



## **CONSULTATION PAPER**

# **ESKOM'S APPLICATION FOR CONGESTION CURTAILMENT TO BE A CONSTRAINED GENERATION ANCILLARY SERVICE**

**Published on 5 July 2024**

***Issued by***

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## DEFINITIONS

In this consultation paper, any word or expression to which a meaning has been assigned, shall have a meaning so assigned, unless the context otherwise indicates.

**‘Ancillary service’** means services supplied to Eskom Transmission or the National Transmission Company (NTC) by generators, distributors or end-use customers, necessary for the reliable and secure transport of power from generators to distributors and other customers, as defined in the system Operation Code, section 4.

**‘Customer’** means a person who purchases electricity or a service relating to the supply of electricity.

**‘Constrained schedule’** means a generation schedule, prepared by the market operator and suitable for implementation by the System Operator (SO) that includes the effects of Transmission System (TS) constraints.

**‘Curtailement’** means that the amount of Active Power that a generating unit, a power station or a generating facility is permitted to generate is restricted by the SO, Network Service Provider (NSP) or other Network Operator due to network or system constraints.

**‘Eskom’** means Eskom Holdings SOC Ltd, a public State-Owned Company registered in accordance with the company laws of South Africa with registration number 2002/015527/30 in accordance with the provisions of the Eskom Conversion Act, 2011.

**‘Independent Power Producer (IPP)’** means any person in which the Government or any organ of state does not hold a controlling ownership interest (whether direct or indirect), which undertakes or intends to undertake the development of new generation capacity pursuant to a determination made by the Minister in terms of section 34(1) of the Electricity Regulation Act, 2006 (Act No. 4 of 2006).

**‘IPP procurement programme’** means a procurement process undertaken for the procurement of new generation capacity from IPPs.

**‘Integrated Resource Plan’** means the Integrated Resource Plan for Electricity 2019 – 2030 (published as GN 1360 of 18 October 2019 in Government Gazette No. 42784) (IRP 2019).

**‘Network Service Provider (NSP)’** means a legal entity that is licensed to provide network services through the ownership and maintenance of an electricity network.

**‘New generation capacity’** means:

- a) the electricity generation capacity other than the capacity of existing generation facilities;
- b) the electricity derived from the capacity referred to in (a); and
- c) ancillary services related thereto, individually or in any combination thereof and including an increase in the electricity generation capacity of existing generation facilities.

**‘Power station’** means one or more units at the same physical location.

**‘System Operator’** means a legal entity licensed to be responsible for short-term reliability of the Integrated Power System, which is in charge of controlling and operating the Transmission System and dispatching generation (or balancing the supply and demand) in real time.

**‘Schedule 2 Notice’** means the Schedule 2 amendment Notice in terms of section 36(4) of the Electricity Regulation Act, 2006 (Act No. 4 of 2006) and published as Gazette Number 47877 of 17 January 2023.

**‘Transmission System (TS)’** means a Transmission System that consists of all lines and substation equipment where the nominal voltage is above 132 kV.

**‘the Act’** means the Electricity Regulation Act, 2006 (Act No. 4 of 2006).

## ABBREVIATIONS AND ACRONYMS

<b>CPA</b>	Central Purchasing Agency
<b>DMRE</b>	Department of Mineral Resources and Energy
<b>GCCA</b>	Generation Connection Capacity Assessment
<b>GW</b>	Gigawatt
<b>IRP 2019</b>	Integrated Resource Plan of 2019
<b>IPP</b>	Independent Power Producer
<b>IPS</b>	Interconnected Power System
<b>MW</b>	Megawatt
<b>NECOM</b>	National Energy Crisis Committee
<b>NERSA</b>	National Energy Regulator of South Africa
<b>NSP</b>	Network Service Provider
<b>NTCSA</b>	National Transmission Company of South Africa
<b>OCGT</b>	Open Cycle Gas Turbines
<b>PAJA</b>	Promotion of Administrative Justice Act
<b>PPA</b>	Power Purchase Agreements
<b>PV</b>	Photovoltaic
<b>REIPPPP</b>	Renewable Energy Independent Power Producer Procurement Programme
<b>RES</b>	Renewable Energy Sources
<b>SAGC</b>	South African Grid Code
<b>TDP</b>	Transmission Development Plan

## EXECUTIVE SUMMARY

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'). Section 4(c) of the NERA empowers and mandates the Energy Regulator to exercise the powers and execute the functions detailed in section 4 of the Electricity Regulation Act, 2006 (Act No. 4 of 2006) ('the Act').

