

GRID CAPACITY ALLOCATION RULES

Draft amendments to the South African Grid Code (Network Code)

February 2023

CONTEXT AND BACKGROUND

- The Network Code (the Code) contains connection conditions for generators, distributors and end-use customers, and the standards used to plan and develop the Transmission System (TS).
- The Code provides that The NTC shall provide quotes or cost estimates for new connections (or for upgrading existing connections) according to the approved tariff methodology as per the Tariff Code and within the time frames specified under section 2(2) of the Code.
- The Grid Capacity Allocation Rules are developed to amend section 2(2) of the Code to give effect to the principles of non-discriminatory and open access to grid.
- It is envisaged that these Rules upon incorporation into the Network Code will regulated connection applications across all licensed distributors and Transmission Network Service Provider.

WHY THE RULES? (RISKS AND MITIGATIONS)

- The proposed amendments to the Network Code are intended to address the following emerging challenges and risks identified in the grid connection landscape:

	<u>Customer</u>	<u>Network Service Provider(NSP)</u>	<u>Market</u>
Challenges	<p>High upfront costs - Insufficient load density in areas of high renewable generation requires substantial increase in grid infrastructure</p> <p>Competition for grid capacity is high (higher costs and longer timelines to connect)</p> <p>Delays: IPP Project interdependencies</p>	<p>Rapid rate of increase in applications</p> <p>Capacity hogging impacting on efficiency of grid capacity allocation and ability to effectively offer non-discriminatory access to the grid..</p>	<p>Relaxation of generation license requirements has increased self-generation, wheeling and other generation opportunities</p> <p>Integrated resource plan to balance both private and DMRE projects access.</p>
Opportunity	<p>Balanced and fair access to the grid will allow long term planning</p>	<p>Focus on new offerings products and services (self-generation, wheeling and energy offset)</p> <p>Communication and marketing of Increase in available generation.</p> <p>Optimisation of grid infrastructure</p> <p>Align to the development of the DSOs</p>	<p>The revision of the IRP to include self-funding projects</p> <p>Greater responsibility for grid code flexibility in the interim and allowing resource reallocation to Renewable Energy sector</p>
Risk	<p>Distributors’ tariff models, agreements and connection processes differ.</p> <p>No cost sharing for upstream infrastructure</p> <p>Timeframe uncertainty and scope of work variability affects the bankability of projects</p>	<p>Customers could use unfair capacity “lock out” strategies</p> <p>Barriers for connection (complex connection processes with delays in quote issuance).</p> <p>Expectation that the grid has unlimited potential to evacuate the power from Distributed Generators</p>	<p>Arbitrage and manipulation of any Grid Capacity Allocation Rules to be developed.</p> <p>Grid development focus will be on incremental grid capacity creation and not long term capacity corridor development</p>

KEY PRINCIPLES

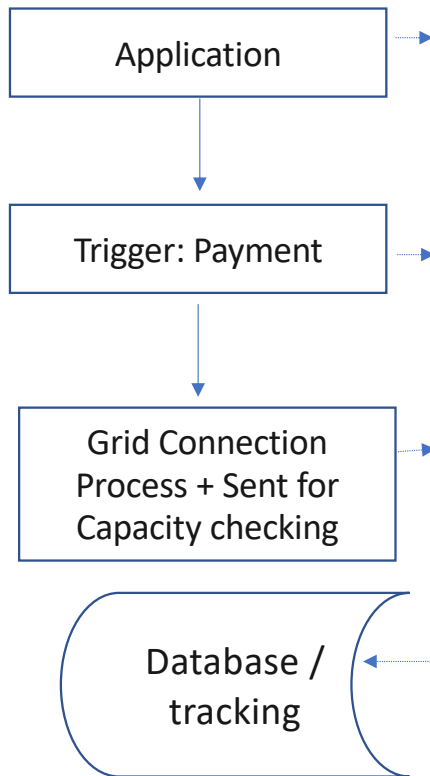
- All grid connection applications shall be treated in a non-discriminatory manner to ensure a fair, transparent, equitable, open access to the grid.
- In order to vindicate the first-ready first-served principle, NSP shall allocate grid capacity to projects based on a demonstrated readiness of the project to build the generation facility and related grid infrastructure to connect to the grid.
- The state of readiness of any project considered for grid capacity allocation shall be assessed based on a broad criteria which includes:
 - Environmental consents – having obtained all necessary consents, licenses (WUL), authorisations(EAs) or approvals required by any regulatory agency or any organ of state for the construction of the generation facility and the grid connection works.
 - Power Purchase Agreement (PPA) term sheets that are bankable – having demonstrated to the satisfaction of NSP that the relevant agreements relating to the off-take of the generated capacity are in place. Alternatively, financial guarantees issued by a financial institution approved by the NSP..
 - Appointment of relevant contractors such as engineering and design consultants and such other personnel required for the execution of the project.
 - Any other legal, financial or technical criterion reasonably required for the assessment of project readiness.

