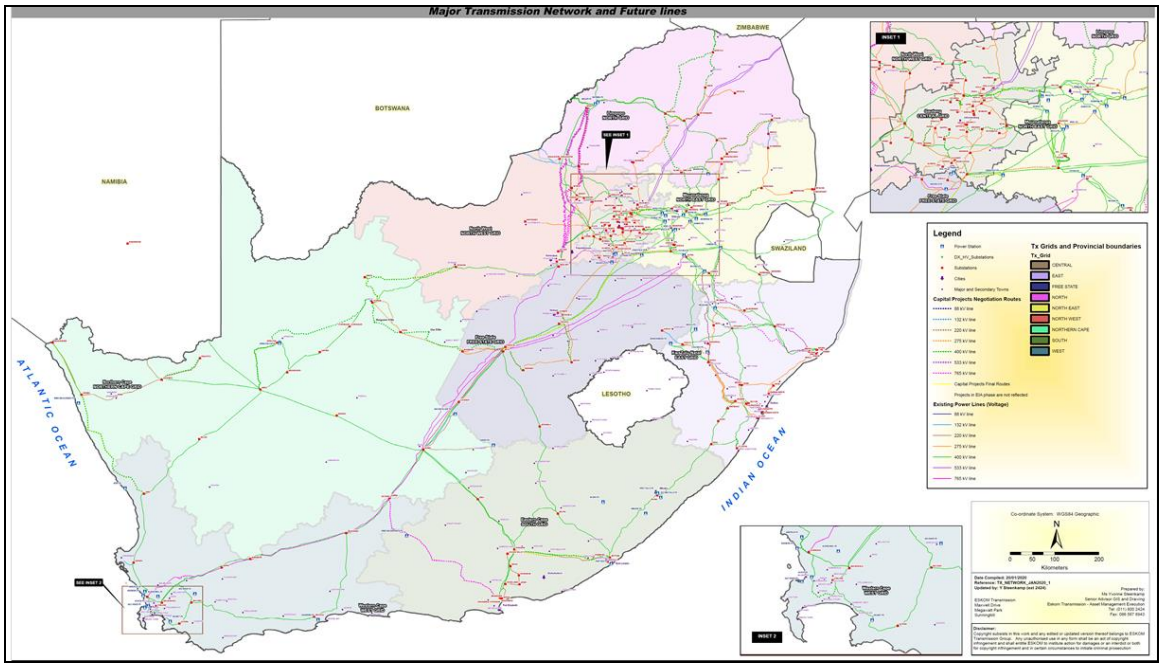
NTC provides, maintains, operates and manages the Transmission network assets on a national basis within South Africa to reliably transport electricity from generators to redistributors, bulk end-customers and international customers.

C2 Please provide a sufficient description of the purpose of the transmission system and the users of the transmission system

NTC will provide the infrastructure and operations to transmit electricity between generators and distributors or large energy users. As such, NTC is the intermediary link between the generation licensees and the distribution licensees, large energy users and international trading partners.

As per the latest Eskom integrated report for the year ending March 2021, the Eskom Transmission infrastructure which is to be to transferred to NTC comprised of approximately 33 199 km of lines and 169 high voltage / extra high voltage (HV/EHV) substations. A map of the national interconnected power grid is shown in Figure 2.

Figure 2: The Transmission Network Map



SECTION D DETAILS OF THE TRANSMISSION SYSTEM

D1 Please provide an overview of the current system and prospects for the next five years, which includes:

D.1.1 The physical system

- *Summary of large-scale map showing geographical location of substations and routes of transmission lines*
- *Single line diagram of the transmission system*
- *Total kilometres per voltage of transmission lines*
- *Table showing all transformers, lines and substations also indicating the replacement values of such equipment*
- *Supply points connected to existing generators (Eskom and municipal power stations, neighbouring utilities) and transmission systems*
- *Delivery points connected to existing distributors and customers*

1. Overview of Transmission System and Physical System Description

The transmission system assets owned by Eskom Holdings SOC Ltd will be transferred to NTC on the Implementation Date as defined in the Merger Agreement. As at 31 March 2021, Eskom Transmission owned and operated 374 transmission lines with a total length of 33 199 km and 500 three phase transformers with a total capacity of 159 384 MVA located at 169 Transmission Substations.

The Transmission Development Plan as compiled by the Transmission System Planner details the required future transmission system expansion, strengthening and refurbishment projects as planned to be executed over the next 10-year period.

The majority of the transmission lines are at 220 kV or above (see Table 1 below). There are however a few exceptions where lines operating at voltages below 220 kV are the only means of connecting an already existing generating facility to the Transmission Network or are direct connections between two Transmission Substations or an International Interconnector.

Table 1: Transmission Lines

Voltage	Number of Lines	Total Length (km)	Replacement Cost R'm (31/03/2020)
88kV	2	17	**Redacted**
110kV	1	6	**Redacted**
132kV	40	889	**Redacted**
220kV	15	1 352	**Redacted**
275kV	136	7 342	**Redacted**
400kV	167	19 760	**Redacted**
765kV	10	2 784	**Redacted**
533kV DC	3	1 049	**Redacted**
Total	374	33 199	**Redacted**

Substation assets include 169 wholly owned substations as well as some equipment located at customer or distributor substations. Table 2 provides a summary of the Transmission owned substations.

