South African Photovoltaic Industry Association

SAPVIA - Grid Access WG Meeting Agenda
Date: 21 November 2025
Time: 10:00-11:30
Chairperson: Zayd Vawda

Declaration of Interest and Prevention of Anti-Competitive Behaviour

Participants of all SAPVIA meetings agree not to engage in or discuss the following topics:

- **Price-Fixing** - current or future prices, pricing strategies, or price changes.
- **Market Division** - allocation of customers, suppliers, territories, or market shares. dividing markets by geographic areas or product lines.
- **Collusive Tendering** - bid-rigging, including agreements on who will submit bids or the terms of bids, information about tender processes or strategies.
- **Production and Supply Control** - agreements to limit or control production, supply, or distribution of products or services, capacity, production quotas, or inventory levels.
- **Boycotts**- agreements to boycott or refuse to deal with specific customers, suppliers, or competitors, collective actions against any market participant.
- **Information Sharing** - competitively sensitive information, including sales volumes, market shares, costs, marketing strategies, future business plans, research and development projects, or investment strategies.
- **Exclusionary Practices** - strategies to exclude competitors from the market or to create barriers to entry, exclusive dealing, tying arrangements, or predatory pricing.
- **Anti-Competitive Agreements**- discussions that could lead to anti-competitive agreements, whether formal or informal, conversations that could be interpreted as attempts to coordinate competitive behaviour.

Facilitator:	Zayd Vawda (ZV)	***Attendees:*** Thabiso Tjatjie (TT) Nyasha Horonga (NH) Monique Beukes Daniels (MD) Ross Train (RT) Lischa Gerstle (LG) Herold Mathebula (HM) Adu-Asomaning Kwame (AK) Jasper Dick (JD) Schalk Loots (SL) Thando Kunene (TK) Travern Reddy (TR) Seth Bulkin (SB) Wiehann van Zyl (WZ) Layla Smith (LS) Gordon Kernick (GK) Elmari Husselmann (EH) Nichol Luttig (NL) Sim Khuluse (SK) Sinethemba Mnguni (SM) Zimkita Bilibana (ZB) Pamela Gama (PG)
Note taker:	Thabang Molai (TM)	

1.	**Opening**	**Chairperson**
	Welcome and Introduction The chairperson welcomed everyone to the working group meeting and acknowledged attendees for making time to attend. **Apologies** Wayne Smith (WS) **Agenda** The agenda was adopted with no amendments. **Minutes** The minutes of the previous meeting were accepted as a true reflection of the meeting proceedings.	

2.	**Transmission IPPs** • ZV invited SM to provide feedback on the current status of the Transmission IPP and the latest developments regarding the Independent Transmission Programme (ITP) being launched by Eskom and the IPP Office. • SM noted that there have been limited formal developments to date, with engagements with the IPP Office (IPPO) planned and the team currently awaiting confirmation of meeting dates to obtain further inputs and clarity. • ZV highlighted that the pre-qualification process opened in the previous quarter, and the IPP Office is currently shortlisting bidders to receive the Request for Proposals (RFP), and further updates are expected following formal engagement with the IPP Office.	Sinethemba M
3.	**Addressing Understaffing in Grid Access Units and Distribution:** • ZV provided an update on upcoming engagements with Seetsele, Head of the Grid Access Unit, highlighting key issues to be raised on behalf of members. • Planned Discussion Points: • Staffing Levels: Understaffing in the Grid Access Unit has been repeatedly raised in previous meetings; while the unit is aware of the concern, it remains a persistent challenge, and members acknowledged that no immediate resolution can be promised, though the matter will be formally raised with management. • Escalation Process: There is currently no clear process for escalating issues within the Grid Access Unit, which creates delays when specific applications encounter problems, and the meeting with Seetsele will seek to clarify and formalize an escalation pathway. • Inconsistency of Rule Application: Members have observed inconsistencies in how rules are applied across applications, and this issue, previously raised, will be championed directly with Grid Access Unit leadership to seek greater consistency. • CEL Timelines and BQ Acceptance: Delays and challenges related to CEL timelines and BQ acceptance remain ongoing, and engagement will aim to clarify expectations and align on processing timelines. • Project Applicability for Congestion Curtailment: Members highlighted concerns about which projects are subject to curtailment during congestion, and the upcoming engagement	De Wet T Sinethemba M Zayd V Dr Rethabile M