In performing its mandated functions, NERSA is required to ensure that the following objects are achieved:

- (a) achieve the efficient, effective, sustainable and orderly development and operation of electricity supply infrastructure in South Africa;
- (b) ensure that the interests and needs of present and future electricity customers and end users are safeguarded and met, having regard to the governance, efficiency, effectiveness and long-term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic;
- (c) facilitate investment in the electricity supply industry;
- (d) facilitate universal access to electricity;
- (e) promote the use of diverse energy sources and energy efficiency;
- (f) promote competitiveness and customer and end user choice; and
- (g) facilitate a fair balance between the interests of customers and end users, licensees, investors in the electricity supply industry and the public

On 24 May 2024, Eskom submitted an application to NERSA requesting approval for congestion curtailment to be treated as a constrained generation ancillary service. Eskom requests the Energy Regulator in terms of section 21(4) of the Act, read together with section 4.2.1 of Eskom's transmission licence conditions, and the provisions of the South African Grid Code, to approve congestion curtailment to be treated as a constrained generation ancillary service. Eskom submits that the Grid Code already makes provision for constrained generation as an ancillary service for power stations; the application seeks to expand the application of this service by including renewable energy resources.

The Energy Regulator is therefore called on to make a decision, which decision must comply with section 10 of the NERA, read with the provisions of section 4 and 5 of the Promotion of Administrative Justice Act, 2000 (Act No.3 of 2000) ('PAJA').

In light of the above, this consultation paper has been formulated to solicit input and views from interested and affected parties, in order to achieve a fair balance between the interests of customers and end users, licensees and investors in the electricity supply industry, and the public at large. The input will be considered and will form part of the decision-making process of the Energy Regulator.

Stakeholders are therefore requested to provide written comments on the application for congestion curtailment to be treated as a constrained generation ancillary service, as set out in this consultation paper. The comments should be addressed to:

**Mr Mondli Shoji at the National Energy Regulator of South Africa, Kulawula House, 526 Madiba Street, Arcadia, Pretoria, 0083**

Comments can be sent via email to the following email address:  
**[congestioncurtailment@nersa.org.za](mailto:congestioncurtailment@nersa.org.za)**

**The deadline for the submission of comments is 5 August 2024**

Kindly provide the name, address, telephone number, fax number and email address of the person or organisation submitting the comments. Comments received after the deadline, will not be considered.

NERSA will collate all comments that are received by the deadline, which comments will be taken into consideration when the decision is taken by the Energy Regulator to either approve or not approve Eskom's application. NERSA may hold a public hearing where interested and affected parties and other stakeholders, may be invited to make presentations.

## 1. BACKGROUND

- 1.1 South Africa is currently facing challenges in terms of electricity capacity, which results in the implementation of load-shedding. Therefore, it is crucial that any new generation capacity be connected to the grid, as soon as it is available. Currently, the transmission grid is constrained, particularly in the Western Cape, Eastern Cape and Northern Cape where most of the renewable energy resources are situated.
- 1.2 The Department of Mineral Resources and Energy (DMRE) is implementing the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) in accordance with section 34 of the Electricity Regulation Act, 2006 (Act. No 4 of 2006) ('the Act'), as well as the Integrated Resource Plan 2019 (IRP2019), in response to the country's urgent need for new generation capacity.
- 1.3 The connection of new generation capacity to the national grid, facilitated by the REIPPPP and the amendment of schedule 2 of the Act, necessitates sufficient grid connection capacity.
- 1.4 The construction of new infrastructure to increase grid connection capacity has lagged behind the uptake of new generation capacity by renewable energy projects, owing to, among other things, the inherent asymmetry of the associated lead times from inception to commissioning, resulting in severe grid constraints in transmission's national corridors, particularly in the Northern, Eastern, and Western Cape.
- 1.5 In October 2023, Eskom published a Generation Connection Capacity Assessment (GCCA) of the transmission network. The aim of the GCCA is to inform stakeholders of the potential capacity available on the transmission network to facilitate connection of generation projects. The results of the GCCA 2025 showed that there is currently no capacity on the transmission network to connect new generation capacity, particularly in the Cape region.
- 1.6 On 28 January 2024, Eskom Transmission<sup>1</sup> published an addendum to the GCCA 2025 to inform stakeholders of the potential capacity that has been made available in the Eastern and Western Cape by accepting not more than 10% of curtailment; and that 3 470 MW of additional generation capacity can be connected to the grid almost immediately, with 2 680 MW in the Western Cape and 790 MW in the Eastern Cape.