Table 2: Transmission Owned Substations

Maximum Voltage (kV)	No of Substations	No of Trfrs	Total MVA	Replacement Cost R'm (31/03/2020)
132	3	4	194	**Redacted**
220	15	21	2 148	**Redacted**
275	59	210	43 712	**Redacted**
400	83	249	85 996	**Redacted**
765	9	30	27 334	**Redacted**
Total	169	500	159 384	**Redacted**

Transmission furthermore also owns some equipment based at substations belonging either to customers or distributors. The total replacement value (31/03/2020 base date) of such equipment is "**Redacted**" million. This equipment is required to properly protect and operate the Transmission owned primary equipment such as lines and transformers.

The assets to be transferred from Eskom Holdings to NTC as reflected in Tables 1 and 2 will be updated to include new assets placed in commercial operation and relevant updates prior to the licence implementation date.

As at the end of March 2021 Transmission had supply and delivery connection points as shown in Table 3 below. Details on the respective connections are included in Section F of this application.

Table 3: Transmission Supply and Delivery Points

Type	Customer category	Number of Supply / Delivery points
Point of delivery	Eskom Distribution	137
	Load customers	10
	Metro municipalities	22
	Municipality (local)	4
	Rail	6
Point of supply	Eskom Generation	25
	IPP	9
Other	International customer	11
Total		224

The delivery points were based on the delivery busbar's voltage per customer substation.

The points of supply for Eskom Generation were based on each generating station as connected to the Transmission system, whilst for IPPs they were aligned to the existing contracted points of delivery.

Transmission owns two network Control Centres as well as two telecommunications network Control Centres to enable the safe operation of the national transmission system. Further details on the System Operator are provided in Section E2 on page 14 of this application.

Redacted

2. Transmission Asset Base Demarcation Principles

The South African Grid Code defines the Transmission System (TS) as *"consisting of all lines and substation equipment where the nominal voltage is above 132kV. All other equipment operating at lower voltages are either part of the distribution system or classified as transmission transformation equipment."*

In order to enable efficient operations, non-discriminatory access and least economic cost of connections, the transmission system would need to include transmission transformation equipment as well as the associated connection assets.

It is deemed in the best interest of the customers not to split the ownership of these assets since it would require additional capital and operational expenditure such as separating control rooms facilities, fencing, access roads, auxiliary supplies, control systems, staffing and maintenance equipment.

The existing Eskom Holdings Transmission licence includes a clause (4.1.2) which is recommended to be retained to provide for the ownership of these assets as follows:

> *"The Licensee may own, operate/ or maintain defined transmission transformation equipment and assets on the Distribution System as agreed with customers."*

Asset demarcation principles have been defined with Eskom Distribution and Eskom Generation which are aligned with the Transmission asset base as detailed in this application.

D.1.2 System characteristics

- *Maximum demand*
- *Energy entering the system at supply points*
- *Energy leaving the system at delivery points*
- *Electrical losses, breakdown of causes and prospects*

Overall Transmission system characteristics are summarised in Table 4. Transmission energy losses are incurred when energy is transferred from the generators to the loads. As electricity flows through the transmission network, energy is lost due to electrical resistance and the heating of conductors. The level of transmission losses is influenced significantly by the generation dispatch as well as location and may therefore vary year on year. The following key factors may also influence energy losses: load changes, network operations and configuration, distributed renewable IPP generation, network strengthening, generation geographic location and generation patterns.

Table 4: Transmission System Characteristics (FY2021)

Characteristic	Value
Maximum Transmission Network Demand	32 800 MW
Energy entering Transmission System	211.519 TWh
Energy leaving Transmission System	206.641 TWh
Electrical Losses	4.878 TWh
Electrical Losses	2.31%

D.1.3 Grid code (Transmission and Distribution) compliance

- *Adequacy of internal policies for grid code compliance*

Compliance and assurance management comprises of reviews, internal assessments and external audits and the outcomes are reviewed at internal governance committees. Transmission supports NERSA to conduct periodic audits as required. Corrective action plans are developed to address findings and are tracked for implementation.

The Transmission Grid Code compliance monitoring committee:

- Reviews compliance against the NERSA Grid Code requirements;
- Compiles exemption applications as may be required;
- Tracks progress against implementation plan for approved temporary exemptions; and
- Reports compliance status as per internal governance and as required by NERSA.

SECTION E MAINTENANCE PROGRAMMES

E1 Details of any proposed major maintenance programmes, including the expected cost and duration thereof, covering the next five years. Project proposals to state the expected reliability of the transmission system over the next five years of operation.

1. Maintenance

Maintenance is planned and executed in accordance with maintenance standards and procedures as well as with due consideration to environmental management and OHS Act requirements.

Maintenance planning, scheduling, execution and control are performed utilizing the SAP Plant Maintenance system.

Maintenance outages are scheduled based on evaluating network risks and outage optimization opportunities.

Maintenance tasks are executed by Transmission employees as well as contracted service providers. Table 5 summarises the breakdown of maintenance costs for materials and external services.