	will review curtailment applicability criteria to ensure fairness and transparency.	
4.	**Nersa Approval of Congestion Curtailment** • SM: • Eskom, NTCSA, and the Grid Access Unit recently held a workshop on the newly launched Curtailment Framework. • The congestion and curtailment framework was approved by NERSA in April 2024 and is considered a temporary mechanism. • It is designed to enable earlier grid connections for wind IPPs by permitting limited and compensated curtailment where network constraints exist. • The framework applies from 1 April 2025 to 31 March 2028. • Purpose of the Mechanism is to enable the early addition of renewable energy capacity by allowing IPPs to connect ahead of major transmission upgrades—through controlled generation curtailment during network constraints—while supporting an accelerated grid build-out and maintaining optimal transmission capacity utilisation. • New and pending CELs may be issued with curtailment conditions, while capacity indications within CELs remain aligned with the standard post-IGCAR and GCAG processes. • Customers may accept a CEL that includes curtailment or request a revised CEL. • There is currently no clarity on how TDP dependencies influence BQ development for CEL requests, or whether projects with existing CELs may lose their queue position or face the risk of GCAG withdrawal. • IGCAR rules will still apply regarding capacity revocations and GCAG forfeiture for projects that do not progress. • Key Implementation Dates: • Revised GCCA Amendment - Published on 31 October 2025. • Finalisation of financial and operational curtailment procedures - 31 March 2026. • Implementation of the automatic curtailment system- 31 October 2026. • The framework applies only to wind projects located in the Eastern Cape and Western Cape. • Compensation for curtailment applies from 2024 to 2028, considered the pilot period. • Revised lower curtailment ceilings may reduce near-term grid connection capacity.	Wayne S Alecia P Sinethemba M

	• While the framework enables earlier grid access, it also introduces increased operational curtailment exposure for affected projects. • NH asked whether the curtailment compensation mechanism applies only to new wind IPPs under the curtailment framework or whether it also covers existing plants that have previously been curtailed. • ZV confirmed that the documentation does not provide clarity on this point and advised that this question should be submitted to the Grid Access Unit via their FAQ process. • NH raised concerns about the blanket restriction on PV projects in certain regions given Eskom's preference for wind due to variability characteristics, suggesting that PV coupled with Battery Energy Storage Systems (BESS) could achieve similar outcomes by storing excess generation during curtailment periods and potentially reducing network strain. • NH asked whether Eskom has considered expanding the GCCA scope to allow PV + BESS connections, and whether SAPVIA has conducted any studies to challenge the wind-only position. • ZV indicated that NTCSA's Transmission Planning Unit has not assessed hybrid (PV + BESS) options to date, but that this may change in the future and suggested inviting NTCSA/Transmission Planning, specifically Ronald Maria, to the next Grid Access Working Group meeting. • The purpose would be to provide a 10-minute technical overview of their planning methodologies and allow members to ask questions—particularly around curtailment, technology restrictions, and hybrid feasibility.	
5.	**Industry-RETEC Collaboration** 5.1 EMT Validation • TT: • The purpose of the presentation is to share the internal process and coordination followed to successfully achieve EMT validation model approval. • EMT validation is required to ensure grid security and stability, confirm the correct dynamic and controlled behaviour of inverters (particularly for PV systems), enable safe facility operation and accurate model representation, and ensure compliance with the South African Grid Code. • The validation was completed under Grid Code Version 3.1; any misalignment with newer versions was noted for discussion.	Yaaseen A Thabiso T