KEY PRINCIPLES (Continued)

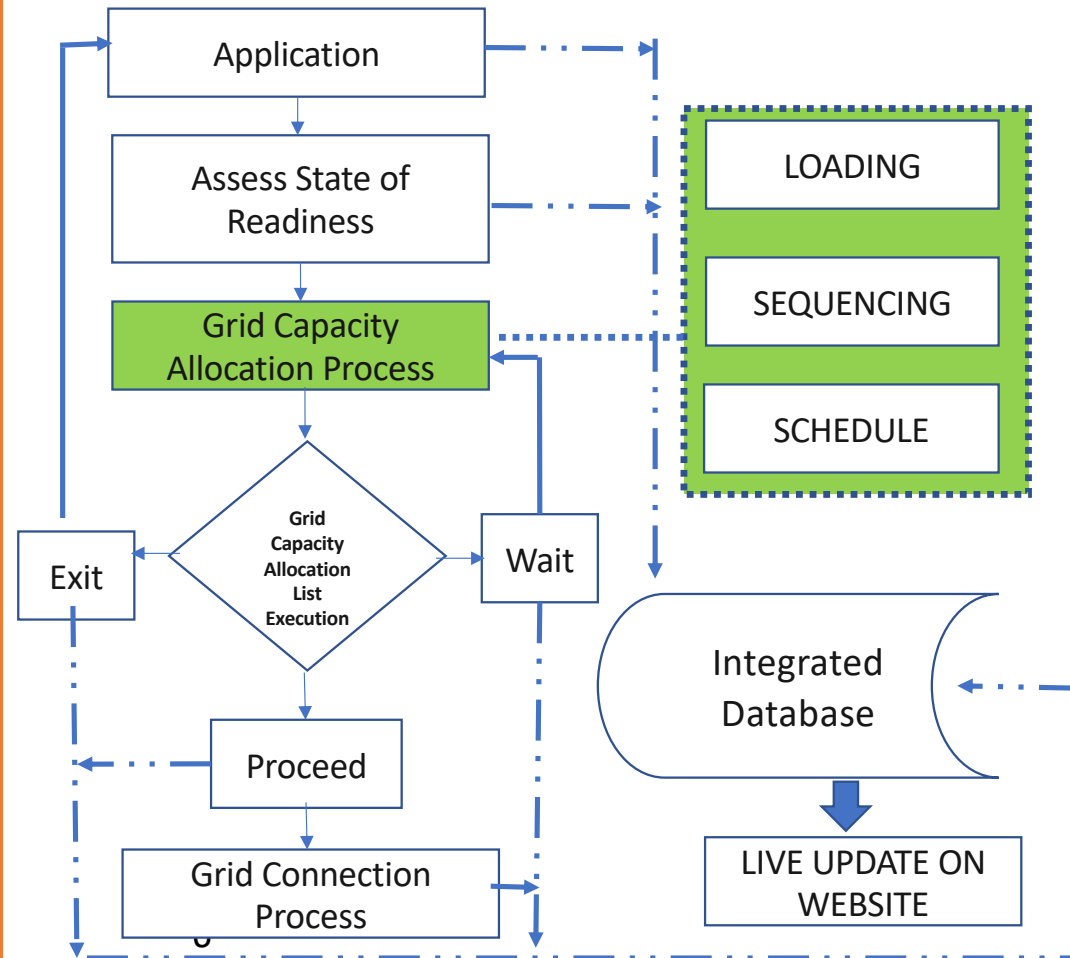
- NSP shall reserve all rights to revoke any grid capacity reserved for specific project and/or to reallocate that grid capacity to another project based on any failure by the applicant to comply with any stipulated timelines in the connection agreements and other related agreements.
 - Failure to appoint design consultants within timelines stipulated by the NSP.
 - Failure to submit preliminary designs to the relevant technical review teams/committees within timelines of being requested to do so by the NSP
 - Failure to rectify and correct any defects with any submission made to the NSP within 7 working days of being requested to do so.
- NSP shall reserve the right to revoke any grid capacity allocation and/or to implement reservations or allocations of capacity pursuant to any policy directive from the Department of Mineral Resources and Energy which is duly procured with the consent of NERSA in advancement of any policy objectives or procured to give effect to any Ministerial Determination. For the avoidance of doubt, NSP shall not revoke any capacity allocation to any customer project that is progressing in compliance with its milestone schedules and other requirements stipulated in the connection agreements.

PROCESS FLOW DIAGRAM

Current Process:



New process with Rules:



QUESTIONS AND ANSWERS