Table 5: Transmission Maintenance Costs (R'million)

Maintenance Costs	2022/23	2023/24	2024/25	2025/26	2026/27
Servitude Maintenance	182	183	195	202	212
Line Maintenance	202	204	215	223	234
Primary Plant Maintenance	213	218	229	238	250
Secondary Plant Maintenance	57	60	65	67	71
Equipment & Spares	38	38	40	41	43
ERI (Transformer & Logistics)	321	329	351	365	383
Other	21	22	23	22	23
Total Maintenance	**1 033**	**1 054**	**1 117**	**1 160**	**1 218**

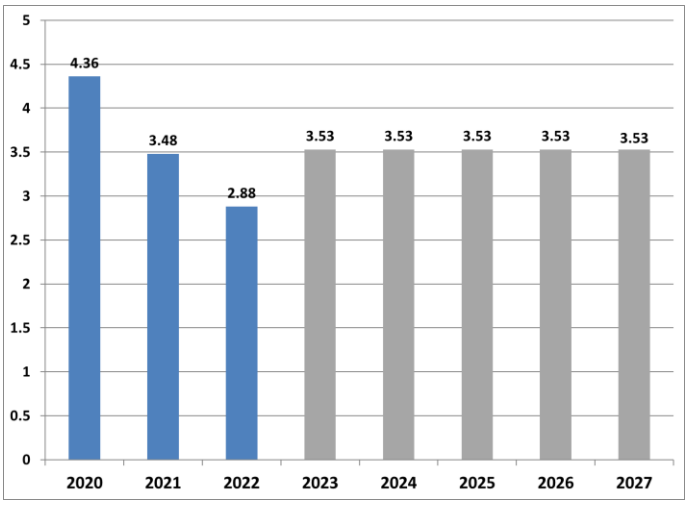
2. Projected Future System Reliability

Reliability of both the network and the associated plant is one of the key outputs that any transmission utility must provide to its stakeholders to ensure that system-wide measures are tracked, targeted and reported externally:

- System minutes <1: Measures the total system minutes lost during the year from incidents that individually were less than one system minute (i.e. it excludes major incidents). One system minute is equivalent to an interruption of the total system load for one minute at the time of the annual system peak.

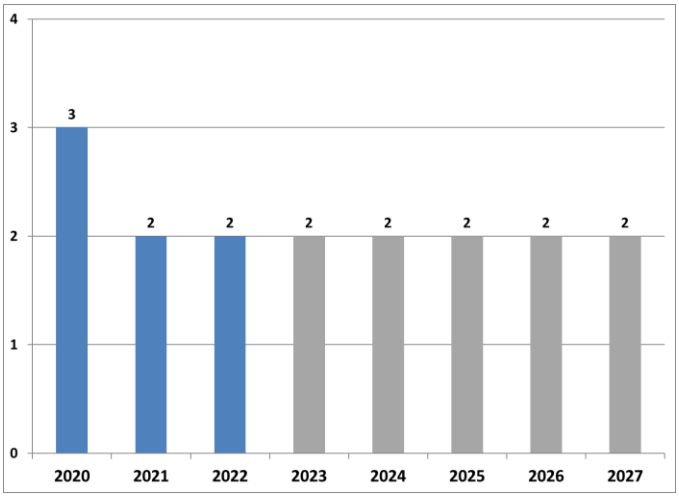
By looking at both load interrupted and duration of the interruptions, this measure reflects the severity of interruptions. Future performance is projected to sustained around 3.53 SM's per annum as depicted in Figure 3.

Figure 3: System Minute <1 Performance



- Major Incidents: A major incident is defined as an interruption incident that results in the loss of one or more system minutes. These incidents represent events that are so significant that they would otherwise swamp the underlying interruption performance measure (SM <1). Figure 4 reflects the number of major incidents for the last five years. Future projected performance is projected to sustain at 2 per incidents per annum within the existing 5-year average.

Figure 4: Number of Major Incidents



E2 Provide details of person/body that will operate the national transmission system. Also provide any agreements with Regional Control Centres.

1. System Operator

1.1 Overview

The System Operator (SO) is responsible for the safe and efficient operation of the Interconnected Power System (IPS). The mandate of the System Operator is "*to control the operation of and be responsible for the short-term reliability of the Interconnected Power System*" as defined in the South African Grid Code.

In order to carry out its mandate, the SO is required to employ a skilled workforce to operate the power and telecommunication systems in real-time. In addition, the workforce is dependent on various power-system and information and communication technology tools that assist in making pertinent decisions during various stages of the system operations processes.

Moreover, the Grid Code requires the SO to acquire sufficient ancillary services in order to ensure that reliability of the power system is always maintained.

Telecommunications supports Transmission's core operations by providing mission critical telecommunication services at various substations, power stations and customer sites on a real time basis to manage, view and operate the power supply.

The Grid Code secretariat performs functions as mandated by the National Energy Regulator of South Africa (NERSA).

1.2 National Control

In terms of the South African Grid Code, the SO is responsible for the security of the South African national electricity grid by monitoring, controlling and operating it in a safe, economical and reliable manner. This ensures Quality of Supply to all customers.

The primary focus of the National Control is to ensure continuing reliability and quality of supply in support of Transmission's objectives. Key objectives include:

- ensuring system reliability, safety and security;
- dispatching generation;
- outage management;
- setting operational procedures;
- controlling the operations of the Interconnected Power System;
- providing operational information to key stakeholders; and
- managing compliance to the South African Grid Code.

1.3 Ancillary services

As part of its responsibilities to maintain power system reliability, the System Operator is required to ensure the provision of appropriate ancillary services. The extent of these services and the manner in which they are to be provided is defined in the South African Grid Code. The ancillary services are defined as:

- reserves;
- black start and islanding;
- reactive power and voltage control; and
- energy imbalance.

1.4 Telecommunications

The Telecommunication network includes points of presence across the national grid and provides services to enable the following key functions:

- real time monitoring and control of the power system, including frequency control, maintaining the supply demand balance, voltage control to ensure compliance with quality of supply requirements;
- supervisory switching of plant to ensure safety of personnel; and
- voice communication and data exchange.