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<sup>1</sup> Eskom Transmission is in the process of unbundling to become the National Transmission Company of South Africa (NTCSA).



- 1.7 On 24 May 2024, Eskom submitted an application to NERSA to request approval for congestion curtailment to be treated as a constrained generation ancillary service (the application is attached hereto as Annexure A).
- 1.8 In its application, Eskom indicates that the Energy Regulator is requested in terms of section 21(4) of the Act, read together with section 4.2.1 of Eskom's Transmission licence conditions and the provisions of the South African Grid Code, to approve congestion curtailment to be a constrained generation ancillary service.
- 1.9 Eskom submits that the Grid Code already makes provision for constrained generation as an ancillary service for power stations; the application seeks to expand the application of this service by including renewable energy resources.
- 1.10 Section 21(4) of the Act states that:  
*access in terms of subsection (3) must be provided on the conditions set out in the licence of such transmitter or distributor, that may relate to-*
- (a) the circumstances under which access must be allowed;*
  - (b) the circumstances under which access may be refused;*
  - (c) the strengthening or upgrading of the transmission or distribution power system in order to provide for access, including contributions towards such upgrading by the potential users of such systems, if applicable;*
  - (d) the rights and obligations of other existing or new users regarding the use of such power systems;*
  - (e) compliance with any rule, code or practice made by the Regulator; or*
  - (f) the fees that may be charged by a licensee for the use of such power system.*
- 1.11 Eskom has also highlighted that its application is pursuant to section 4.2.1 of the transmission licence conditions, which states:  
*the Transmission Division shall be in control of and be responsible for the short-term reliability and operation of the interconnected power system (IPS) as defined in the Grid Code. In doing so the Licensee shall act in accordance with the prevailing Grid Code and Market Rules in order to, among others:*
- a) Ensure system reliability, safety and security;*
  - b) Dispatch generation;*
  - c) Set operational procedures;*
  - d) Control the operations of the IPS;*
  - e) Acquire sufficient ancillary services;*
  - f) Provide operational information to the industry;*
  - g) Define on an annual basis in agreement with customers, the demarcation of the IPS (Schedule 4).*

1.12 Furthermore, section 7.8 of the Network Code makes provision for constrained generation ancillary service to be considered as a solution to mitigate network constraints. It states:

- (1) *The NTC has the obligation to resolve network constraints; and*
- (2) *Network constraints (“congestion”) shall be regularly reviewed by the NTC. Economically optimal plans shall be put in place around each constraint, which may involve investment, the purchase of the constrained generation ancillary service or other solutions.*

1.13 Having received a formal application from Eskom, NERSA is undertaking a public participation process to ensure that the decision of the Energy Regulator complies with section 10 of the NERA, read with the provisions of section 4 and 5 of PAJA.

## **2. CONGESTION CURTAILMENT AS A CONSTRAINED ANCILLARY SERVICE**

2.1 Curtailment means that the amount of active power that a generating unit, a power station or a generating facility is permitted to generate is restricted by the System Operator (SO), Network Service Provider (NSP) or other Network Operator due to network or system constraints.

2.2 Curtailment as a congestion management mechanism proposed by Eskom in its application and/or related documents, means making the most optimal use of the existing power grid by accommodating more Renewable Energy Sources (RES) in an already constrained network, while preserving infrastructure and grid reliability. It refers to the active control/reduction of the output of RES plants as a means to alleviate congestion.

2.3 In both instances (as defined in this document and in Eskom documents), curtailment is a tool available to the SO to use to restrict generation capacity under network or system constraints.

2.4 Currently, in transmission system planning, no generation capacity is added onto the network if the technical limits (thermal, voltage or stability limits) of that particular network have been reached. This limits the possibility of exceeding the network’s technical limits, even with all connected generation resources producing at maximum capacity.