	• The following tools and coordination mechanisms were identified as critical: compliance with Grid Code requirements; the use of power quality/power analyser (“black box”) equipment; simulation software such as DigSILENT Power Factory (with alternatives including PSCAD); coordination with the Network Service Provider (NSP); and, where internal grid code expertise is limited, the optional use of consultants, including DigSILENT South Africa, Matla Engineering Solutions, and TDX. • Fault identification and data collection involve installing power quality analysers to capture qualifying grid faults, recognising that faults are inevitable over time and may originate far from the plant yet still impact the facility, with the key requirement being whether they meet Grid Code voltage depression criteria (≥20% or ≥80%), and emphasising the importance of correct trigger settings alongside regular review and manual analysis of recorded fault events. • Once a fault is detected, RMS voltage and current data are extracted, the time and date of the fault are recorded, and the data is submitted to the NSP for confirmation. • The NSP confirms the fault origin and whether it qualifies as a grid-side fault. • Upon confirmation, a detailed analysis is conducted, and EMT simulations are updated using OEM models aligned with the actual plant configuration. • EMT Simulation and Modelling: Existing OEM inverter models were adapted to reflect the actual plant configuration and grid connection conditions • Aggregated inverter modelling was used where appropriate to reduce simulation file size and improve practicality, such as when aggregating 98 or more inverters. • Aggregation approaches were confirmed as acceptable by NERSA (RETEC). • At a minimum, the EMT validation report must include: - Description of the plant and grid connection. - Fault description and fault location. - Data preparation methodology. - Simulation setup and assumptions. - Aggregation methodology (if applied). - Comparison of measured vs simulated results. - Error margins for voltage and current (as per Grid Code). - Supporting appendices and datasets. • Lessons Learnt and Key Observations:	

	• RETAC Capacity Constraints - Delays were experienced due to understaffing and high submission volumes. • Lack of Clear Industry Guidance - EMT requirements were defined in regulation, but without sufficient procedural clarity. • Lack of Clear Industry Guidance - EMT requirements were defined in regulation, but without sufficient procedural clarity. • Skills Gap in Grid Code Compliance: The industry has limited operational expertise, and reluctance to openly acknowledge these gaps hinders collective problem-solving. • TT noted that EMT validation is comparatively easier than other compliance areas, such as power quality and harmonics assessments. • NH noted that EMT validation had been particularly challenging, especially where Eskom (NSP) was not forthcoming with network data following a fault. He queried how EMT simulations can be reproduced when faults occur far from the plant (e.g. ~300 km away) and NSP data is unavailable. • In response, TT explained that accurate EMT validation is not possible without NSP contribution, making their engagement essential; in practice, this has required persistent follow-ups, sustained engagement, involving RETAC and the NSP simultaneously to show that delays were due to missing NSP inputs, and escalation to senior management when necessary. • NH asked whether it is advisable to install background harmonics monitoring equipment during construction, or whether harmonic studies can be conducted later during operation. • TT: • There is no definitive “best” approach however, experience highlighted the importance of clear interpretation of Grid Code requirements. • A key challenge arose from misunderstanding the harmonic compliance assessment period (e.ag. 7th, 11th, or 17th harmonic orders), as initial month-long analysis revealed instances where harmonics were not fully absorbed, and some days showed non-compliance despite overall acceptable performance. • Follow-up engagements with RETAC clarified that demonstrating compliance over a continuous seven-day period is acceptable under the Grid Code. • The team subsequently extracted and simulated a compliant seven-day dataset, resolving the issue, with ongoing engagement with RETAC proving critical to avoiding misinterpretation and unnecessary resubmissions.	