1.5 Grid Code Secretariat

NERSA has previously appointed the System Operator, within the Transmission Division, as the Grid Code Secretariat (GCS). The GCS is responsible for administering the development and application of the Grid Code by the users of the Interconnected Power System (IPS) as well as recommending the appropriate changes and exemptions to the Grid Code for approval by the NERSA Board.

The evolution of the electricity supply industry, largely driven by the introduction of IPPs, has required the monitoring of compliance by the generation assets connected to the IPS to the relevant requirements of the Grid Code. This role is also being fulfilled by the GCS.

2. Operating Agreements

Operating service level agreements have been established between Transmission and Eskom Distribution asset owners per regional area in accordance with the operating regulations. The main purpose of these operating agreements is to clarify and allocate responsibilities regarding the respective operational requirements (e.g. operating authorisations, substation security linking, maintenance and restoration) as well as asset demarcation principles. These agreements will be converted into contracts as part of operationalisation.

SECTION F CUSTOMER PROFILE

F1 Provide particulars of the person or persons to whom the applicant is providing or intends to provide electricity transmission services. Also provide details of proposed tariffs for the transmission services.

1. Transmission Customers Profile

NTC will provide a network service to customers who are directly connected to the Transmission system. Details on respective customers and associated supply and delivery points which are directly connected to the Transmission system are summarized in Table 6.

Table 6: Customer Profile – Direct Connections

Customer category	No of Customers	No of Supply / Delivery Points
Eskom Holdings - Distribution	1	137
Load customers (other)	8	10
Metropolitan municipalities	6	22
Local municipalities	3	4
Rail (Transnet)	1	6
Eskom Holdings – Generation	1	25
IPPs	9	9
International customers	6	11
Total	**35**	**224**

2. Management of connection agreements

Redacted

3. Customer management plans

Redacted

4. Proposed Transmission Tariff

Redacted

SECTION G FINANCIAL INFORMATION

1. Overview: NTC Financial Information

1.1. Solvency and Liquidity Test

In order for NTC to begin trading as a company, the solvency and liquidity test as outlined in Section 4 of the Companies Act must be met. In terms of this Act, a company satisfies the solvency and liquidity test at a particular time if, considering all reasonably foreseeable financial circumstances of the company at that time, the assets of the company, as fairly valued, equal or exceed the liabilities of the company, as fairly valued (solvency); and it appears that the company will be able to pay its debts as they become due in the ordinary course of business for a period of 12 months after the date on which the test is considered (liquidity).

Based on the audited Annual Financial Statements (AFS) for the year ending 31 March 2021 and the audit opinion provided, Eskom and therefore the Transmission division meets the solvency and liquidity requirements as outlined in Section 4 of the Companies Act.

Furthermore, Eskom (the parent company of NTC) is compliant with the Companies Act requirements of Sections 28 and 29 which deal with accounting records and financial statements. Transmission division's specific accounting records have been audited as a divisional audit pack. The auditor's report to management does not reflect any concerns around the Transmission division that would be traditional "red flags" for going concern. The Eskom AFS for the year ending 31 March 2021 have been signed off by the external auditors on a going concern basis.

The FY22 AFS are currently being audited and once finalized, a copy will be provided to NERSA upon request. Transmission's results are noted in the AFS for Eskom as part of segment reporting.

1.2. Future Forecasts

Future revenue/price applications to NERSA in respect of transmission charges will be made by NTC with the view that NTC, as an efficient licensee, will be able to recover the full cost of its licensed activities, including a reasonable margin or return, and a full pass through on all IPP, power importation and Eskom generation costs.

It is proposed that the NERSA revenue determinations with respect to the Eskom Transmission Licensee resulting from the Eskom's MYPD5 application should be allocated to NTC for the FY2024 & FY2025 periods. It is understood that further development is still required to establish a pricing/revenue methodology which would apply to NTC.

The legal basis for this recovery is based on the Electricity Regulation Act, 2006 (Act No. 4 of 2006). Sec 4(a)(ii) of the Act states that, *"The Regulator must… regulate prices and tariffs."* Section 14(1)(d) provides that, *"The Regulator may make any licence*

subject to conditions relating to… (d) the setting and approval of prices, charges, rates and tariffs charged by licensees". Further, sections 15(1)(a) and (2) of the Act prescribe the following tariff principles:

(1) A licence condition determined under section 14 relating to setting or approval of prices, charges and tariffs and the regulation of revenues-
a) Must enable an efficient licensee to recover the full cost of its licenced activities, including a reasonable margin or return

(2) A licensee may not charge a customer any other tariff and make use of provisions in agreements other than that determined or approved by the Regulator as part of its licensing conditions."

Further, provisions of the Electricity Pricing Policy (EPP) speak to cost recovery and revenue requirement. Policy Position 1 of the EPP provides that:

> *"The revenue requirement for a regulated licensee must be set at a level which covers the full cost of production, including a reasonable risk adjusted margin or return on appropriate asset values."*

This is further supported in section 2.2 of the EPP in which the following is stated:

> "*In the absence of competition, regulators may select from a range of methodologies to regulate the industry. All these options have some advantages and disadvantages. Regardless of the method of regulation or price formation it is essential that an efficient and prudent licensee should be able to generate sufficient revenues that would allow it to operate as a viable concern now and in the future."*

The ERA and the Electricity Pricing Policy allow for the recovery of efficient costs and earning a fair return on assets. In alignment with this legislation and policy, the current MYPD methodology allows for earning a return on the installed Regulatory Asset Base (RAB) as well as on relevant capital works that are under construction.