2.5 With the proposed congestion curtailment framework, Eskom in essence seeks approval from NERSA to be permitted to connect additional RES generation capacity on networks that have already reached maximum allowable technical limits, which will increase the probability of the need to curtail production.

- 2.6 The benefits of the congestion curtailment framework, as highlighted by Eskom in its application and supporting documents, is that it maximises the use of the existing grid, by making it possible for capacity to be added to the grid by allowing more RES to be connected, thereby reducing the risk of load-shedding and the use of expensive Open Cycle Gas Turbines (OCGTs).
- 2.7 The disadvantage is that the addition of new generation capacity from RES to a network that has already reached its maximum capacity increases the likelihood of the need to curtail generation production. The levels of curtailed generation will be higher than what is currently experienced on the networks, and the cost of the curtailed power will be borne by customers.
- 2.8 Eskom proposes for congestion curtailment to be treated as a constrained generation ancillary service.
- 2.9 Ancillary services are defined in this document as services supplied to the National Transmission Company (NTC) by generators, distributors or end-use customers, necessary for the reliable and secure transport of power from generators to distributors and other customers, as defined in the System Operation Code, section 4.
- 2.10 Currently in the System Operation Code, constrained generation service is the service supplied by a power station to the NTC by constraining its power output below (alternatively, above) the unconstrained schedule level. The service is required to ensure that the Integrated Power System (IPS) remains within the appropriate operational limits.
- 2.11 The current constrained generation ancillary service as contained in the Codes only applies to conventional power stations; Eskom is proposing that the applicability of this ancillary service be extended to Renewable Energy Power Plants (RPPs).

### Questions

1. Curtailment is generally understood as a congestion management tool. What are your views on the implementation of curtailment as a means to 'create' more capacity on the grid?
2. In your view, does congestion curtailment qualify to be treated as a constrained generation ancillary service? Please elaborate on your answer.
3. In your view, is the treatment of curtailment as an ancillary service reasonable/rational, given that the need for this service is purposely created by connecting more capacity on a portion of the grid than is already constrained?

### **3. EMPOWERING PROVISIONS THAT SUPPORT ESKOM'S APPLICATION**

- 3.1 In its application, Eskom indicates that it is making the application, firstly, pursuant to the following objects of the Act, as set out in section 2 of the Act:
  - (i) achieve the efficient, effective, sustainable, and orderly development and operation of the electricity supply infrastructure in South Africa;
  - (ii) facilitate universal access to electricity;
  - (iii) promote the use of diverse energy sources and energy efficiency; and
  - (iv) facilitate a fair balance between the interests of customers, end users, licensees, investors in the electricity supply industry and the public.
- 3.2 Secondly, section 14 of the Act states that the Regulator may make any licence subject to conditions. The licence granted to Eskom (as well as the one granted to the NTCSA) is subject to the South African Grid Code and NRS 048:9 as part of its conditions.
- 3.3 Thirdly, Section 21(4) of the Act states that 'access to the grid must be provided on conditions set out in the licence of a distributor or transmitter that relate to circumstances under which access (to the Transmission system) may be granted or refused'.

- 3.4 Also, in terms of the Eskom transmission licence, the following are applicable:
- a) Clause 4.1.4.3 of the licence obliges the licensee to 'make an offer to connect onto its transmission network or to increase the capacity of an existing connection to:
    - (i) a holder of a generation, distribution network or transmission network licence, or a person who has been exempted by the NER from holding any of these licences;
    - (ii) a person which is, or intends to become, a customer taking supply directly from the licensee's transmission'.
  - b) Section 4.1.4.4 of the licence provides that the licensee shall deal with such requests for connection in accordance with the Grid Code.
- 3.5 Section 7.8(1) of the Network Code requires the licensee to resolve network constraints.
- 3.6 Section 7.8(2) of the Network Code states that network constraints ('congestion') shall be regularly reviewed by the NTC. Economically optimal plans shall be put in place around each constraint, which may involve investment, the purchase of the constrained generation, ancillary service, or other solutions.
- 3.7 The application further cites section 4.2.1 of the Eskom transmission licence, which states that:
- The Transmission Division shall be in control of and be responsible for the short-term reliability and operation of the interconnected power system (IPS) as defined in the Grid Code. In doing so, the Licensee shall act in accordance with the prevailing Grid Code and Market Rules in order to, among others:*
- a) Ensure system reliability, safety and security;*
  - b) Dispatch generation;*
  - c) Set operational procedures;*
  - d) Control the operations of the IPS;*
  - e) Acquire sufficient ancillary services;(Emphasis Added)*
  - f) Provide operational information to the industry;*
  - g) Define on an annual basis in agreement with customers, the demarcation of the IPS (Schedule 4).*

