GRID CAPACITY ALLOCATION RULES

PURPOSE

To ensure the efficient, expeditious and uniform administration of grid capacity allocation and third-party access to transmission and distribution power systems and to create sustainable and justifiable considerations for licensees to apply when allocating grid capacity, thus facilitating a fair balance between the interests of customers and end users, licensees, investors in the electricity supply industry and the public.

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DEFINITIONS

Terms not otherwise defined in the Electricity Regulation Act, 2006 (Act No. 4 of 2006) and/or Codes shall have the meaning given to them below.

Act	Electricity Regulation Act, 2006 (Act No. 4 of 2006), as amended or re-enacted from time to time.
Affected Party	Party affected by a Force Majeure event (further defined under the definition of Force Majeure).
Applicant	A legal entity or third party applying to a transmission or distribution licensee for access to its network.
Budget Quote	The provision of financial terms and physical supply conditions with the confidence level of 85%, subject to certain conditions negotiated between the participants. The customer may pay more if the stipulated conditions cannot be met, or pay less if the actual costs are less than those quoted.
Capacity	In respect of a Facility, at any time and from time to time, capacity is the output power (expressed in megawatts or MW) of such a Facility that can be reliably transmitted through the network or component thereof, whether serving loads or accepting generation, without exceeding the technical limits of any network component or compromising system operation, resulting in potential grid instability.
Codes	The South African Grid Code, the Distribution Code, or any other code approved by NERSA, as may be applicable.
Connection agreement	An agreement detailing the conditions under which the Distributor or Transmitter intends to connect the customer.

Connection works	Means the facility Connection Works and the Transmission Connection Works or the Distribution Connection Works
Consumer	A user of electricity (person or legal entity) that has entered into an agreement with a licensed electricity distributor.
Cost Estimate Letter	The letter issued by the NSP to the Applicant indicating the estimated costs for the construction of works to connect a load or generator to the Transmission or Distribution System or recoverable works based on a preliminary load-flow analysis and designs, without creating any obligation on either party or accounting for site-specific requirements.
Electricity Pricing Policy	Electricity Pricing Policy, dated 12 December 2008, including subsequent amendments thereto.
Electricity Supply Industry	The import, export, generation, transmission, distribution, system operation and trading of electricity and all activities related thereto, and for purposes of the Rules, includes investors looking to invest in industry infrastructure.
Generation	The production of electricity by any means.
Generator	A facility that generates electricity for the purposes of own use, or to sell electrical energy through a power purchase agreement.
Facility	A generation, transmission, distribution or energy storage facility, as applicable, located at the site and comprising all plant, machinery and equipment, all associated buildings, structures, roads on the site that are not national, provincial or municipal, and other appurtenances, together with all required interfaces to be constructed for the safe, efficient and timely operation of that facility and, for the avoidance of doubt, excludes the transmission

	connection works or distribution connection works, as the case may be.
Force Majeure	Any act, event or circumstance or any combination of facts, events, or circumstances which: a) is beyond the reasonable control of the Affected Party; b) is without fault or negligence on the part of the Affected Party and is not direct or indirect result of a breach by the Affected Party of any of its obligations under any project document; c) could not have been avoided or overcome by the Affected Party, acting in accordance with the standards of a reasonable person; and d) prevents, hinders, or delays the Affected Party in its performance of all (or part) of its obligation.
Licensee	The holder of a licence granted or deemed to have been granted by NERSA under the Electricity Regulation Act.
Network	The transmission or distribution power system, as may be applicable.
Network service provider	A legal entity that is licensed to provide network services through the ownership and maintenance of an electricity network.
Service	Any service provided by a licensee as part of a licensed activity and recognised by NERSA as such.
Transmission power system	A network for the conveyance of electricity that operates above a nominal voltage of 132kV, including assets that are approved by NERSA to be part of the transmission power system.

ABBREVIATIONS

BESS	Battery Energy Storage Systems
BQ	Budget Quote
CEL	Cost Estimate Letter
COD	Commercial Operation Date
EPP	Electricity Pricing Policy, dated 12 December 2008
ER	Energy Regulator
ERA	Electricity Regulation Act, 2006 (Act No. 4 of 2006), as amended or re-enacted from time to time
ESI	Electricity Supply Industry
MW	Megawatt
NDP	Network Development Plan
NERSA	National Energy Regulator of South Africa
NSP	Network Service Provider
TDP	Transmission Development Plan

1. BACKGROUND

1.1 Grid access refers to the process of connecting electricity generators, as well as consumers, to the transmission and distribution power systems. A crucial element of this access process is that renewable energy generated not only enters the grid, but is also allowed to be dispatched and sold according to the relevant grid connection rules and codes.