RESPONSES TO SPECIFIC FINANCIAL QUESTIONS:

G1 Submit projections of and current statements of the accounts in respect of the undertaking carried on by the applicant, showing the financial state of affairs of the most recent period, together with copies of the latest audited annual accounts where such have been prepared.

Included in Table 7 are the current projections for the activities relating to the Transmission licence, noting that the revenue being referred to herein is merely an internal allocation; and that the allocation of revenue for NTC is still to be determined.

Redacted

Table 7:

G2 Submit annual forecasts for the next five years of costs, sales and revenues stating the assumptions underlying the figures.

The financial details below reflect the NTC Transmission licensee activities which are the subject of this licence application.

Annual forecasts of the costs are provided below. The forecasts are as per the MYPD5 application made by Eskom Holdings SOC Ltd with respect to the Transmission Licensee revenue requirement. As described in section 1.2 above (Future Forecasts); the revenue determination is required to be done by NERSA following the principle that NTC, as an efficient Transmission licensee, will be able to recover the full cost of its licensed activities, including a reasonable margin or return.

It should be noted that Eskom is reviewing the financial impact of required actions as announced by the Presidency to end load shedding and to achieve energy security. Such financial impact as may be relevant to the Transmission Licensee is not yet reflected in the forecasts reflected in this section.

1. Operational Expenditure

a) Table 8 shows the forecast of operating expenses which, based on the principles above, are expected to be recovered in full by tariffs to be approved by NERSA. With this in mind, there is a reasonable expectation that the tariffs that will be allowed by NERSA in line with the principles outlined above will enable a full cost of NTC's licensed activities, including a reasonable margin or return, and thus the Transmission subsidiary NTC will be financially viable such that it will be eligible to obtain a Transmission licence.

Redacted
Table 8:

b) Transmission has taken steps to contain its cost base and limit its impact on electricity price increases.
c) Operating expenditure includes all costs involved with the day-to-day running of the business. Transmission's operating expenditure includes employee costs, maintenance, other expenses and corporate overheads. It should be noted that these costs are nett of capitalisation and also take into account other income derived from operations.

d) Employee expenses:
    - NTC's staff complement is planned to increase during the MYPD5 period to deliver on the increased capital expenditure programme to enable the Integrated Resource Plan (IRP2019), increasing asset renewal as well as the advancement of energy market services.
    - Workforce optimisation was identified as a major component to drive internal efficiencies, increase productivity and lower the operating cost across Eskom. The employee expenses are inclusive of cost to company remuneration and other staff.
    - Related expenditures such as training, professional fees, overtime and contingency travel costs. These expenses are nett of capitalisation and represent the costs that are directly recoverable.
e) Maintenance:
    - The maintenance philosophy addresses statutory requirements, safety of assets and people as well as plant performance. The expanding transmission network requires additional resources to monitor, operate and maintain assets.
    - The cost of maintaining the transmission network is influenced by the geographical size of the network, condition as well as the increasing asset base.
    - Planned outage constraints which require specialised skills and equipment to perform live line maintenance have an impact on maintenance costs.
    - The maintenance projection further considers the increase in the asset base, inflation as well as deriving efficiency improvements.
f) Other Operating Expenses:
    - Other operating expenses include insurance, fleet and travel costs, security services, telecommunications, safety equipment and general office expenses.
g) Corporate Overheads:
    - Corporate overheads expenses are primarily costs that cannot be specifically allocated to a division / subsidiary, and these are charged out based on a pre-determined formula and are shared in proportion to employee complement, asset values and other operating costs.
    - Corporate functions provide indirect services such as treasury, communications, legal, business planning, etc.
h) Other Income:
    - This includes income derived from leasing of telecommunication optic fibres, site sharing of telecommunication infrastructure as well as other recoverable projects such as maintenance services provided to third parties.

2. Capital Expenditure

a) Table 9 shows the forecast for capital expenditure. The ERA and the Electricity Pricing Policy allows for the recovery of efficient costs and earning a fair return on assets. The Transmission Licensee is therefore allowed to earn a return on the installed Regulatory Asset Base (RAB) as well as on relevant capital works that are under construction. Transmission's network needs to be strengthened and expanded to connect new loads and generators to the network to enable country growth. In addition, investments for asset replacement are required for assets which have reached their end of life in order to sustain a reliable supply of electricity.

Redacted
Table 9:

b) Strengthening and capacity expansion includes generation integration projects required to ensure that the network is able to evacuate and dispatch power from generation sources to the load centres. It also includes projects for planned new customer connections, strengthening the transmission network to allow for future demand growth and reliability projects relating to Grid Code compliance requirements.
c) Asset replacement investments are required when assets have reached their end of life and can no longer be reliably operated. These investments are prioritized based on asset condition, network criticality and risk criteria.
d) Environmental Impact Assessments (EIAs) are conducted in accordance with National Environmental Management Act (NEMA) requirements for expansion and asset replacement projects. Land and servitudes are procured for substation and line construction projects based on valuations from independent and registered land valuators.
e) NERSA has published rules in the Grid Code governing investment in the transmission network. Transmission plans the network according to the Grid Code and subject to funding & other resource constraints, builds the network in alignment with the Transmission Development Plan (TDP). Where insufficient funds are available for required network investments, a consistent set of rules is applied to prioritise projects and allocate funding in such a way that the maximum benefit is gained for customers and Transmission is still financially viable.