#### Questions

4. Do the provisions quoted by Eskom support its application for the Energy Regulator to approve congestion curtailment to be a constrained generation ancillary service?

#### 4. APPLICABLE TIME PERIOD FOR THE IMPLEMENTATION OF CONGESTION CURTAILMENT

- 4.1 Eskom outlined that congestion curtailment will only be experienced on the system when the 3 470 MW announced in the GCCA 2025 addendum has been connected to the system. This will still take at least 18 to 24 months; meaning it is anticipated that congestion curtailment will be implemented from the year 2026 onwards.
- 4.2 In the application, it is also stipulated that congestion curtailment levels are expected to increase as the penetration of renewable energy resources increases. Network strengthening projects, on the other hand, will tend to reduce the average congestion curtailment levels. Going forward, the average levels of congestion curtailment will continue to fluctuate, driven by levels of renewable energy penetration and the completion of transmission strengthening and/or expansion projects. But there will always be some level of congestion curtailment going into the future to maintain system reliability when necessary.

##### Questions

5. In its application, Eskom indicates that curtailment levels are expected to increase as the penetration of renewable energy resources increases. Do you think this assertion is true if the Transmission Development Plan (TDP) is implemented to address the current constraints?
6. If approved, what should the duration of the application of the proposed congestion curtailment framework be (should it be a temporary or a permanent solution)?
7. Based on the information provided in Eskom's application, do you believe that it is more economical to implement curtailment than to expand the grid?

## 5. SCOPE OF APPLICATION OF THE FRAMEWORK

- 5.1 Eskom states in its application that the congestion curtailment framework will apply to all renewable energy resources connected to the grid in particular due to their intermittent nature. This includes all renewable energy IPPs (section 34 IPPs and private IPPs), as well as any renewable energy plants operated by Eskom. It will include both existing and new IPPs.

### Questions

8. The capacity is created to allow a certain group of projects to connect to the grid. In your view, shouldn't these projects be the only ones considered for the proposed framework to apply to, with the assumption that the framework will be applicable until such a time that the capacity constraints are resolved? Please substantiate your answer.
9. The proposed framework seems to be putting all the risk on the energy buyer, with no risk to the seller. Should IPPs connecting to constrained networks take any risk associated with the curtailment framework on constrained networks or all the risk should be put on customers?

## 6. COST-BENEFIT ANALYSIS OF THE FRAMEWORK IMPLEMENTATION

- 6.1 Eskom indicated that congestion reduction will allow for more renewable energy resources to be connected to the grid. Eskom also stated that in the current energy-constrained situation, additional energy from these resources will reduce load-shedding and OCGT usage. The wind and Photovoltaic (PV) bid prices in bid window 6 ranged from R505.47/MWh to R976.00/MWh, and R469.50/MWh to R548.00/MWh, respectively. These are significantly lower than the cost of diesel, which is around R5500/MWh, and the official cost of load-shedding, which is R11.460/MWh.
- 6.2 In the application, curtailment is compared with the option to strengthen the network. According to the Generation Connection Capacity Assessment (GCCA) Report, the Western Cape's maximum generation connection capacity without curtailment is 4 400 MW. To connect an additional 4 GW of renewable energy in the Cape, two 765 kV lines and one 400 kV line would be required, costing an estimated R32 billion. The annual project cost (APC) is R2.6 billion, assuming a 25-year return on investment and a post-tax real discount rate of 6.4%.
- 6.3 Furthermore, the report states that a conceptual study was conducted for the year 2025, with 8.4 GW of renewables in the Western Cape, consisting of 7054 MW of wind and 1340 MW of solar. This is also approximately 4 GW above the 4 400 MW GCCA limit. Koeberg was operated at full capacity throughout the year to maximise congestion. The availability factor of renewable resources in the Western Cape was 41.4% for the year. A total of 650 GWh, or 2.14%, was curtailed over the course of the year at a cost of R650 million, which is significantly less than APC. This demonstrates that curtailment costs are lower than network investment costs for connecting the same amount of renewable energy to the grid.