1.2 As demand for electricity generation rises and the shift from fossil fuels to renewable sources continues, it is essential to have well-defined policies and rules that protect grid access matters. These rules ensure fairness and consistency in their implementation.

1.3 However, available grid connection capacity is becoming increasingly limited, particularly at the substation level and throughout the western part of the country. This scarcity highlights the need for regulatory measures to establish structured rules for grid capacity allocation.

1.4 Delays that happen after the allocation of grid access, resulting in the actual start of project construction being deferred to later dates, often occur due to financial constraints or lengthy environmental approval processes.

1.5 The inadequate development of grid infrastructure not only hinders the connection of new generation power sources, but also slows down the energy transition, resulting in higher costs for clean energy developments. Thus, it is important to evaluate key factors that can ensure efficiency, effectiveness, and fairness in grid connection processes.

1.6 Given the shortages in grid connection capacity and the rapidly changing landscape of electricity generation markets, it has become clear that Grid Capacity Allocation Rules must be crafted to ensure non-discriminatory and open access. This approach should be fair and transparent for all Applicants seeking grid connection capacity.

1.7 In the past, licensees allocated grid capacity on a first-come, first-served (fc-fs) basis. However, as the demand for electricity generation increased, it has become clear that the process of allocating grid capacity should be refined further to ensure efficient distribution and to minimise the risk of speculators monopolising the grid without a genuine commitment to fostering investment. Hence, the first-ready, first-served principle is being adopted as a way of allocating grid capacity. Section 4 further clarifies the provisions of the readiness and the first-ready, first-served principles.

1.8 The rules are designed to promote a balanced allocation of grid capacity among all Applicants, which is essential for maintaining long-term energy

security. Consequently, non-discriminatory access will enhance customer options for affordable and reliable electricity supply.

1.9 In the South African market, regulating the allocation of grid access by transmission and distribution network owners is essential, especially as the energy sector moves towards a more competitive environment. In this context, the ER has deemed it necessary to outline key regulatory principles for the use and allocation of access to transmission and distribution grids. This aims to ensure that access is granted fairly and that the available capacity in the grid is utilised efficiently and effectively.

1.10 As electrical transmission and distribution lines are historically natural monopolies, it is vital to ensure fair access to these power systems to allow healthy competition in the electricity market, with the aim to result in competitive prices for end users.

2. LEGAL MANDATE

2.1 The National Energy Regulator of South Africa (NERSA) is a regulatory authority established as a juristic person in terms of section 3 of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) ('NERA').

2.2 NERSA's mandate is to regulate the electricity, piped-gas and petroleum pipeline industries in terms of the Electricity Regulation Act, 2006 (Act No. 4 of 2006), Gas Act, 2001 (Act No. 48 of 2001) and Petroleum Pipelines Act, 2003 (Act No. 60 of 2003).

2.3 Section 2A of the Electricity Regulation Act, 2006 (Act No.4 of 2006), as amended ('the Act') confirms that the Act is applicable to the generation, transmission, distribution, reticulation, system operation, trading, and import and export of electricity activities, and to persons undertaking such activities.

2.4 In terms of section 3 of the Act, the Energy Regulator ('the ER') is the custodian and enforcer of the regulatory framework provided for in the Act and has regulatory authority over persons undertaking activities that are subject to the Act. Therefore, the ER is entrusted with ensuring that the objectives of the Act are achieved.

2.5 The ER is obliged, in terms of section 4(a)(iv) of the Act, to issue rules designed to implement the national government's electricity policy framework, the integrated resource plan and this Act.

2.6 Section 35(1) of the Act empowers the ER to make rules, guidelines, directives and codes of conduct and practice after consultation with

licensees, municipalities that reticulate electricity and such other interested persons as may be necessary.

2.7 Section 35(3) of the Act further provides that, without derogating from the general nature of the empowerment, the ER makes rules that relate to '(c) the security, operation, use and maintenance of transmission and distribution power systems' and '(k) any other ancillary or administrative matter for which it is necessary to make rules for the proper implementation of this Act'.