G3 Estimates of net annual cash flows for subsequent periods (5 years; 10 years; 15 years) sufficient to demonstrate the financial security.

Net annual cash flows will depend on the tariff awarded to NTC. In order to ensure that at all times, NTC does not "trade recklessly", NTC spend will be limited to the cash available to the business from operations supplemented either by equity injection or borrowings to the extent that the Balance Sheet will allow. The extent of the reliance on equity injection and / or borrowings is dependent on the tariff that is awarded by NERSA.

G4 Transmission financing: Who will finance, how is funding split between debt and equity, and what are the terms and conditions of the funding agreements?

Redacted

Table 10:

G5 Fixed Assets – Provide summary of total assets of all transmission plant

Redacted

Table 11:

SECTION H HUMAN RESOURCES INFORMATION

H1 *Submit details of the number of staff and employees and their categories in the service of the applicant in any support services separate from the applicant. Also provide information regarding relevant qualifications and experience in critical areas e.g. Professional registration (Engineering Council of South Africa – ECSA), Government Certificate of Competency.*

1. Human Resources Overview

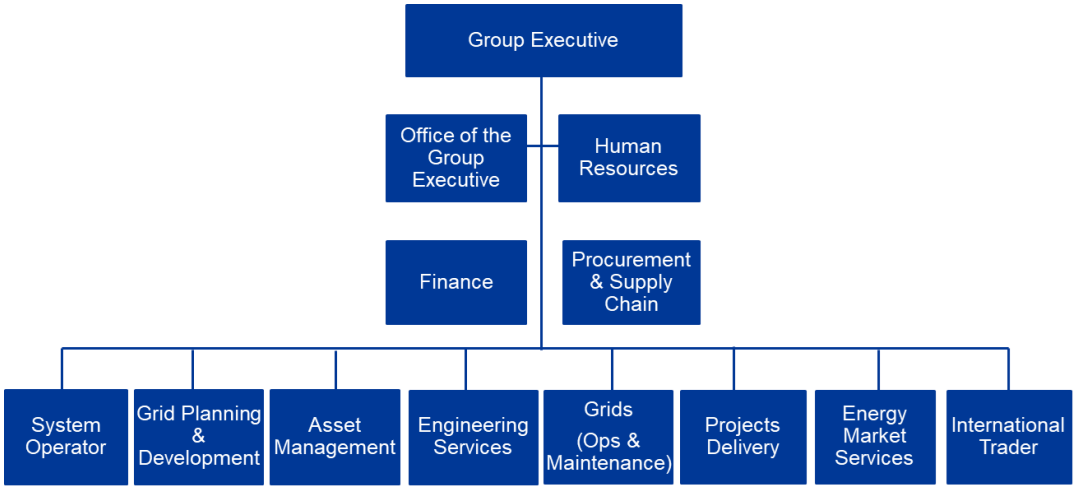
The information in this section is a depiction of the current re-organized Transmission division as currently structured internally to Eskom Holdings SOC Ltd, which will be transferred to NTC on the Implementation Date.

As part of Eskom's organisational restructuring and divisionalisation process in preparation for the establishment of NTC, employees in corporate services and support functions were re-linked to Transmission during FY20 and FY21. The aim of this process was to:

- strengthen operations and maximise decision making;
- improve levels of accountability at the right levels of business;
- improve operational and financial efficiencies;
- maximise execution of strategy; and
- improve productivity and value delivery.

The existing Transmission structure is depicted in Figure 5. The present mandate is to provide reliable and efficient transmission network, system operator and energy market services to the South African and designated electricity markets.

Figure 5: Existing Transmission Structure



The Transmission Division comprises of the Regional Grid areas for operating and maintenance, the System Operator, Grid Planning and Development, Asset Management, Engineering, Project Delivery, International Trader, as well as Energy Market Services. Service functions include Human Resources, Finance, Office of the Group Executive (Information Management, SHREQS management, Assurance, Communication etc.) and Procurement & Supply Chain Management.

2. Current Transmission staff complement and Employment Equity Profile

Table 12 details the Transmission total staff complement as at March 2022 including the respective skills categories and equity profile per business unit. With the exception of the Energy Market Services and International Trader staff (42 staff), the majority of the staff are primarily required for purposes of operating Transmission facilities.

Table 12: Total Transmission Staff Complement

Redacted

3. Technical Skills Capability

A total of 44% of the total staff complement comprises Engineers, Technicians, Technologists and Artisans. Table 13 provides a breakdown of the technical skills currently employed by Transmission:

Table 13: Transmission Technical Skills Information

Skills	Number	Minimum Qualification	Average Experience
Senior Consultants	18	B Engineering	25
Engineers	262	B Engineering	14
Technicians	469	National Diploma	15
Artisans	449	Trade test	14
Technologist	72	Bachelor of Technology	20
Total	**1270**		

Table 14 reflects the total number of employees who are currently registered with Engineering Council of South Africa (ECSA).

Table 14: Professional Registration Status

Professional registration	Number of professionals	Applicability
Engineering Council of South Africa	620	Engineers, Technicians and Technologist

4. Workforce Plan

Legal separation from Eskom requires the new Transmission entity to resource itself in the various functional / service areas in order to deliver on its new and expanded mandate.