### Questions

10. Eskom indicates that congestion curtailment provides a least-cost option to integrate RES to the grid when compared to the cost of transmission infrastructure required to connect the same amount of RES. Please provide your views on this.
11. Kindly provide your comments on the cost benefit analysis provided by Eskom under section E of the application.



## **7. THE COMPENSATION METHOD TO BE APPLIED FOR THE FRAMEWORK.**

7.1 Regarding compensation, in the current framework, NSPs, Transmission and Distribution do not compensate for generator curtailment. Eskom indicates that compensation is a contractual agreement between energy buyers and sellers. However, as the designated buyer for public procurement programmes, the Central Purchasing Agency (CPA) in Transmission will pay deemed energy to IPPs when curtailed, subject to the unavailability provisions in power purchase agreements (PPAs).

7.2 Eskom proposes that all IPPs, when curtailed, be compensated for congestion curtailment, according to the contracts as per the below mechanism:

### **a) Compensation for public IPPs**

- (i) As per the contractual agreement in the PPAs, the CPA pays deemed energy payments subject to the unavailability provisions in the PPAs where applicable.
- (ii) The CPA recovers congestion curtailment costs from the System Operator Ancillary Services Department and does not account for these costs in the energy budget.
- (iii) Congestion curtailment costs are paid from the constrained generation ancillary service budget.
- (iv) The PPA obligations between the CPA and IPPs remain unchanged.

### **b) Compensation for private IPPs**

- (i) Private IPPs who wheel the energy on the Eskom system do not have an energy contract with Eskom. They only have a network services contract with Eskom. The energy contract is a private one between the IPP and the off-taker.
- (ii) The energy that the IPP produces into the Eskom network and that which the off-taker consumes from the Eskom network are both metered.
- (iii) Eskom does not pay the IPP for the supplied energy, but the off-taker account is credited with the same amount of energy. The wheeling contract signed with Eskom states that the off-taker account should be credited with the energy produced by the private supplier.
- (iv) Where the off-taker consumes more energy than the IPP has supplied, the off-taker pays for the differential energy at the applicable tariff rate.
- (v) Whenever the private IPP is curtailed by or on instruction of the Transmission System Operator, the off-taker's account will be credited with this curtailed energy as if the IPP has supplied it. Thus, both the private IPP and off-taker remain unaffected.
- (vi) Distribution will recover the credited amount from Ancillary Services, and the costs will be accounted against the constrained generation ancillary services budget.
- (vii) No money will be paid from Eskom to private parties.

### Questions

12. Eskom proposes to implement curtailment up to the level of 10% for each generator connected to a congested network and compensate the curtailed energy as an ancillary service. What are your views on Eskom's proposal to compensate for the curtailed energy from both private and public IPPs as part of the ancillary services charges?
13. Considering that currently compensation for curtailment is a contractual agreement between energy buyers and sellers, for private IPPs, shouldn't the costs for curtailment be borne by their customers, similar to how the costs for the curtailed energy of section 34 IPPs is borne by captive customers?
14. Are there other compensation mechanisms you know of that are currently implemented in other jurisdictions that you think the Energy Regulator must consider in the analysis of this application?

## **8. LEVEL OF CURTAILMENT CATERED FOR IN THE FRAMEWORK AND USED TO FREE UP 3 470 MW CAPACITY IN THE CAPE AREA**

- 8.1 A preliminary analysis of Eskom's strategic grid planning confirms that accepting a share of no more than 10% curtailment could nearly double RES hosting capacity in the Western Cape Region. Approximately 4 GW of additional RES capacity could be connected to the grid almost immediately, with more than 90% of their electricity production safely integrated into the grid. Because of the abundance of RES in South Africa, they provide the most efficient way to reduce load-shedding when a RES curtailment framework is in place.
- 8.2 The projected congestion curtailment costs are based on the assumption that 10% of wind and solar production will be reduced. It is also predicated on the assumption that most IPPs will continue to be affiliated with public programmes over the next five years. In future, as the penetration of private IPPs grows, the budget requirements will be influenced by the tariff rates granted to Eskom and tariff reforms.
- 8.3 Considering South Africa's load-shedding crisis, it is critical that infrastructure be used to its full potential, while simultaneously implementing mitigation measures to eliminate

the risk of a total network collapse. Curtailment can be used as an immediate solution to combat load-shedding while working on a long-term plan to strengthen the grid in favourable areas, with intentions of increasing energy security.