2.8 Policy position 5 of the Electricity Pricing Policy (EPP) of 2008 details the circumstances under which access must be provided to all users, which aligns with the provisions of section 21 of the Act, which requires transmission and distribution licensee to provide non-discriminatory access to its transmission or distribution power system to third parties.

2.9 In the development of delegated or subordinate legislation, the following interactive factors play a role in enabling the legality of such subordinate legislation:

a) The extent to which the discretion of the delegated authority is structured and guided by the enabling legislation.
b) The public importance and constitutional significance of the measures.
c) The shortness of the period to develop such subordinate legislation.
d) The extent to which the subject matter necessitates the use of forms for rapid intervention, which could otherwise be slow and inhibit other processes.

2.10 The justification for having the rule-making powers vested in administrative bodies, such as NERSA, is based on numerous practical considerations, including the following:

a) The technical nature of financial regulation and the degree to which specialist knowledge is needed for effective rule-making.
b) The importance of the time factor in addressing matters where rapid intervention is critical.
c) Issues on which regulations are made are often of a non-political, administrative/technical nature.
d) Best practices in other jurisdictions indicate that rule-making powers are vested in administrative authorities/bodies rather than in political office-bearers.
e) Rules are subject to the ultra vires rule, which means that they may be struck down by a court if not authorised in the enabling Act.

2.11 To meet the legality requirement, the ER has ensured that the appropriate powers have been exercised to ascertain jurisdictional fact and satisfy the stakeholder consultation legal requirements.

2.12 These rules are developed to ensure uniformity in the consideration of applications, relevant factors and the lapsing of such right to access that has been given.

3. OBJECTIVES OF THE GRID CAPACITY ALLOCATION RULES

3.1 The objectives of these Rules are to:

a) promote investment in the Electricity Supply Industry (ESI);
b) ensure the efficient, fair, and reliable use of the electricity grid infrastructure;
c) improve capacity allocation to prioritise projects that are ready to connect while maintaining options for Applicants;
d) bring clarity and order to how grid capacity is allocated to potential generation and load projects; and
e) ensure that potential entrants to the industry have sufficient preliminary information to enable proper assessment and informed investment decisions.

4. PRINCIPLES OF THE GRID CAPACITY ALLOCATION RULES

4.1 The Network Service Provider (NSP) must adhere to the following principles in the provision of grid access:

a) Non-discriminatory access: Third parties must be granted equal access to the grid, encouraging competition and fairness.
b) Protection of existing customers: The rights and responsibilities of current customers are safeguarded, ensuring that their interests are not jeopardised by new connections or projects.
c) Compliance with the Grid Code: Any party seeking to connect to the grid must comply with the standards and guidelines established in the Grid Code, which governs technical and operational practices.
d) Fair access process: Access to the grid must be granted through a transparent and fair procedure, reducing barriers for legitimate connections.
e) Capacity limitations: NSPs may refuse access if they can objectively demonstrate insufficient network capacity to maintain system integrity.
f) Capacity discrimination: NSPs may not discriminate between customers or classes of customers regarding access, tariffs, prices, and conditions of service, except for objectively justifiable and identifiable differences approved by the Regulator.
g) Information costs: Parties requesting information about network capacity may be charged a reasonable fee, which helps cover the costs associated with providing such information.

4.2 Acceptance of the Cost Estimate Letter (CEL): Both parties must agree that the acceptance of the CEL recognises the indicative nature of the costs that are provided, including the technical scope, which might change when the scope becomes more accurate at the Budget Quote (BQ) stage. The acceptance of the CEL by the Applicant puts an obligation on the NSP to reserve capacity for an Applicant. The provisions below establish the framework for determining a project's readiness level for grid access:

a) First ready: A threshold of readiness of the Applicant's project to build the generation Facility and related grid infrastructure in accordance with the published rules.
b) For the purposes of these Rules, readiness refers to the demonstrable stage at which a generation, transmission or distribution project has met all regulatory, technical, financial, and contractual conditions required to proceed with physical grid connection and energisation within a defined timeframe, as verified by the NSP.