The staff complement is expected to increase to 3 226 by FY2025, representing a 4% growth. Key drivers impacting the workforce plan include:

- Significantly increased asset creation requirements as detailed in the Transmission Development Plan (TDP) in support of the IRP 2019 as well as asset replacement for sustainability;
- Increasing operating and maintenance workload due to the growing asset base
- Legal, compliance & regulatory resources to support procurement and various contract functions; and
- The need to adequately resource security functions to protect Transmission assets and workforce.

The workforce plan as summarized in Table 15 highlights expected growth over the next few years by providing critical skills that will enable it to meet its mandate.

Table 15: Five Year Workforce Plan

Workforce Plan	FY22 Actual	FY23	FY24	FY25	FY26	FY27
Headcount	2 928	3 154	3 152	3 226	3 225	3 225

The Workforce Plan is currently under review to ensure the current and future staffing requirements support business objectives. The review takes into account business factors directly driving staffing demands; such as production plans, capital projects, customer numbers, number of substations and kilometres of lines. The current review also considered the resource requirements for the Transmission Development (TDP) and Transmission Refurbishment Plan (TRP) plant projects for the period 2022-2031.

5. Skills Development and Pipelining

The Workplace Skills Plan provides for skills and capacity development in compliance with the following requirements:

- Compliance with the Skills Development Act and its regulations;
- Ensuring fulfilment of Shareholder compact commitments; and
- Meeting the requirements of building capabilities to ensure a flexible, innovative, multi-tasked and productive workforce.

The learner pipeline is detailed in Table 16. A skills replenishment plan of 5% learner pipeline as per benchmark is required to maintain sustainability in organizations.

Table 16: Learner Complement

Business Area	Number of Learners
Network Service Provider	**89**
- Artisan	65
- Engineer	9
- Technician	15
System Operator	**10**
- Engineer	1
- Technician	9
Total	**99**

6. HR Legislation

NTC will meet its legal obligations in terms of compliance to the following legislation:

- Labour Relations Act 66 of 1995 ,
- Employment Equity Act 55 of 1998,
- Basic Conditions of Employment Act 75 of 1997,
- Skills Development Act 97 of 1998,
- Unemployment Insurance Act 30 of 1996.

Compliance management includes practices related to compensation and benefits, attracting, recruiting, hiring, skills and development and industrial relations. Compliance to legislation is critical and is ensured through the following:

- Documented Policies and Procedures;
- Reinforcing the implementation of policies and procedures through ongoing training and awareness;
- Regular self-assessments and compliance audits of HR practices;
- Constant review of policies and procedures, to ensure they stay updated and in line with labour laws, thereby keeping abreast with changing legislation;
- Ensuring quality and compliance, supported by reliable processes, systems and data; and
- Reporting regularly on progress made with the implementation of all human capital strategies and objectives and advising the business on corrective action which might be necessary to achieve the desired performance levels.

It is envisaged that the transfer of employees from Eskom Holdings to NTC will be through Section 197 of the Labour Relations Act. Consultations on the people transfer for the bargaining unit employees are taking place at an Eskom level within the Restructuring Consultative Framework (RCF), which is a consultative forum between Eskom and the three recognised trade unions (NUMSA, NUM and Solidarity) established in April 2021. Several engagements have been held and are progressing. Consultations on the people transfer for non-bargaining unit / managerial employees are also taking place at divisional level.

SECTION I PERMISSION FROM OTHER GOVERNMENT DEPARTMENTS OR REGULATORY AUTHORITIES

I1 Please provide of copies of the permits issued by other government departments or regulatory authorities in respect of erecting and operating the transmission system, including any environmental and safety approvals.

1. Environmental

1.1 Amendment and transfer of Environmental Authorisations and Licences

The applicant consulted the relevant authorities (DFFE and DWS) and obtained feedback on the process to transfer environmental licenses, permits, authorisations and consents from Eskom Holdings to NTC. The existing environmental licenses, permits, authorisations and consents will be transferred based on successor-in-title amendments as required to continue undertaking the Transmission business activities. The authorisations will be prioritized and amended individually based on compliance requirements for project execution and operational activities. The amendment process typically requires 30 days to conclude and will be initiated timeously before the Implementation Date.

1.2 Environmental Permits and Licences

Consistent with Eskom Holdings' historical commitment to compliance in the SHEQ policy (32-727), Transmission as a division of Eskom Holdings has been ISO14001 certified business since 2002. It has established, implemented and maintains a procedure(s) for periodically evaluating compliance with applicable legal and other requirements as required by the ISO 14001: 2015 (clause 6.1.3 & 9.1.2) standard. NTC will continue to apply these practices and apply for a name change to the current ISO14001 certification.

Legal requirements include all the legal obligations i.e. national, provincial, and local laws and regulations; environmental permits; registrations and orders required for NTC and its business units to manage its operations. The list of these legal requirements is maintained in the SHE Legal Register that is utilized to support the legal compliance across the business.

Table 17: Legal Register Scope Summary

Legislation	Licence/Permit	Competent authority	Status
National Environmental Management Act (NEMA): Environmental Impact Assessment (EIA) Regulations	Environmental Authorizations (EAs) and Record of Decisions (RoDs)	Department of, Forestry and Fisheries and the Environment (DFFE)	List attached of all EAs issued for transmission operations (to be amended)
National Water Act (NWA)	Water Use Licenses (WULs), Existing Lawful Water Uses (ELWUs) and General Authorizations (GAs)	Department of Water and Sanitation (DWS)	Available per site
National Environmental Management Waste Act (NEMWA)	South African Waste Information System (SAWIS) Registration Certificates	Department of, Forestry and Fisheries and the Environment (DFFE)	Available per site
National Forest Act (NFA)	Licenses to cut, remove and damage or destroy indigenous trees in natural forests, and/or protected trees	Provincial	Available per site
National Environmental Management Biodiversity Act (NEMBA)	Permits authorizing removal of bird nests	Provincial	Available per site

2. Safety

NTC subscribes and commits to compliance with the OHS Act, Act 85 of 1993 and Eskom Holdings SHEQ Policy (32-727). Based on each Business Unit / Grid's operational scope and activities, Transmission complies to all applicable legal obligations including National, Provincial and Local Municipality By-laws, which are managed and updated on the SHE Legal Register and also tracked on the OHS Compliance Universe.