6.	**SAPVIA Member_ Information Sharing** **6.1 Grid Code Compliance** • ZV introduced the agenda item, requesting a brief update from SK regarding a recent grid code amendment request submitted by members, including wind IPPs and its potential impact on the solar industry. • SK: • SAPVIA received requests from members to **amend certain definitions in the Grid Code**. • A joint presentation was made to the **Grid Code Advisory Committee (GCAC)** in collaboration with **SAWEA** earlier this month. • The amendment was not formally accepted, but the engagement was valuable in opening communication channels between stakeholders, improving mutual understanding of technical and regulatory positions, and establishing a foundation for future discussions and consensus-building. • ZV emphasised that members are encouraged to bring industry-wide issues affecting multiple participants to SAPVIA for support, as individual applications or exceptions are unlikely to be accepted by GCAC, making consensus across members key. • The amendment issue arose due to RETAC's reinterpretation of the Grid Code regarding Maximum Export Capacity (MEC), with RETAC proposing that MEC be calculated based on derated turbine capacity at specific temperatures rather than the nameplate rating, which would have reduced MEC allocations for certain turbines and impacted wind IPPs' business cases.	Sinethemba M Sim K DeVillers B
7.	**Industry updates:** **7.1 Grid Capacity Allocation Rules – NECOM Update** • The issue remains under debate with no formal resolutions reached, and efforts to progress the matter are ongoing through direct engagement with relevant stakeholders and coordination via SAPVIA and NECOM channels to advocate for necessary reforms. **7.2 Feedback: 2025 SA Renewable Energy Grid Survey** • The survey was well-received across the industry, with positive feedback from multiple stakeholders. • Several articles and publications highlighted the survey results, demonstrating strong industry interest and visibility.	Zayd V Sinethemba M Naniki N/Sicelo N

	• SAPVIA intends to take the initiative further in the coming year by encouraging broader engagement:
	  - Students and other interested parties are invited to analyze the dataset
	  - Insights derived from the data may be developed into white papers, research notes, or conference presentations.
	  - SAPVIA will support publication and dissemination of high-quality analyses through its channels.
	• The initiative will focus on data science applications, leveraging the survey's wealth of information to generate actionable insights for the industry.
	• Early next year, the working group will reopen the survey engagement, and volunteers from the group will be called upon to assist again.
	
	7.3 GCCA Update
	• ZV addressed the ongoing concern among members regarding the delayed publication of the GCCA.
	• SAPVIA has repeatedly followed up on the publication, expressing frustration at the delay while remaining professional and courteous.
	• The last scheduled publication date was 31 October, but as of the meeting, it had not yet been released
	• Current information indicates that the GCCA document has been completed and is undergoing internal approval within Eskom, with the main authors, Ronald and Maris (NTCSA), having completed their contributions and the document technically ready for release, though the reason for the remaining delay remains unclear despite pressure from industry bodies.
	• Only the curtailment-specific addendum has been published, while the full GCCA remains pending, and the addendum has been shared with all members via the meeting chat. https://www.ntcsa.co.za/wp-content/uploads/2025/11/27.1-GCCA_2025_Update_31102025_publish.pdf	

8.	**Any Other Matters** **8.1 South African Carbon Credit Market Consultation Paper** • ZV introduced the topic of carbon credits, noting that SAPVIA has been approached to provide input on an issue affecting the broader industry. • ZB: • National Treasury is developing a paper on the South African carbon credit market.	Zimkita B

	• The paper seeks to modernize carbon credit infrastructure, clarify legal and financial regulations, and stimulate investment in low-carbon projects in South Africa. • SAPVIA members were invited to provide comments and recommendations on the concept note. • Deadline for submission is 26 November. • Members who have not received the announcement were invited to contact Zimkita for the relevant documents.	
12.	**Closure** The chairperson thanked all participants for their contributions throughout the year and noted the value of ongoing engagement and collaboration. Following these remarks, the Chairperson officially adjourned the meeting. **Next Meeting:**	**Chairperson**

Action Items:

No:	Action	By Whom
1.	Share the latest draft (GCAC proposal) of the report once it's finalized.	**DeVillers B**
2.	Provide comments on the amended rules (IGCAR applications) through the online form https://sapvia.co.za/sapvia-comment-on-igcar/ or by email to Sinethemba Mnguni (sinethemba@sapvia.co.za). SAPVIA to drive the discussions with the Grid Access Unit (Seetsele), incorporating member inputs.	**All Members** **Sinethemba M - Lead**
3.	Circulate the GCCA Amendment document to all members for reference.	**Zimkita B**
4.	Reach out to NTCSA/Transmission Planning and request their participation in the next meeting.	**Sinethemba M**