5. APPLICABILITY OF THE RULES

5.1 These rules shall apply to NSPs that are legal entities to provide electrical network services and are responsible for planning, processing connection application, operation, and maintenance of an electricity network in their respective jurisdictions. The scope of an application encompasses electricity transmission and distribution activities, including the following:

a) An Applicant intending to develop, operate, and maintain a Facility.
b) A licensee or its appointed representative that develops, operates and maintains the distribution network.
c) A licensee or its appointed representative that develops, operates and maintains the transmission network.

5.2 These rules shall also apply to Applicants seeking grid connection allocation, including renewable energy, thermal energy sources, Battery Energy Storage Systems (BESS), pumped hydro, and hybrid systems integrating storage to enhance dispatchability and provide ancillary services and/or any other technology that generates electricity.

6. INFORMATION REQUIRED TO BE MADE AVAILABLE TO THE PUBLIC

6.1 The Transmission NSP shall develop the Transmission Development Plan (TDP) annually and ensure its availability to the public by publishing it on its official website.

6.2 The Distribution NSP shall develop the NDP every three years, with a minimum window period of five years, and make it available to the public on request.

6.3 The Grid Code, as an extension of the Act, mandates the NSP to indicate available network capacity by publishing the TDP and making the NDP available on request.

6.4 Such network capacity information and any other network information that must be made available to an Applicant, must be on time, be accurate, be complete, and be sufficiently detailed to ensure that Applicants are fully informed and able to make decisions based on reliable and adequate information.

6.5 The NSP may charge a reasonable fee to be published in a schedule of fees for the cost of providing additional information relating to the network capacity and measures that would be necessary to reinforce the network on application.

6.6 The NSP shall develop the grid allocation policies, processes, and procedures and publish them on their website.

6.7 The NSP shall publish the connection application form with the information pack indicating the application process.

7. GRID CAPACITY ALLOCATION PROCESS REQUIREMENTS

7.1 The grid capacity allocation process shall have three stages that include the pre-feasibility stage, reservation stage and allocation stage, as shown in Figure 1 below.

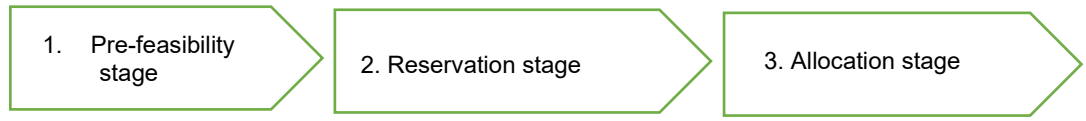

Figure 1: Grid capacity allocation process

7.2 **Pre-feasibility stage:** An Applicant shall apply for a CEL with a relevant NSP and demonstrate project development intent, showing that they have started engagements with relevant authorities such as the Department of Environmental Affairs and landowners.

7.3 The Applicant should be able to determine the project location, size of the project in terms of Megawatts (MWs) and technology.

7.4 The Applicant shall also be required to pay a reasonable fee for the cost of the provision of a CEL.

7.5 The timelines for the provision of a CEL shall be in line with the requirements of the Grid Code, unless the NSP has a reduced timeline compared to those indicated in the Grid Code.

7.6 **Reservation stage:** The capacity shall be reserved for a project when an Applicant has accepted the CEL and has paid the CEL fee.

7.7 The Applicant must also provide proof of the following readiness documents:

a) Environmental authorisation for the generation site
b) Provision of a financial guarantee
c) Verified site resource data, such as twelve months site resource data for wind technology or satellite-verified data for solar technology
d) Proof confirming that it has applied for/obtained registration or a generation licence with NERSA.

7.8 Thereafter, the Applicant shall be required to apply for a BQ.

7.9 The BQ shall be accompanied by all the relevant agreements such as connection agreements and implementation agreements.

7.10 The timelines for the provision of a BQ shall be in line with the requirements of the Grid Code, unless should the NSP have a reduced timeline compared to those indicated in the Grid Code.

7.11 **Allocation stage**: The capacity shall be allocated to a project when it has proof of the following readiness documents:

a) When the BQ has been accepted and provision of financial guarantees related to project execution.
b) When the Applicant and an NSP have signed legally binding agreements such as a connection agreement(s) and/or implementation agreement.

7.12 The connection agreement(s) and/or implementation agreement shall contain the technical scope, project timelines, and the Commercial Operation Date (COD).