#### Questions

15. Based on Eskom's preliminary analysis, what are your views regarding the curtailment level of not more than 10%? What level of curtailment is considered reasonable? Should there be a limit? What must it be based on?
16. Do you think that the curtailment framework should be regionally categorised?
17. Do you think Eskom is deviating from pursuing long-term plans to strengthen the grid by exploring the congestion curtailment framework? Substantiate your response.
18. What are your thoughts on generators being given firm vs unfirm access to the transmission network?

## **9. SOCIALISATION OF COSTS IF CONGESTION CURTAILMENT IS APPROVED AS AN ANCILLARY SERVICE**

- 9.1 In the current transmission tariff structure, there is an ancillary services component meant to recover ancillary service costs from network participants. Eskom is indicating that congestion curtailment costs will also be recovered using this formally approved recovery mechanism.
- 9.2 Eskom further highlights that the tariff structure does not adequately and correctly recover costs for all ancillary services, however, Transmission Pricing has initiated a project to review the cost recovery of all ancillary services. The project will review cost recovery for the entire basket of ancillary service products including congestion curtailment as a constrained generation ancillary service. The purpose of the project is to ensure that ancillary services are correctly recovered from the right classes of customers, and costs are not being unduly avoided.

### Questions

19. Do you think it is reasonable for all customers to be expected to pay for the curtailed energy, particularly from private IPP to private offtaker arrangement?
20. Please provide your view on Eskom's proposal to include congestion curtailment costs in the tariff as ancillary service charges, given that certain classes of customers may be avoiding costs for these services.

## **10. ANY OTHER STAKEHOLDER INPUT OR COMMENT ON ESKOM'S APPLICATION IN TERMS OF SECTION 21(4) OF THE ACT**

- 10.1 Stakeholders are also requested to provide any other input or comments pertaining to Eskom's application (Appendix A) for grid capacity preservation and/or reservation in terms of section 21(4) of the Act, that were not raised in this consultation paper.

## 11. NERSA APPROVAL PROCESS OF THE ESKOM APPLICATION FOR APPLICATION FOR CONGESTION CURTAILMENT TO BE A CONSTRAINED GENERATION ANCILLARY SERVICE

11.1 NERSA has processes and procedures in place to process such applications, in compliance with section 10 of the NERA, read with sections 4 and 5 of PAJA.

11.2 Accordingly, in making a decision to either approve or not to approve the Eskom application, NERSA will follow the process indicated, along with indicative timelines, in

11.3 Table 1 below.

**Table 1: Indicative timelines<sup>2</sup> to process the Eskom application**

<b>Activities</b>	<b>Actual/Indicative date</b>
ELS Approval of Consultation Paper	02 July 2024
Publishing the Consultation Paper	05 July 2024
Closing date for the submission of written comments	05 August 2024
Public Hearings	22 August 2024
Special Electricity Subcommittee Meeting	To be confirmed
Energy Regulator Meeting	30 September 2024

Day – Calendar day

Actual/Indication date – means the expiry date of an activity

Public hearings – may be conducted for interested parties to make oral presentations to ELS members. This will be dependent on a number of factors, such as objections received by the Energy Regulator against the approval of the Eskom application.

11.4 Written comments should be sent to NERSA for the attention of **Mr Mondli Shoji** at:  
**Email:** [congestioncurtailment@nersa.org.za](mailto:congestioncurtailment@nersa.org.za)

**The closing date for the submission of comments is 5 August 2024.**

## ATTACHMENTS

**ANNEXURE A:** Eskom's application for congestion curtailment to be treated as a constrained generation ancillary services

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<sup>2</sup> Stakeholders should take note that the timelines in

Table 1 are not binding and are subject to change because they are dependent on a number of factors.