Transmission has been implementing and maintaining OHS processes which are periodically evaluated to ensure compliance and conformance to legal and other requirements and is ISO 45001: 2018 certified. Contracts and Contractor Management processes have been implemented to manage contractors performing construction work for Transmission. Construction Health & Safety Agents are registered with SACPCMP, to ensure compliance where construction work permits are required. The applicant will continue to apply these practices and apply for a name change to the current ISO 45001: 2018 certification.

3. Telecommunication Licence Exemption

The existing Eskom Holdings Private Electronic Communications Networks (PECN) licence exemption was revised to include to all Eskom Holdings subsidiaries, and confirmation of this was received from ICASA. The exemption is in accordance with the Licence Exemption Regulations published in the Government Gazette No. 31289 of 2008 read with section 6 of the Electronic Communications Act, 2005 (Act No: 36 of 2005).

4. Aviation Licensing

NTC is in the process of application for an Air Service License (ASL), Air Operating Certificate (AOC) and a Remotely Piloted Aircraft Systems Operating Certificate (ROC) in line with section 14 of the Air Service Licence Act 115 of 1990. Governance approvals have been concluded and the Air Service Licence application has been submitted to the Department of Transport.

SECTION J BROAD-BASED BLACK ECONOMIC EMPOWERMENT

J1 Please provide information in terms of the following categories:

COMPONENTS	POINTS	0.5	0.75	1	
Direct Empowerment	Black Ownership	10% to <20%	20% to 50%	>50%	
	Black Management	20% to <35%	35% to 50%	>50%	
	Black Female Management	1% to <5%	5% to 10%	>10%	
Human Resource Development	Black Skilled Personnel as % of payroll	20% to <35%	35% to 50%	>50%	
	Skills Development Programs as % of payroll	1% to <5%	5% to 10%	>10%	
	Employment Equity i.e. Women Representation	20% to <35%	35% to 50%	>50%	
Indirect Empowerment	Procurement from Black/BEE Suppliers	20% to <35%	35% to 50%	>50%	
	Enterprise Development i.e. Monetary Investment or quantifiable non-monetary support in SMME with BEE contributions as % of Net Asset Value/ EBITDA/Total Procurement	10% to <20%	20% to 25%	>25 %	
	Industry specific initiatives to facilitate the inclusion of black people in the sector as % of net profit	1% to <5%	5% to 10%	>10%	
NERSA's Discretionary Points	Based on skills transfer and fulfilment or acceleration of other national objectives e.g. employment of disabled personnel robust implementation of mechanisms to verify the BEE status of suppliers reported under preferential procurement and utilization of DTI approved accreditation agencies and so on.	1% to <5%	5% to 10%	>10%	

SECTION K ADDITIONAL INFORMATION

Provide any other relevant information related to this application

The Ministry of Public Enterprises has approved the application made in terms of the Public Finance Management Act sections 54(2)(c) and 54(2)(d) for the sale by Eskom Holdings of its Transmission business to its new wholly owned Transmission subsidiary (NTC), and the subscription for shares by Eskom Holdings in NTC.

The Ministry of Finance has also approved the Eskom application in terms of sections 54(2)(c) and 54(2)(d) of the PFMA for the operationalization of NTC through the proposed disposal of Eskom's transmission business to NTC.

SECTION L DECLARATION

On behalf of the applicant, I hereby declare that:

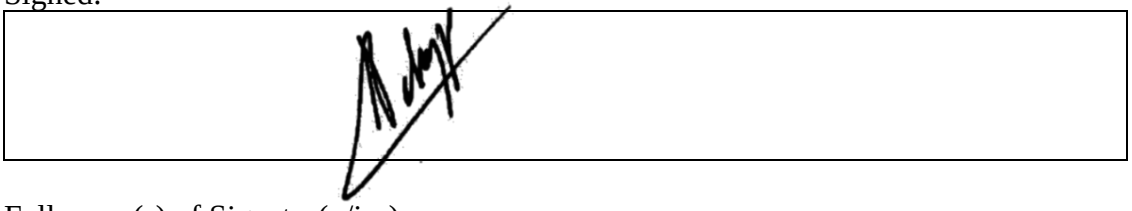
(a) the applicant shall at all times comply in every respect with the conditions attached to any licence that may be granted to the applicant;

(b) the applicant shall at all times comply with lawful directions of the National Energy Regulator of South Africa;

(c) the information provided by me on behalf of the applicant is accurate and complete in all respects; and

(d) I am authorised to make this declaration on behalf of the applicant.

Signed:



Full name(s) of Signator(y/ies):

Segomoco Martin Scheppers	

Position held (if the applicant is a company, co-operative, partnership, unincorporated association or any other body corporate):

Director: National Transmission Company South Africa SOC Ltd	

Date:

13 Jan 2023