7.13 Construction schedules and Engineering Contracts may be submitted to the NSP to ensure the successful commissioning of the project.

7.14 The readiness of the three stages of the grid capacity allocation process shall be assessed by either a pass or fail condition based on the requirements/criteria emanating from each of the three stages. An NSP

shall be required to use the readiness criteria illustrated in Table 1 to move the project from one stage to the next.

Table 1: Readiness criteria to be used by an NSP to move a project from one stage to the next

Stage	Criteria	Pass requirements	Fail condition
1. Pre-feasibility	1. Proof that an Applicant has applied for the CEL. 2. Proof that an Applicant has paid a fee for the provision of a CEL.	If both aspects of the criteria are met.	No supporting evidence provided.
2. Reservation	1. Acceptance of a CEL. 2. Proof of provision for a financial guarantee. 3. Environmental authorisation and/or land rights for the generation site. 4. Verified site resource data such as twelve months site resource data for wind technology or satellite-verified data for solar technology. 5. Proof that an Applicant has applied for a generation licence or a registration certificate. 6. Proof that an Applicant has applied for a BQ.	If all six aspects are met.	If some of the requirements are not met.
3. Allocation	1. Acceptance of a BQ and provision of a financial guarantee related to project execution. 2. When both the Applicant and an NSP have signed legally binding agreements such as a connection agreement, implementation agreement, and use-of-system agreement.	If both aspects of the criteria are met.	If both aspects of the criteria are not met.

7.15 The approach set out in Table 1 supports the first-ready, first-served principle whereby a project will only move to the next grid capacity allocation stage when all conditions from a previous stage are met.

8. THE QUEUING PROCEDURE

8.1 The NSP shall develop a fair and transparent queuing procedure to manage multiple applications, ensuring equitable treatment of all Applicants. The queuing procedure developed by the NSP shall be in line with the grid capacity allocation process requirements stipulated in section 7 of these rules.

8.2 The queuing procedure shall outline a clear tracking or allocation system, detailing how applications are assessed and moved up or down the queue at each phase of the allocation process (i.e. pre-feasibility, reservation and allocation) as stipulated in section 7 of these rules.

Queue Provisions

8.3 NSPs shall implement a three-stage queuing system consisting of **project registration (pre-feasibility), capacity reservation and capacity allocation**.

8.4 This system shall apply to all Applicants seeking connection to the Grid. Queue positions shall be based on progression through defined project milestones and validated evidence of project readiness.

Project Registration (Pre-feasibility)

8.5 NSPs shall keep an official record of Applicants that have signalled initial project intent and submitted a complete application.

8.6 In order to be placed on the project list/register, the Applicant must fulfil the following:

a) Submit a completed application
b) Submit a request for a CEL to the NSP, pay the CEL fee and provide a proof of payment.
c) Submit documentary proof of initial engagements with affected landowners and Department of Environmental affairs.

8.7 On receipt of the above, the NSP shall:

a) Enter the project into the project register/list
b) Issue a CEL within the timelines stipulated in the Grid Code.

8.8 The CEL is valid for a period of 12 months. If it is not accepted by the Applicant within 12 months, the CEL expires, and the project is removed from the project list.

8.9 On acceptance of the CEL and payment of the CEL acceptance fee within this period, the project will progress to be officially placed in the queue for capacity reservation.

8.10 A project that meets all requirements set out in section 7.6 and 7.7 of these rules ahead of schedule, will move up in the reservation queue, ahead of a project that has delayed its progress despite earlier registration.

Capacity Reservation Queue

8.11 Initial queue positions are determined by the date of CEL acceptance, submission of a formal request for BQ and payment of the relevant CEL acceptance fee.

8.12 The project must also demonstrate enhanced project readiness by meeting the following:
   a) Provision of required guarantees or security payments
   b) Obtaining Environmental Authorisations
   c) Obtaining land and rights
   d) Having 12 months validated generation resource data (validated generation resource data means for example independently verified solar irradiance or wind speed records)
   e) Having proof that confirms that it has applied for/obtained registration or a generation licence with NERSA.

8.13 On receipt of the above (8.11 and 8.12), the NSP shall reserve capacity for the project, and prepare and issue a BQ within the timelines stipulated in the Grid Code.

8.14 The BQ is valid for a period of six months (i.e. six months post BQ issue date). If it is not accepted by the Applicant within six months, the BQ expires and the capacity reservation lapses.

8.15 Projects failing to meet the advancement milestones within the validity period of the BQ will be removed from the queue and the reserved capacity will go to the next eligible project.

8.16 The NSP may, on receipt of a substantiated written request from the Applicant, grant a single extension of no more than six months for the fulfilment of the BQ requirements. The outcome of this stage is that once all the requirements are met by the Applicant (i.e. BQ accepted and payment made by the applicant), the project progresses to the capacity allocation queue.

Capacity Allocation Queue

8.17 To enter the capacity allocation queue, the project must demonstrate readiness by having fulfilled the following:
   a) Accepted the BQ and paid the BQ acceptance fee.
   b) Completed legally binding agreements such as a connection agreement, use-of-system agreement and implementation agreement.

8.18 Connection timelines are contractually binding and monitored for compliance.

8.19 On fulfilment of the above (8.18) by the Applicant, the NSP shall formally allocate capacity to the project and remove it from the competitive queue.

8.20 Capacity may be revoked and reallocated if the project fails to reach its milestones within the agreed timelines in the relevant agreements.

General Provisions/Principles on Queuing

8.21 All Applicants must submit an application in accordance with the process specified by the NSP, including the required technical information and applicable application/CEL fee.

8.22 On receipt of the application, the NSP shall validate the completeness and accuracy of the submission.

8.23 On successful validation, the NSP shall record the project in the project register, indicating the date on which a complete application was made.

8.24 The NSP is required to provide feedback on incomplete applications within 10 working days.

8.25 Queuing shall commence at the capacity reservation stage based on CEL acceptance and related submissions.

8.26 Queuing shall apply where multiple applications are received for connection capacity at a specific node or geographic area. Where no competition exists for capacity, queuing principles shall not apply.

8.27 Advancement from the project register to the capacity reservation queue is determined by the date of acceptance of the CEL.

8.28 Queue positions are non-transferable, except in cases of change of ownership.

8.29 Applicants must maintain their queue position in good standing by complying with:

a) all applicable requirements at each stage (e.g. agreements, documentation, financial guarantees); and
b) the prescribed deadlines.

8.30 Each queueing stage has defined validity periods. Failure to advance within these periods will result in removal from the queue.

8.31 NSP delays shall not negatively impact the Applicant, meaning Applicants may not lose their queue positions due to NSP delays.

8.32 Applicants may be eligible for refunds of financial security deposits if actual network upgrade costs exceed initial estimates by thresholds higher than those stated in the CEL or BQ.

8.33 Any disputes regarding queue positions or readiness assessments shall be referred to NERSA for adjudication.

8.34 If a project is ready but capacity is insufficient, it retains its queue position for the validity period of the CEL or respective stage.

8.35 The NSP should notify the Applicant within 10 business days once capacity becomes available again.

8.36 NSP shall publish a public queue status report monthly, subject to confidentiality protections.

8.37 Queue information must be publicly disclosed and updated monthly, and must exclude commercially sensitive data.

8.38 The following queue information shall be published by the NSP:

a) Project/Applicant reference number
b) Application date
c) Size/capacity applied for
d) Technology
e) Location e.g. substation or node
f) Status
g) Position
h) Total capacity available at key nodes
i) Total queued capacity per node
j) Timeline estimates for when capacity may become available.

8.39 The following information shall not be publicised by the NSP, as it is deemed to be sensitive:

a) Project/Applicant identity
b) Commercial/financial information

8.40 The NSP shall, at a minimum, update the queue information on the public tracking system monthly.

9. REVOCATIONS

9.1 The following aspects shall be the triggers for capacity revocation:

a) Non-compliance with project milestones within the allocated timeframe.
b) Termination of the connection agreement(s) and/or related contracts.

9.2 However, the NSP shall not revoke capacity for a project if the delays are caused by a force majeure event.

10. COMPLIANCE

NSPs are subject to the enforcement of these rules in accordance with the licence conditions, and compliance will be strictly monitored and enforced by NERSA.

11. DISPUTES

Disputes shall be dealt with as contracted for, and/or referred to NERSA for resolution by means of mediation and/or arbitration.

12. IMPLEMENTATION DATE

These Rules shall be published in the Government Gazette and shall take effect immediately on publication.